

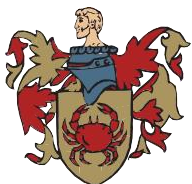


SCIENTIFIC DIALOG

BAHNO 2019 ANNUAL SCIENTIFIC MEETING ABSTRACT BOOK

Friday 17th May 2019
Royal College of Physicians, London

Endorsed by:



BAHNO

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Oral

“Fast-Trach” - the way to reduce length of stay?

Oral

Mrs. Alison Dinham¹, Ms. Olivia Martineau¹, Mr. Luke R. Williams¹, Mr. Alastair Fry¹

1. Guys and St Thomas' NHS Foundation Trust

Aim

At GSTFT in 2017, a wide variation of case selection for tracheostomy insertion and diversity of weaning to decannulation procedure was evident for patients both with and without flap reconstruction following ablative head and neck cancer surgery. A “Fast-Trach” protocol was implemented with the aim to standardise care and decrease time to decannulation.

Fenestrated tracheostomies were inserted in theatre at the time of the initial major resection. Tracheostomy cases were defined as either

1) “cover” (temporary placement to provide protection from potential surgical complications in the immediate post-operative period and facilitate safe and rapid return to theatre)

or

2) “essential” (placed as part of a planned surgical procedure with anticipation of prolonged patient requirement i.e. >10 days).

“Cover” tracheostomies were permitted cuff down trials from post-operative day 1 onwards, with the intention of a “quick wean” to decannulation from post-operative days 3-5, following nasendoscopy assessment to ensure adequate airway patency.

Method

Retrospective analysis was performed on routinely kept data concerning time to decannulation and length of inpatient stay. Patients treated over a one year period pre- and post-implementation of the “Fast-Trach” protocol were analysed.

All major head and neck surgeries were considered, with exclusion criteria being

- tracheostomy insertion/surgery conducted for a non-cancer reason,
- no indication for tracheostomy (i.e. procedures without extension into the airway e.g. standard neck dissection, thyroidectomy, parotidectomy, orbital exenteration),
- and
- laryngectomy.

Cases from pre-protocol implementation were retrospectively labelled “cover” or “essential” according to the specified criteria and using TNM staging and operative site information.

Results

In 2014, there were 86 eligible cases (57 with flap reconstruction, 29 without) and 63 (49 with a flap and 14 without) in 2018.

The proportion of patients having a tracheostomy when no flap reconstruction was being performed reduced from 24% to 21%, whilst in those with a flap reconstruction placement increased from 51% to 92%.

For patients with a flap reconstruction requiring a “cover” tracheostomy, time to decannulation reduced significantly from mean 14 days to 9.5 days ($p=0.02$) and length of inpatient stay was reduced from 24 days to 19 days ($p=0.1$) following implementation of the “Fast-Trach” protocol. Numbers decannulated by post-operative day 5 were 0/29 in 2014 and 11/45 in 2018.

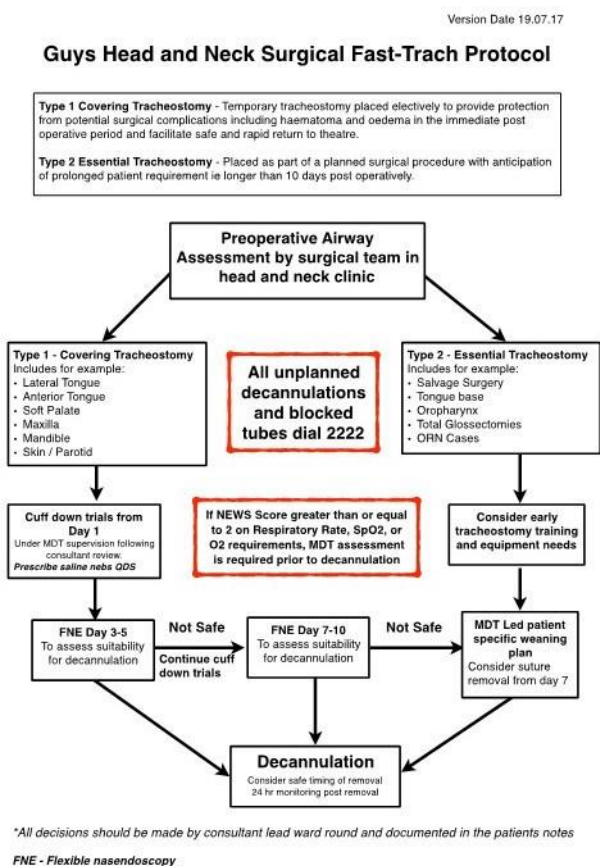
Length of time to decannulation was also reduced in those with a flap who required an “essential” tracheostomy (from 15 to 10 days), though length of stay was unchanged in this group (21 days for both years).

Conclusion

Implementation of a standardised protocol to manage tracheostomy case selection and weaning to decannulation may have helped contribute to significantly reduce total time of cannulation and was associated with reduced total length of inpatient stay in the target “cover” tracheostomy population. Short duration of tracheostomy placement may help facilitate patient tolerance of such a procedure. Further study will help to evaluate the risks versus benefits of short term tracheostomy placement in this patient group [1,2,3,4].

Reference (If applicable)

- 1] Singh, T., Sankla P., and Smith G. (2016) Tracheostomy or delayed extubation after maxillofacial free-flap reconstruction? BJOMFS 54(8): 878-882
- 2] Coyle, M.J., Tyrrell, R., Godden, A. et al (2013) Replacing tracheostomy with overnight intubation to manage the airway in head and neck oncology patients: towards an improved recovery BJOMFS 51(6):493-496
- 3] Halfpenny, W. and McGurk, M.(2000) Analysis of tracheostomy-associated morbidity after operations for head and neck cancer BJOMFS 38(5): 509-512
- 4] Rogers, S.B., Russell, L. and Lowe, D. (2017) Patients’ experience of temporary tracheostomy after microvascular reconstruction for cancer of the head and neck BJOMFS 55(1):10-16



Fast-trach protocol 2017.jpg

A service evaluation looking at gastrostomy retention rates during surgical and/or chemo-radiotherapy treatment, in newly diagnosed head and neck (H&N) cancer patients, from a single centre between April 2016-April 2017.

Oral

Ms. Annabel Leather¹, Ms. Kelly Wade-Mcbane¹

1. Imperial College Healthcare Trust

Aim

This service evaluation is a retrospective study, designed due to a lack of data regarding gastrostomy retention times of H&N cancer patients seen by dietitians at Imperial College Healthcare Trust (ICHT). The primary aim was to look at radiologically inserted gastrostomy (RIG) retention rates in H&N cancer patients at ICHT who were newly diagnosed between April 2016-April 2017. Further objectives looked at in this cohort of patients were (1) to determine the number of patients with a gastrostomy in situ and how many of these were prophylactic (2) to determine the average length of time between patients being referred for a gastrostomy and actual date of insertion and (3) to determine the number of patients who had feeding via their gastrostomy straight after insertion and after their treatment had finished. The data gained from this study was then to be compared with other centres and guidelines.

Method

Data was pulled from The Somerset Cancer Register for all new H&N cancer diagnoses between April 2016 and April 2017. A total of 199 patients were identified for ICHT and data collection from these patients was gathered retrospectively from the electronic database of patient records. Information was gathered on how many had a gastrostomy tube in situ. They were then split into different groups: 'surgical', 'radical radiotherapy' and 'patients not included'. 17 patients underwent both surgery and radiotherapy so were included as separate entities in both groups. Any patient that had a gastrostomy tube was added into the 'gastrostomy group' as well.

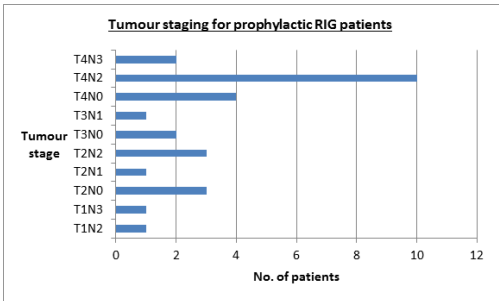
Results

21% (n=41) of the newly diagnosed H&N cancer patients at ICHT had a gastrostomy in situ at some point during their treatment. 97.5% (n=39) of the gastrostomy tubes were RIGs. 14% (n=28 patients) of the newly diagnosed H&N cancer patients had a prophylactic RIG inserted. The average length of time between a prophylactic gastrostomy being requested and inserted was 25 days. 25% of patients were fed through their RIG straight away. 93% of patients were using their RIG at the end of their treatment. The average number of weeks for the RIGs to be in situ was 24 weeks. In the radical radiotherapy cohort of patients, 28 patients had a prophylactic RIG and 61% (n=17) of these were inserted before radiotherapy was started. 57% of the prophylactic RIG patients had T4 tumours, these were predominantly base of tongue and tongue.

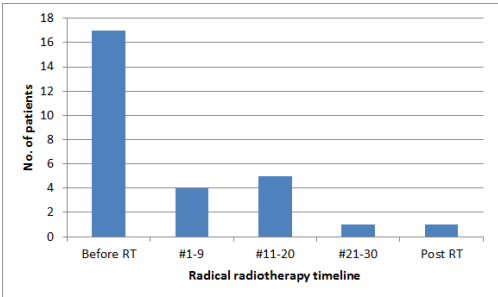
Conclusion

Gastrostomy retention rates at ICHT appear to be in line with international guidelines. Many of the prophylactic RIGs were in use by the completion of radiotherapy indicating the correct group of patients are chosen for prophylactic insertion. A quarter of patients required feeding via their prophylactic RIG straight away therefore earlier insertion would help to nutritionally optimise patients for radiotherapy. The type of gastrostomy inserted is dependent on local policy with no nationally agreed selection criteria for placement in H&N patients. Comparison between studies is difficult due to study design limitations

and the inability to classify data into groups by similar treatment modality, type of gastrostomy and timing of tube placement. ICHT is part of The Vanguard partnership with Royal Marsden and Partners and thus, it would be beneficial to streamline practice and provide equitable care, both locally and also nationally; so all patients are following the same pathway.



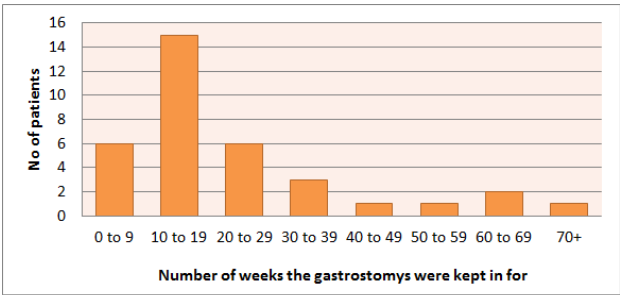
A chart to show the tumour staging for the prophylactic RIG patients.



A bar chart demonstrating prophylactic gastrostomy insertion in relation to radical radiotherapy treatment.

Abstract attachment x 1 - tumour staging for pro rigs.png

Abstract attachement x 2 pro rig insertion vs rt treatment.png



A bar chart to demonstrate gastrostomy retention rates in this group of patients.

Asbstract attachment x 3 - rig retention rates.png

A tracheostomy weaning pathway for head and neck surgery patients informed by an expanded retrospective case series analysis

Oral

Ms. Mirjana Rasovic¹

1. Oxford University Hospitals

Aim

For head and neck cancer patients, tracheostomies are inserted as part of planned major surgery.

In 2017, my initial case series analysis found that local Head and Neck speech and language therapist (SLT) involvement in tracheostomy weaning had been inconsistent, with particular variation in both timing of and reason for referral. Yet, it is known that a structured multidisciplinary team (MDT) approach reduces time to decannulation (NCEPOD 2014; Garrubba, Turner and Grieveson, 2009), with SLTs being one of the key MDT members.

I developed an amended tracheostomy pathway, encouraging MDT working and providing an education tool for MDT members. Initial implementation results were encouraging.

An extended case series analysis has now been completed on a larger and more varied cohort of patients with the aim of validating the pathway.

Method

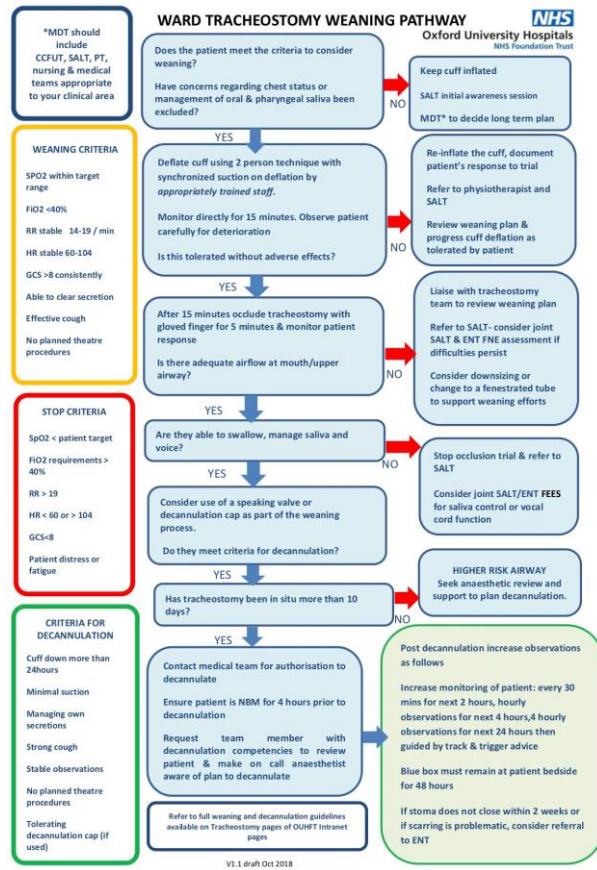
40 cases following the weaning pathway (200% increase on the initial cohort), including ENT, plastics and maxillofacial are analysed. The cohort includes cases ranging in TNM staging (T1-T4). Key pathway milestones are reviewed and compared with the initial cohort. These include time to cuff deflation, upper airway assessment, voicing, oral trials and overall time to decannulation.

Results

In comparison with the initial cohort, SLT intervention is, on average, earlier and supplemented with post-operative communication support. There is a reduction in variation in timing of referral and clearer understanding for all parties on the reason for referral. There is an overall reduction in time to decannulation.

Conclusion

The implementation of a local head and neck tracheostomy weaning pathway has been beneficial in improving consistency of practice; SLT referrals are also more timely. Ultimately, care is more individualised, leading to earlier and safer decannulation. This has led to reviews of tracheostomy weaning at trust level.



Ward weaning pathway draft v1.1 october 2018 2.jpg

Analgesia for Transoral Robotic Surgery: Our Experience of Developing a TORS-Specific Analgesic Protocol

Oral

Mrs. Laura Gradwell-Nelson¹, Dr. Laura Jones¹, Mrs. Hannah Fox¹, Mr. James O'Hara¹, Prof. Vinidh Paleri², Dr. Ahmed Chishti¹, Mrs. Laura Warner¹

1. The Newcastle upon Tyne Hospitals NHS Foundation Trust, Newcastle, 2. The Royal Marsden NHS Foundation Trust

Aim

In the last decade transoral robotic surgery has revolutionised treatment for oropharyngeal squamous cell carcinoma by offering a minimally invasive surgical approach with the potential to de-intensify oncological therapy, thereby minimising long-term swallowing morbidity. Although a minimally invasive surgical technique, TORS procedures can cause significant post-operative pain. If this is poorly controlled patients can experience delayed swallowing rehabilitation, difficulty in managing secretions and prolonged hospital admission. The aim of this study is to describe the evolution of a TORS-specific analgesic regime and to report functional outcomes after implementation.

Method

An initial questionnaire survey was performed of patients undergoing TORS with standard post-op pain relief with paracetamol and a combination of weak and strong opioids. 100% of patients reported uncontrolled pain in the post-operative period, aggravated by swallowing. A specialised TORS pain protocol was designed and implemented, incorporating dexamethasone, gabapentin, NSAIDs and opiate analgesics, including patient controlled analgesia (PCA) (figure 1).

Outcome data was then prospectively collected for 28 patients undergoing TORS, including; average daily pain scores at rest and when swallowing, time until swallowing rehabilitation, length of stay and details of any adverse effects of the analgesic regime. Follow up interviews at 2 weeks post op were conducted to assess pain levels and the effect on quality of life after discharge.

Results

71% of our cohort were treated for HPV-related disease. One patient underwent salvage TORS for recurrence after chemoradiotherapy. 17 patients underwent lateral oropharyngectomy for tonsil cancer, 9 underwent tongue base resection and 2 had diagnostic mucosectomy.

The majority of patients reported mild pain (0-3 on analogue scale) on days 1-3. Figure 2 demonstrates average daily pain scores. Three patients consistently reported pain above 5/10 and length of stay was prolonged for these patients. This includes one patient who underwent salvage TORS, who was the only patient who did not achieve full swallowing rehabilitation.

Swallowing subjectively aggravated pain, with higher pain scores on swallowing in 45%. 24 patients (86%) re-started oral fluids by day 2 and 22 patients (78%) successfully re-initiated oral diet by day 3. Swallowing rehabilitation was intentionally delayed for clinical reasons in three patients.

Our protocol was well tolerated; 3 patients reported feeling drowsy, with no serious side-effects.

Conclusion

The data presented demonstrate that our TORS specific analgesic protocol delivers excellent levels of pain control after transoral robotic oropharyngeal surgery. The regime was well tolerated, with minimal adverse effects.

The aim of the presented protocol is to minimize strong opioid and PCA use, whilst ensuring our patients’ pain is controlled leaving them able to rehabilitate without delay. These strategies enhance the patient experience after surgery and improve recovery times and functional outcomes after TORS.

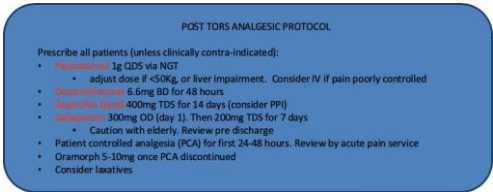
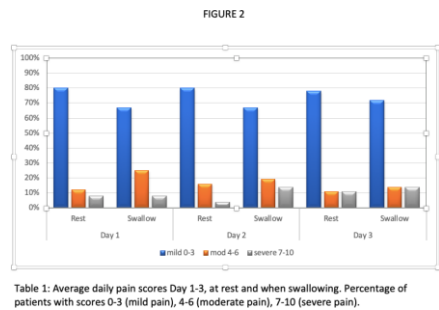


Figure 1.png

Figure 2.png

De-ESCALaTE: Comparison of cetuximab versus cisplatin in patients with HPV-positive, low risk oropharyngeal cancer, receiving radical radiotherapy

Oral

Prof. Hisham Mehanna¹, Dr. Anthony Kong¹, Dr. Andrew Hartley², Mr. Pankaj Mistry³, Mr. Matthew Dalby³, Mrs. Tessa Fulton-lieuw¹, Dr. Max Robinson⁴, Prof. Alastair Gray⁵, Dr. Bernadette Foran⁶, Dr. Mehmet Sen⁷, Dr. Lorcan O'Toole⁸, Dr. Karen Dyker⁹, Dr. Hoda Al-booz¹⁰, Dr. Rafael Moleron¹¹, Dr. Sinead Brennan¹², Dr. Eleanor Aynsley¹³, Dr. Andrew Chan¹⁴, Dr. Devraj Srinivasan¹⁵, Dr. Jan Buter¹⁶, Prof. Janet Dunn³

1. Institute of Cancer and Genomic Sciences, The University of Birmingham, 2. Queen Elizabeth Hospital Birmingham, 3. Warwick Clinical Trials Unit, University of Warwick, 4. Centre for Oral Health Research, Newcastle University, 5. Department of Population Health, University of Oxford, 6. Weston Park Hospital, 7. St James's Institute of Oncology, 8. Castle Hill Hospital, 9. Bradford Institute for Health Research, 10. Bristol Haematology and Oncology Centre, 11. NHS Grampian, 12. Saint Luke's Radiation Oncology Network, 13. South Tees Hospitals, 14. University Hospital Coventry and Warwickshire, 15. Western General Hospital, 16. VU University Medical Center

Aim

De-ESCALaTE is a pragmatic, multi-centre, open label randomised clinical trial addressing the need to establish less toxic therapy in low-risk HPV positive head and neck cancer.

The incidence of human papillomavirus-positive oropharyngeal cancer is rapidly rising. It is a distinct disease entity, affecting younger patients, with much better outcomes. Standard treatment (cisplatin+radiotherapy) causes significant toxicity, which these young patients have to endure for many years. Cetuximab, an epidermal growth factor receptor inhibitor, has been proposed for treatment de-escalation to reduce toxicity of standard (cisplatin) treatment, but no randomised trials exist. The aim of the trial is to reduce toxicity whilst retaining tumour control.

Method

Patients with low-risk human papillomavirus-positive oropharyngeal cancer were randomised to receive radiotherapy (70G in 35F) and either cisplatin (3 doses of 100 mg/m²) or cetuximab (400 mg/m² loading dose followed by weekly 250 mg/m²). Outcomes were total number of severe (Grades 3-5) toxicity events, overall survival, recurrence and quality of life.

Results

We recruited 334 patients between 2012-2016 at 32 HNC treatment centres in the UK, Ireland and the Netherlands. Of patients randomised, 80% are male, mean age 57 years. The arms were well balanced for baseline patient characteristics.

There was a significant difference in the 2-year overall survival between cisplatin and cetuximab (97.5% vs 89.4% respectively, $p=0.001$, HR=4.99, 95% CI 1.70-14.67) and in 2-year recurrence rate (6.0% vs 16.1% respectively, $p=0.0007$, HR=3.39, 95% CI 1.61-7.19).

There were no differences between the cisplatin and cetuximab arms in the reported mean number of overall (5.37 vs 5.45 events per patient respectively), acute or late severe (grade 3-5) toxicity events per patient or all grade toxicity (overall 29.15 vs 30.05 event per patients respectively). There were significantly more serious adverse events (162 vs 95) in the cisplatin arm compared to the cetuximab arm.

Conclusion

There was no benefit in terms of reduced toxicity and a significant detriment from the use of cetuximab instead of cisplatin in terms of tumour control. Cisplatin and radiotherapy remains the standard of care in this setting.

Delayed extubation versus elective tracheostomy in elective free flap reconstruction in head and neck cancer - Our 10 year experience

Oral

Ms. Alexandra Green¹, Mr. Luke Williams², Mr. Alistair Fry², Mr. Luke Cascarini²

1. Guy, 2. Guy's and St Thomas' NHS Foundation Trust

Aim

To evaluate a 10 year experience of perioperative airway management in head and neck cancer free flap reconstruction looking at the advantages and disadvantages of a delayed extubation approach versus a primary tracheostomy approach.

Method

We formed a 10 year free flap database of 469 free flap cases, which was collected by the head and neck team and cross referenced retrospectively with electronic and paper notes.

We collected a range of data including gender, age, co-morbidity, length of operation, post operative complications and length of stay.

Results

333 of head and neck cancer free flap cases underwent delayed extubation, of which 16 underwent subsequent emergency tracheostomies. This excluded cases where a elective tracheostomy is indicated such as in bilateral neck dissections and a radiotherapy treated neck. Even with hindsight, it was difficult to predict the need of an elective tracheostomy in the cases that ended up needing an emergency tracheostomy. In light of this, in the summer of 2016, a new protocol was instituted where free flaps would get an elective tracheostomy which was supplemented by a specialised multidisciplinary tracheostomy decannulation protocol in the postoperative period. As a consequence the following 136 cases underwent elective tracheostomies and there were no airway emergencies and the mortality rate from airway management when from 1-2 per year to 0. We also noticed a reduction in our length of hospital stay and overall halving of free flap complications.

Conclusion

We advocate, in head and neck cancer free flaps, an elective tracheostomy is a safer option given that airway management can be unpredictable in the post operative period.

Reference (If applicable)

The evaluation of a scoring system in airway management after oral cancer surgery. Lee HJ, Kim JW, Choi SY, Kim CS, Kwon TG, Paeng JY. Maxillofacial Plastic and Reconstructive Surgery. December 2015, 37:19.

Airway management in head and neck cancer patients undergoing microvascular free tissue transfer: Delayed extubation as an alternative to routine tracheotomy. Meerwein C, Pezier T, Beck-Schimmer B, Schmid S, Huber G. The European Journal of Medical Sciences 2014.

Tracheostomy or delayed extubation after maxillofacial free flap reconstruction. Singh T, Sankla P and Smith G. British Journal of Oral and Maxillofacial Surgery. June 2016

DYSPHAGIA REHABILITATION FOLLOWING TRANSORAL ROBOTIC SURGERY FOR ORO-PHARYNGEAL SQUAMOUS CELL CARCINOMA: A multi-centre survey within the United Kingdom

Oral

***Mrs. Sarah Stephen*¹, *Prof. Vinidh Paleri*², *Mrs. Diane Goff*¹, *Mr. James O'Hara*³, *Dr. Joanne Patterson*⁴**

1. The Newcastle upon Tyne Hospitals NHS Foundation Trust, Newcastle, 2. The Royal Marsden NHS Foundation Trust, 3. ENT Department, Freeman Hospital, Newcastle upon Tyne, 4. Newcastle University

Aim

Transoral robotic surgery (TORS) is an emerging treatment for oro-pharyngeal squamous cell carcinoma (OPSCC). Excellent oncological and survival outcomes have been reported, with a minimally invasive technique avoiding the functional morbidity associated with open surgery and high dose primary (chemo)radiotherapy¹. Encouraging swallow outcomes are demonstrated^{2,3} with the majority of patients resuming full oral intake by six weeks⁴. However, the level of dysphagia and rehabilitation requirements in the early post-surgical stage are currently not reported.

There are 15 centres across the U.K. offering TORS, with more expected in the future. It is therefore essential to get a clear understanding of optimal dysphagia management for this treatment group.

This study aimed to investigate access and timing of Speech and Language Therapy (SLT) intervention and dysphagia management from a multi-centre collaboration.

Method

A panel of multi-disciplinary clinicians with expertise in TORS initiated a multi-centre service evaluation. Survey questions were devised by two expert SLTs with TORS rehabilitation experience.

Lead SLTs from 15 TORS centres within the U.K. were invited to participate in the study. The survey was piloted by three centres and refined.

Each centre completed a patient audit on the previous five consecutive OPSCC TORS resections.

The survey included open and closed questions referring to patient demographics, pre and post-surgical SLT intervention and post-surgical swallow function. Findings were analysed using descriptive statistics.

Results

Three centres were excluded as were yet to complete five OPSCC TORS resections. Nine centres completed audit data, giving a total of 45 patients.

Eighty-eight percent of patients were seen for SLT assessment prior to surgery. Typically, initial assessment included baseline oro-motor assessment (73%), clinical swallow assessment (73%), advice on expected post-operative dysphagia (88%) and dysarthria (54%). Just over half (56%) of patients had pre-operative instrumental assessment, with the majority (n=20/25) having videofluoroscopy assessments.

Almost all patients (93%) had a naso-gastric tube (NGT) placed at time of surgery with the majority requiring tube feeding between 1 and 3 days (n=15).

All patients were seen by SLT for clinical assessment prior to commencing oral intake, typically on day one post-surgery (59%). More than half (55%) of patients showed clinical signs of aspiration. Sixty-six percent received dysphagia rehabilitation exercises, however three-quarters (75%) experienced a level of pain that significantly impacted on rehabilitation.

Conclusion

The survey identified differences in access to SLT services and dysphagia management. There are several potential reasons for this, including service provisions and referral pathways. Some centres were enrolled in a national clinical trial⁵ increasing access to videofluoroscopy assessment, which otherwise may not have been adopted in to clinical practice.

TORS results in dysphagia with risks of aspiration on oral intake. Pain is a significant post-surgical issue. Optimising pain management will improve post-surgery rehabilitation.

The study highlighted the difficulties in multiple centre data collection. However, there are significant benefits in collating patient outcomes and service evaluations. Developing a consensus of rehabilitation needs will promote efficient dysphagia management and inform service development and resource requirements, in addition to strengthening professional networks. As a result, patients could be provided with more tailored expectations of post-surgical rehabilitation, including the use of patient information leaflets.

Reference (If applicable)

- Kelly, K., et al. Oncologic, functional and surgical outcomes of primary Transoral Robotic Surgery for early squamous cell cancer of the oropharynx: A systematic review. *Oral Oncology*; 2014; 50, 696-703.
- Hutcheson KA, et al. Functional outcomes after TORS for oropharyngeal cancer: a systematic review. *Eur Arch Otorhinolaryngol*. 2014;272(2):463-71.
- Achim V et al. Long-term functional and quality-of-life outcomes After Transoral Robotic Surgery in Patients with Oropharyngeal cancer. *JAMA Otolaryngology-Head & Neck Surgery*. 2018; 144(1); 18-27.
- Owen, S., et al. Baseline swallowing measures predict recovery at 6 weeks after transoral robotic surgery for head and neck cancer. *Clinical Otolaryngology*. 2017; 42, 366-372
- Owadally W et al. PATHOS: a phase II/III trial of risk-stratified, reduced intensity adjuvant treatment in patients undergoing transoral surgery for Human papillomavirus (HPV) positive oropharyngeal cancer. *BMC Cancer*. 2015 Aug 27;15:602. doi:10.1186/s12885-015-1598-x. PubMed PMID: 26311526; PubMed Central PMCID: PMC4549836

FUNCTIONAL OUTCOMES FOLLOWING TRANSORAL ROBOTIC SURGERY FOR RECURRENT HEAD AND NECK CANCER (HNC)

Oral

***Mrs. Grainne Brady*¹, *Mrs. Sarah Stephen*², *Dr. Justin Roe*¹, *Prof. Vinidh Paleri*¹**

1. The Royal Marsden NHS Foundation Trust, 2. The Newcastle upon Tyne Hospitals NHS Foundation Trust, Newcastle

Aim

The standard of care for the management of recurrent HNC is open surgery, an intervention associated with high morbidity. Transoral robotic surgery (TORS) is now being considered as a minimally invasive option for selected tumours with encouraging oncological control. However, multidimensional swallowing outcomes have not been reported.

Method

We evaluated PSS Normalcy of diet (PSS-NOD) at 3 and 6 months post-surgery at two UK tertiary cancer centres. A subgroup treated in a single centre (London) underwent more detailed assessment using the MD Anderson Dysphagia Inventory (MDADI) and the Penetration-Aspiration Scale (PAS) (using videofluoroscopy or Fiberoptic Endoscopic Evaluation of Swallowing- FEES on thin liquids only).

Results

Between 2014 and 2018, 32 patients underwent TORS for recurrent HNC. PSS-NOD scores reduced from 65.3 (95% CI 56.6 to 74) at baseline (n=32) to 44.68 (95% CI 33.7 to 55.7) at 3 months (n=32) and 50.86 (95% CI 37.1 to 64.7) at 6 months (n=23) post-surgery. A subgroup of 16 patients underwent further assessment; mean age was 61 (range 48-74), 3 females were included. Five patients required free flap reconstruction and 12 required tracheostomy. Mean time to decannulation was 9.58 days (range 4-27). Baseline gastrostomies in place for 2 patients at baseline, 8 at 3 months (n=16), and 5 at 6 months post-surgery (n=14). Median MDADI global score decreased from 4 (range 1-5) at baseline (n=15) to 2 (range 1-5) at 3 and 6 months post-surgery. Median PAS scores increased from 1 (range 1-8) at baseline (n=13), to 8 (range 1-8) at 3 and 6 months post-surgery.

Conclusion

The use of TORS for recurrent HNC may result in a decline in swallowing status in the early post-operative phase; however dependency on gastrostomy decreases, and diet scores appear to improve by six months post operatively. Baseline swallowing status appears to be a key factor influencing swallowing recovery. Dysphagia rehabilitation is required for this patient cohort. Further research is required.

HPV associated B-cell infiltration in head and neck squamous cell carcinoma and survival outcomes: a systematic review.

Oral

Dr. Alexander S North¹, Mr. Umar Al-haddad¹, Mr. Daniel Lin², Mr. David Hamilton¹, Dr. Henrique Lemos¹, Prof. Andrew L Mellor¹, Dr. Lei Huang¹

1. Newcastle University, 2. ICM

Aim

1. To synthesise current evidence pertaining to the association between human papillomavirus (HPV) positive head and neck squamous cell carcinomas (HNSCC) and the infiltration of B-cells into the tumour microenvironment.
2. To assess the relationship between HPV+ HNSCC, B-cell infiltration and survival outcomes in HNSCC.
3. To discuss the potential for immunotherapies targeting B-cell infiltration in HPV+ HNSCC.

Method

A comprehensive search of Medline, Embase, Scopus and Cochrane Library databases was performed in January 2019. No limits were placed on date or language. All titles and abstracts were screened by two independent authors to determine relevance, and in cases of disagreement a third author was consulted. For all included papers we hand-searched the references and "cited-by" papers to identify further relevant work. Inclusion criteria were: 1) studies which published original data in a peer-reviewed journal; and 2) articles assessing the relationship between HPV status and B-cell infiltration in HNSCC. Data extraction was performed by two independent authors using a pre-defined database.

Results

Nine papers were included. HPV+ status was associated with a significantly greater B-cell immune response compared to HPV- HNSCC¹⁻⁷ (Table 1). However, two studies found no increased B-cell infiltration in HPV+ tumours^{8,9}, but their sample size was limited⁸. Results were consistent across anatomical sites, except in one study where only oropharyngeal tumours had increased B-cell infiltration⁷. Increased B-cell infiltration was the biggest difference in the immune microenvironment when comparing HPV+ to HPV- HNSCC^{2,3}. Furthermore, HPV integration into the host genome was associated with decreased B-cell infiltration compared to integration negative tumours⁴. Five studies analysed the impact of high vs low B-cell infiltration on prognosis. Increasing infiltration was generally associated with improved overall survival^{1,3,4} and recurrence free survival^{2,3}. In other studies, no correlation was demonstrated^{6,7}, but survival analyses were likely underpowered. None of the studies analysed the effect of B-cell infiltration on responsiveness to chemoradiotherapy or as a predictor of metastases.

Conclusion

There is increasing evidence supporting the importance of the B-cell immune response associated with HPV+ HNSCC, and that the degree of infiltration may correlate with outcome. However, a subset of HPV+ HNSCC presented poorer outcomes, and this has been correlated with HPV integration into the host genome and a B-cell depleted microenvironment. Studies are needed to correlate B-cell infiltration with long-term outcomes and/or responsiveness to therapeutic modalities to determine if B-cell infiltration could serve as a biomarker to guide treatment decisions. Further investigation into the mechanistic role of the different B-cell subpopulations within the tumour microenvironment and their interaction with other immune cells will help inform the design of potential immunotherapies targeting B-cell pathways in HPV+ HNSCC.

Reference (If applicable)

1. Chen X, Yan B, Lou H et al. Molecular Immunology. 2018; 96; 28-36
2. Wood O, Woo J, Seumois G et al. Oncotarget. 2016; 7; 56781-97
3. Cao B, Wang Q, Zhang H et al. OncoImmunology. 2018; 7; e1392427.
4. Koneva LA, Zhang Y, Virani S et al. Mol Cancer Res. 2018; 16; 90-102
5. Franzen A, Vogt TJ, Muller T. Oncotarget. 2018; 9; 641-650
6. Russell SM, Angell TE, Lechner MG et al. Head Neck Oncol. 2013; 5; 24
7. Schneider K, Marbaix E, Bouzin C et al. Acta Oncologica. 2018; 57; 1165-72
8. Ritta M, Landolfo V, Mazibrada J et al. New Microbiologica. 2013; 36; 133-44
9. Wansom D, Light E, Worden F et al. Acta Otolaryngol Head Neck Surg. 2010; 136; 1267-73

Author	Year	B-cell analysis method	High vs Low B-cell Expression	Survival Analysis	Survival Outcome
Chen et al ¹	2018	Gene Expression analysis using OBERGORT software	Ratio of B-cell infiltrate to total immune	Overall survival with multivariate cox regression analysis	HPV+ high B-cell expression improves overall survival (HR 0.263; CI 0.084-0.827; p=0.022)
Wood et al ²	2016	Gene expression (RNA seq) and CD20 immunohistochemistry with Functional analysis of individual RNA-seq or Microarray Expression	Pathological quantification: high = >40 involvement of tumour/stroma, low = <20% involvement	Disease free survival with Kaplan-Meier curve and log rank analysis	HPV+ high B-cell expression improves disease free survival (p=0.001)
Cao et al ³	2018	DNA microarray immunohistochemistry	Average of normalised expression value	Five-year overall survival and disease-free survival with Kaplan-Meier curve and log rank analysis	HPV+ high B-cell expression had improved overall and recurrence-free survival (OS, p = 0.006; RFS, p = 0.000)
Koneva et al ⁴	2018	Gene expression analysis	Average value degree of infiltration	Five-year overall survival with Kaplan-Meier curve, log rank analysis and multivariate cox regression analysis	HPV integration negative tumours had improved five-year overall survival (p=0.046)
Franzen et al ⁵	2018	Quantitative data obtained from The Cancer Genome Atlas	RNA-seq based quantification	-	-
Russell et al ⁶	2013	qRT-PCR and immunohistochemistry of CD20	Mean used as cut-off	-	-
Schneider et al ⁷	2018	Immunohistochemistry of CD20	Proportion of stained area as ratio of whole tumour	No sub-analysis of B-cell infiltration on survival	-
Ritta et al ⁸	2013	Immunohistochemistry of CD20	Mean density (%) of B-cell infiltration compared for HPV+ and HPV-	-	-
Wansom et al ⁹	2010	B-cell flow cytometry	Mean B-cell percentage as function of overall lymphocyte infiltration for HPV+ and HPV-	-	-

Table 1: Descriptive methodology of included studies relating to analysis of B cell infiltration and analysis of survival outcomes if included.

Table 1 with footer.png

Listening to the Laryngectomy Patient to Improve Care

Oral

Ms. Jane Dunton¹, Ms. Susannah Heppenstall¹

1. Guy's and St Thomas' NHS Foundation Trust

Aim

Following total laryngectomy, patients have specific care needs [1]. Most patients are self-caring, however if they require hospital admission or experience a deterioration in function they may require support. GSTT is a specialist centre for Head and Neck Cancer with a team of specialist SLTs who act as keyworkers for laryngectomy patients. Our patients told us that staff caring for them in non-specialist settings often lacked basic knowledge and understanding of the changes to anatomy and function that laryngectomy involves. Queries from staff indicated that some aspects of basic care were being neglected at times when patients are particularly vulnerable.

Our study day was designed in response to these concerns, aiming to improve delegates' knowledge and understanding of anatomy, function and care needs following laryngectomy, and to improve their confidence in supporting patients. We evaluated the day to determine whether aims were met and to inform delivery of future training.

Method

A multidisciplinary study day was run by the SLT department, with presentations from surgical, nursing and physiotherapy colleagues. Content and evaluation forms were specifically designed with patient input, and patients and carers attended the day to give talks and answer questions.

The target audience was nurses and allied health professionals who were not specialists in head and neck cancer management, but who may care for laryngectomy patients, e.g. in non-specialist hospitals, nursing homes, or in patients' own homes.

The evaluation form was completed anonymously by all delegates, rating their confidence and knowledge in a number of areas at the beginning and end of the day, on a scale of 1-10. Responses pre-and post-training were compared with the Wilcoxon Signed-Rank test. Delegates were also asked to indicate their profession, grade, and number of years working in their current specialism. Open questions were included to capture qualitative responses and suggestions for improvement.

Results

18 delegates attended from a range of background and levels of experience (Figure 1). There was a significant improvement in all questionnaire measures following the training ($p < 0.01$, Figure 2). When asked to rate how well the day had met their expectations from 1 (not at all met) to 10 (exceeded), 100% rated at 7 or above.

Delegates were asked to explain how their practice would be informed by their learning. 6 delegates commented that they would share their learning with colleagues; 2 highlighted their increased understanding of the importance of involving patients in their own care.

12 delegates identified patient involvement in the study day as a feature they found most helpful. Others commented on the MDT approach and variety of presentations included. Suggestions for improvement included increasing the practical sessions and extending the duration of the day, and running the day again so colleagues could attend.

Conclusion

In partnership with patients and carers, we designed and delivered a study day on Basic Laryngectomy Care in response to patient feedback and queries from non-specialist centres. Delegates were asked to evaluate the day,

rating their baseline confidence and knowledge from 1-10 at the beginning of the day and then re-rating their confidence and knowledge in the same areas at the end of the day. Median responses increased from 4.5-5 at the start of the day to 9 for all areas following the study day and this was statistically significant. Feedback was extremely positive, and delegates felt that they would be able to put their learning into practice. There were no suggested changes to the format or content of the day, and delegates found the patient involvement particularly beneficial.

We plan to deliver the study day annually, with ongoing monitoring of feedback to inform further development of the programme.

Reference (If applicable)

[1] Ward, E.C. & van As-Brooks, C.J. (2007) *Head and Neck Cancer: Treatment, Rehabilitation, and Outcomes*. San Diego: Plural Publishing

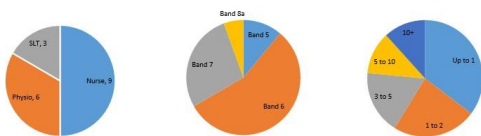


Figure 1.png

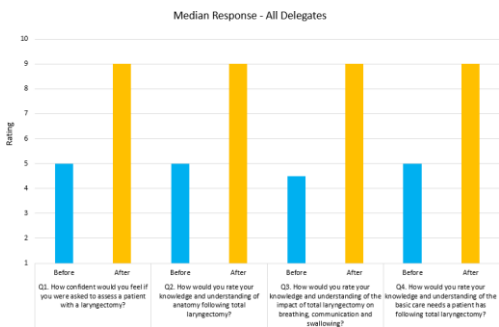


Figure 2.png

National audit of head and neck cancer post-treatment surveillance: An INTEGRATE-BAHNO collaboration

Oral

Mr. George Garas¹, Mr. John Hardman², Ms. Theofano Tikka³

1. On behalf of INTEGRATE (in alphabetical order: Matthew Ellis, George Garas, John Hardman, Maha Khan, Hisham Mehanna, Matthew E Smith, Theofano Tikka, Kishan Ubayasiri, Richard Williams), 2. The Royal Marsden NHS Foundation Trust, 3. Queen Elizabeth University Hospital, Glasgow

Aim

Follow-up of patients after treatment for head and neck cancer is crucial in the management of morbidity and detection of disease recurrence. We assessed practice across the UK, evaluating compliance with the BAHNO recommendations, and exploring indicators for recurrence and the role of allied health professionals.

Method

Multi-centre, prospective and retrospective audit involving 89 hospitals across the UK, delivered for BAHNO by INTEGRATE, the National ENT Trainee Research Network.

Results

Complete data were collected from n=5,123 patients. 57% of recurrences occurred at 2 years, 32% between 2 and 5 years, and 11% post-5 years. Expedited follow-up correlated significantly with the presence of recurrence ($p<0.05$). The pick-up rate (for residual/recurrent disease) was 35% for expedited appointments compared to 5.2% for planned follow-ups ($p<0.001$). Of the expedited appointments, 63% were initiated by patients (vs. 37% by clinicians). The commonest new symptom was dysphagia (33%) but the strongest predictor of recurrence was dyspnoea (PPV=16.2%) followed by pain (neck=10.4%, mouth/throat=9.2%). There was lack of consensus around the choice of imaging modalities for investigating suspected recurrence. 30% of patients were seen in a dedicated MDT clinic with input from other health professionals available on the day in 23% of consultations. There was evidence to support the delivery of patient education regarding recurrence, smoking and alcohol advice in only 20.4%, 6.2%, and 5.3% of cases, respectively.

Conclusion

These findings provide incentive to change current practice of clinician-led follow-up, making it more patient-driven and innovative, and involving risk-stratification and greater patient education.

Reference (If applicable)

Authorship: INTEGRATE (in alphabetical order: Matthew Ellis, George Garas, John Hardman, Maha Khan, Hisham Mehanna, Matthew E Smith, Theofano Tikka, Kishan Ubayasiri, Richard Williams)

Presenters: John Hardman and Theofano Tikka

Oral Care Protocol to Reduce Post Oral Surgical Complications for Head and Neck Cancer

Oral

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1. University College London Hospital NHS Foundation Trust

Aim

Mouth Care Matters (MCM) is a Health Education England initiative that aims to improve clinical outcomes by empowering the healthcare team with the knowledge of the importance and implications of good oral hygiene, as well as skills to provide a high standard of oral care.¹

Oral hygiene plays an important role in the recovery and reduction in post-surgical complications of Head and Neck cancer (H&N) patients, particularly those who have undergone surgery to the oral cavity^{2,3,5}. However, oral care for this patient population can be complex and is often overlooked¹.

Our project aim was to establish a baseline in current oral hygiene practice on the H&N ward at University College London Hospital (UCLH). These findings would be used to identify areas of improvement and support the Multidisciplinary team (MDT) to improve post-surgical outcomes to deliver gold standard care as identified by the MCM initiative.

Method

Two questionnaires and a documentation audit were carried out in February 2018. The questionnaires were aimed at patients and nursing staff on the H&N ward at UCLH. Of the returned questionnaires, patients returned 15 and staff returned 10. An audit was completed on 12 sets of patient notes. All results were collated on a database.

Results

Of the patient notes reviewed, 75% did not have a record of mouth care. 60% of the patients reported that they were asked by staff about their mouth status. 60% of patients reported new problems pertaining to oral care and 70% reported that they were not asked if they had the appropriate oral care equipment. Of the nursing response, 70% felt comfortable providing oral care and 90% were interested in training for mouth care.

Conclusion

There is a demonstrable need for training and development in oral hygiene on the H&N ward at UCLH. A defined protocol has been developed by the H&N MDM as a result of the survey findings and forthcoming roll-out of the MCM initiative at UCLH in early 2019. This protocol will serve as an addendum to the MCM competency document. The aim is to improve the standard of care and reduce post-surgical complications by empowering both staff and patients to implement oral hygiene post surgery to the oral cavity. Strategy for successful roll-out will be enabled by championing the MCM initiative by involvement in MCM meetings and events, staff training, and exemplar ward focus on oral health. The surveys will be repeated to assess progress and efficacy of the protocol one year after the MCM programme has been established at UCLH.

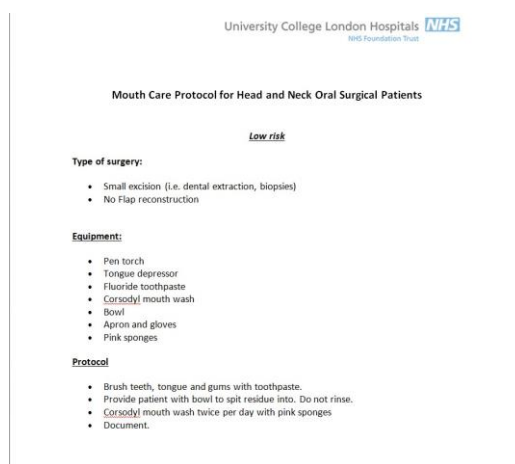
Reference (If applicable)

1. Improving Oral Health of Older Persons Initiative. (2018). Retrieved from <http://www.mouthcarematters.hee.nhs.uk/>
2. Mouth care guidance and support in cancer and palliative care. (2015) Retrieved from http://www.ukomic.co.uk/pdf/UK_OM_Guidelines.pdf
3. SHIGEISHI, Hideo et al. "Risk Factors For Postoperative Complications Following Oral Surgery". *Journal Of*

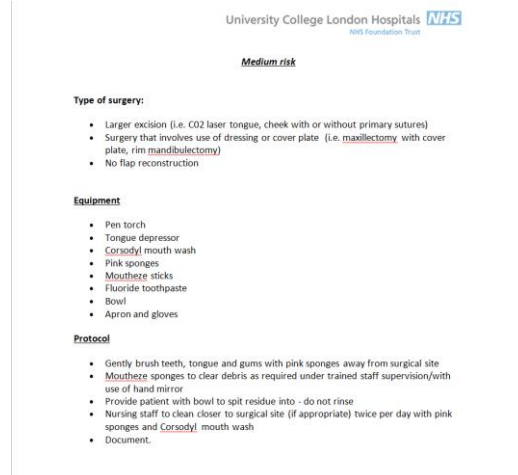
Applied Oral Science, vol 23, no. 4, 2015, pp. 419-423. *Fapunifesp (SciELO)*, doi:10.1590/1678-775720150130.

4. Sato, Jun, et al. "Oral Health Care Reduces the Risk of Postoperative Surgical Site Infection in Inpatients with Oral Squamous Cell Carcinoma." *Supportive Care in Cancer*, vol. 19, no. 3, 2010, pp. 409-416., doi:10.1007/s00520-010-0853-6.

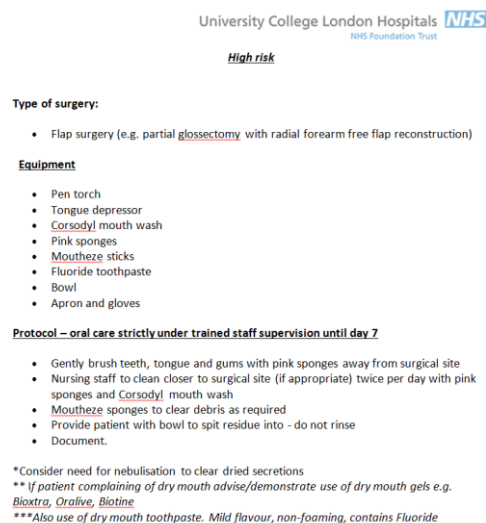
5. Chandu, A., et al. "Maintenance of Mouth Hygiene in Patients with Oral Cancer in the Immediate Post-Operative Period." *Australian Dental Journal*, vol. 47, no. 2, 2002, pp. 170-173., doi:10.1111/j.1834-7819.2002.tb00323.x.



Mouth care protocol - page 1.png



Mouth care protocol - page 2.png



Mouth care protocol - page 3.png

Patterns and predictors of retropharyngeal lymph node involvement in oropharyngeal carcinoma treated with (chemo)radiotherapy

Oral

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Aim

Retropharyngeal (RP) lymph node (LN) irradiation increases toxicity due to proximity to parotid and pharyngeal constrictors. Prediction of RP LN involvement is necessary to prevent radiotherapy treatment failures and potentially allow de-escalation of treatment by omission of this region in low risk patients. FDG PET-CT is one of the most sensitive imaging modalities for LN detection. This study aims to evaluate the frequency of RP involvement in patients with oropharyngeal carcinoma and a baseline PET-CT and MRI and/or contrast enhanced CT, relative to tumour subsite, T stage, size/number/location of involved LN, HPV and smoking status.

Method

This study is a single centre retrospective analysis of patients with oropharyngeal carcinoma treated with radiotherapy ± chemotherapy between 2010-June 2017. Inclusion criteria were: squamous cell carcinoma of oropharynx, baseline PET-CT, cross-sectional imaging with an MRI and/or contrast enhanced CT. Imaging reports were reviewed and any discrepancies between PET-CT and MRI/CT with regard to retropharyngeal LN status were reviewed by an experienced radiologist. Prevalence of retropharyngeal LN involvement was determined in relation to oropharyngeal subsite, T stage, levels of involved ipsilateral lymph nodes, contralateral lymph node involvement, size of largest LN, total number of involved lymph LN, HPV status, smoking status.

Results

402 patients with oropharyngeal carcinoma and a baseline PET-CT were evaluated. Baseline patient and disease characteristics are summarised in Table 1. Median number of involved LN was 2 (range 0-20); median largest LN size was 2.5cm (range 0-8.3). RP LN involvement was present in 43/402 (10.7%) of patients. RP LN involvement was unilateral-only in 35/43 (81%), bilateral in 5/43 (12%) and contralateral-only in 3 (7%). In 8/43 (19%) cases, involvement was predominantly above the level of the oropharynx. On multivariate analysis, involvement of contralateral LN was associated a higher rate of RP LN involvement ($p=0.001$, odds ratio 2.3 (95% CI 1.12-6.95) and grade 3 (poorly differentiated) histology was associated with a lower rate ($p=0.013$, odds ratio 0.27 (95% 0.01-0.77)); tumour subsite, T stage, largest LN size, total number of LN, any ipsilateral LN level I/II/III/IVa/Va/b involvement, HPV and smoking status did not predict risk of RP LN involvement.

Conclusion

The prevalence of retropharyngeal LN involvement was 10.7% with contralateral-only involvement rare, suggesting this region may be omitted from radiotherapy target volumes for lower risk patients. Contralateral lymph node involvement was associated with a higher risk of RP LN; however no clear group suitable for omission of ipsilateral RP LN irradiation could be identified.

Table 1. Patient and disease characteristics		
	n	%
ONSET		
• Date	212	77.1
• Place	10	3.9
AGE	20 (range 20-84)	
INDICATED SYMPTOMS		
• Headache	114	28.4
• Vomiting	103	25.1
• Irritability	93	23.1
PHYSICAL EXAM		
• Pupils	150	42.8
• Oculomotor	170	47.9
DIAGNOSIS		
• Tumor	241	59.0
• Meningitis/Encephalitis	161	39.5
• Hydrocephalus	5	1.2
• Other	13	3.2
DEATH		
• Yes	3	0.8
• No	207	50.4
• Cause of death (if reported)	74	18.4
• Cause of death (if not reported)	133	32.0
7 FOLLOW-UP		
• Yes	107	26.5
• No	105	25.9
• Cause of death	73	18.2
8 TREATMENT		
• No	40	9.8
• Surgery	161	39.5
• Chemotherapy	149	36.2
• Radiation	121	29.7
9 FOLLOW-UP WITHIN 6 MONTHS		
• Yes	111	27.4
• No	101	24.5
• Cause of death	67	16.3

Tables.png

PET-CT surveillance post (chemo)-radiotherapy in advanced head and neck squamous cell cancer - beyond the PET-Neck protocol

Oral

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Aim

The PET-NECK study[1] demonstrated PET-CT scan 12 weeks post-radiotherapy for HNSCC was non-inferior to planned neck dissection (ND). A high negative predictive value means that patients who are disease-free are reliably identified and spared ND. However, poor positive predictive value means optimal management for equivocal responders remains unclear. The aim of this analysis was to evaluate outcomes using PET-CT surveillance with particular focus on those achieving an equivocal nodal response

Method

All patients with node positive HNSCC treated with (chemo)-radiotherapy between January 2013 and September 2016 were identified. PET-CT responses were classified as complete (CR), incomplete (ICR) or equivocal (EQR). Patient demographics and outcomes were obtained from electronic records.

Results

187 patients were identified. 82.3% had oropharyngeal cancer, 80.5% of those were HPV-positive. Nodal staging was as follows: N1 14.5%, N2 80.7%, N3 4.8%. 80.2% received chemoradiotherapy. Median follow-up was 30 months. Median time from end of radiotherapy to PET-CT scan was 90 days. 59.4% had CR, 23.0% EQR and 17.6% ICR nodal response. Only 10 NDs (23.2%) were carried out for the EQR group with 50% pathological involvement. 2-year recurrence rate was 12.8%, 11.8% and 37.5% for CR, EQR and ICR groups respectively. 2-year survival was 91.9%, 87.5% and 50.0% respectively. No statistically significant differences in recurrence and survival rates were found between CR and EQR at 1-year and 2-years.

Conclusion

This study showed that patients with equivocal response on 12 week PET-CT have similar clinical outcomes (survival, recurrence and locoregional control) as compared to the complete response group, despite the omission of ND. This confirms the safety of an active surveillance strategy rather than immediate ND in patients with an equivocal response on 12 week FDG PET-CT post (chemo)-radiotherapy.

Reference (If applicable)

[1] PET-CT Surveillance versus Neck Dissection in Advanced Head and Neck Cancer; H Mehanna et al, DOI: 10.1056/NEJMoa1514493

Pre-clinical ultrasound assessment for head & neck cancer: A novel pilot study

Oral

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1. University College London Hospital NHS Foundation Trust

Aim

The current two-week-wait head and neck cancer pathway advocates 'one-stop' neck lump assessment clinics. We pilot a novel approach to neck lump referrals by way of a pre-clinic ultrasound scan. We present the outcomes, discuss strengths and limitations and propose this an alternative approach to the current pathway.

Method

New patients referred with a 'neck lump' by the GP on a 2WW cancer pathway were included. Patients were allocated a pre-clinic ultrasound scan by clerical staff with a clinic follow up 5 days later. Demographics, presenting complaint, patient journey details and outcomes were collected. A positive impact was considered where the ultrasound resulted in an expedited endpoint; when a patient was discharged, listed for surgery, removed from the cancer pathway, referred to another specialty or for further investigations based upon the ultrasound. A negative impact was considered in cases where the ultrasound resulted in a delay in care or where the ultrasound was not felt to be indicated/did not alter management.

Results

84 patients were booked for pre-clinic ultrasounds between May 2018 and January 2019. 16 did not attend and were excluded from further analysis. The remaining 68 patients underwent ultrasound assessment by a specialist consultant radiologist on average 8.81 days after referral (range: 2 – 21 days). 20 patients (29.4%) underwent a biopsy at the same time. At first appointment, 33 patients were discharged back to the GP (48.5%), six listed for surgery (8.8%), 12 referred on for further management/investigations (17.6%) whilst 11 were followed up routinely (16.2%). Overall, a positive impact was achieved in 91.2% of patients.

Ultrasound made no difference to the management of three patients and in one patient, a second ultrasound was requested inadvertently at the first clinic appointment. Two patients were reviewed in clinic prior to the biopsy results being available resulting in an additional appointment being booked.

Conclusion

Pre-clinic ultrasound scanning may provide an alternative to or complement the current 'one-stop' neck lump clinic. Our results demonstrate a reduced number of clinic visits, potential for quicker diagnosis and low rate of unnecessary scans. We feel our proposed setup requires less re-structuring of services, may make better use of current resources with a resulting improvement in efficiency.

The negative impacts highlighted in our pilot should reduce once the pathway is refined further to make the process more robust and streamlined. A larger study with direct comparison to the current pathway would allow further confirmation of our findings and highlight other potential strengths and limitations.

Protocolised access to the MDT – Towards efficient and meaningful MDT discussion

Oral

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1. Barts Health, 2. University College London Hospital NHS Foundation Trust, 3. Barts Health and UCLH

Aim

The multidisciplinary team meeting (MDT) remains the gold standard for decision making in the management of head and neck cancer patients. The aim of the MDT should be a comprehensive evaluation of all patients and bespoke care. The number of patients requiring discussion is growing and there is a need to control access to the meeting agenda in order to prevent repeat discussions and inadequate outcomes due to lack of information or incomplete investigations. We aimed to streamline two large neighbouring head and neck MDTs as a precursor to formal MDT unification. By improving data quality and providing guidance on MDT data requirements prior to referral we aimed to improve the efficiency of the MDT and reduce incomplete outcomes.

Method

We designed a network MDT referral protocol based on current UK National Multidisciplinary Guidelines. This was circulated to all core members for comment and local modifications were implemented. To evaluate the effectiveness of the protocol we retrospectively reviewed five consecutive MDT meeting agendas. A detailed analysis of the Barts Health MDT was performed as a proof of concept and then the principals were applied to the University College London Hospital (UCLH) MDT in order to confirm the findings.

Results

A total of 276 patient discussions were analysed (149 Barts Health, 127 UCLH) over the five-week period of this study in January 2018. In the Barts Health cohort, 53 patients (53/149, 35%) had incomplete or missing information resulting in rediscussion or 'roll over' and lack of definitive outcome. In the UCH group, application of the protocol demonstrated 42 patient discussions (42/127, 33%) were inadequate, again resulting in incomplete MDT outcome. Overall, if the protocol were applied to both MDTs, 95 patient discussions could have been avoided due to incomplete information (95/276, 34%).

Conclusion

The MDT is vital for timely and effective management of head and neck cancer patients. Incomplete or inadequate information precludes meaningful discussion of patients and ultimately may result in a delay to patient care. Without complete information including named consultant, history, imaging and pathology reports a definitive MDT outcome is often not achievable. By implementing a referral protocol we have demonstrated that over 1/3 of patient discussions in our MDT could be enhanced. This reduces the need for 'roll overs', improves pathway efficiency in addition to time saving benefits. The protocol described in this study is now in use for our network with ongoing, demonstrable improvements in MDT efficiency.

Re-evaluation of the impact of an Enhanced Recovery Programme on total, pre- and post-operative fasting times

Oral

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Aim

An Enhanced Recovery Programme (ERP) was introduced in head and neck cancer surgery at Guy's Hospital in 2013 with the aim of improving surgical outcomes. Key nutritional principles include carbohydrate loading prior to surgery and early post-operative feeding, leading to shorter total fasting time (FT). A previous service evaluation has highlighted significant reductions in pre-operative FT since the introduction of a carbohydrate loading protocol, however only modest reductions in post-operative FT (Taskiran-Chaudry et al. 2015). Since then there has been a focus on reducing post-operative FT, including the development of a multidisciplinary 'Head and Neck Surgery Feeding Protocol'. This abstract aims to evaluate the impact of these service improvements on total, pre- and post-operative FT.

Method

Data was collected for all adult patients who had head and neck cancer surgery at Guy's Hospital. Patients were excluded if they did not receive exclusive enteral tube feeding for a minimum of 4 days post-operatively or if they were not admitted to critical care (GCCU) post-operatively. Data collection was prospective and took place over a 3 month period. Data collection included total, pre- and post-operative FT and nutritional intake in the post-operative period, including time to meet full nutritional requirements.

Results

9 patients were admitted to GCCU post-operatively and underwent carbohydrate loading as per Trust protocol. The average total FT was 10.3 hours (SD = 4.7, Median 9.1). This represents a 48% reduction in total FT since the last service evaluation in 2015 (19.7 hours, SD = 10.7, Median 14.8). The average pre-operative FT was 3.2 hours (SD = 1.6, Median 2.5), a 16% increase since 2015 (2.77 hours, SD = 0.65, Median = 2.5). The average time to feeding post-operatively was 7.0 hours (SD = 4.8, Median 5.4), a 59% reduction since 2015 (17.0 hours, SD = 10.97, Median = 12.3). The time taken to reach target volume of feeding was 2.00 days (SD = 0.82), compared to 2.36 days (SD = 1.12) in 2015.

Conclusion

There has been an overall improvement in post-operative FT, total FT and time to meet nutritional requirements. A newly implemented 'Head and Neck Surgery Feeding Protocol' recommends commencement of feeding within 4 hours of surgery. Although the average time to feeding post-operatively is 7 hours in this review, this is a significant reduction from 2015 when time to feeding was 17 hours. Joint working with GCCU colleagues and establishing barriers to early enteral feeding has been important for bringing about this change. This reduction corresponds with head and neck ERP guidance (Dort et al. 2017), which recommends feeding within 24 hours. The results show a small increase in pre-operative FT. However, reliable conclusions cannot be drawn due to skewing of data by one patient whose surgery time was delayed by 6 hours. Future work should continue to explore avoidable reasons for delays and interruptions which contribute to sub-optimal nutrition post-operatively.

Reference (If applicable)

Powell, R (2013) A Service Evaluation of Post-Operative Feeding Practices in Head and Neck Cancer Surgery

Patients at Guys' Hospital. BSc Nutrition and Dietetics. London Metropolitan University.

Taskiran-Chaudry, E., Mather, P. and Balhatchet, D. (2015) A re-evaluation of feeding practices in surgical head and neck cancer patients at Guy's hospital. London Metropolitan University

Dort, J.C., Farwell, G.D., Findlay, M., Huber, G.F., Kerr, P., Shea-Budhell, M.A., Simon, C., Uppington, J., Zygun, D., Ljungqvist, O., Harris, J.. (2017). Optimal Perioperative Care in Major Head and Neck Cancer Surgery With Free Flap Reconstruction A Consensus Review and Recommendations. From the Enhanced Recovery After Surgery Society. *JAMA Otolaryngol Head Neck Surg.* 143(3):292-303

Salivary Gland Malignancies: Descriptive Analysis from Head and Neck 5000

Oral

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1. University of Bristol

Aim

Malignant salivary gland tumours are uncommon and have a reported annual incidence of 0.83-1.38 per 100,000 in the United Kingdom [1]. Obtaining good quality epidemiological and prognostic data is challenging for this patient cohort in view of the relative low incidence, potential for involvement of several anatomical sub-sites, and multiple histopathological diagnoses within the head and neck region.

Head and Neck 5000 (HN5000) is a large UK based longitudinal study and translational/biomedical resource that has recruited and followed 5511 people with a diagnosis of head and neck cancer. We use data from the HN5000 study to present a descriptive analysis that includes details of demographics, histopathological diagnosis, disease management and outcome, for a sub-group of participants presenting with a diagnosis of salivary gland malignancy.

Method

The establishment of the HN5000 study and methodology used has been described in detail [2]. In brief, a total of 5511 patients, with a new diagnosis of head and neck cancer, were recruited from multiple sites across the UK between April 2011 and December 2014. Baseline and follow up data was acquired from clinical notes, and a range of patient questionnaires. Blood, saliva, and formalin-fixed paraffin embedded (FFPE) biopsy were collected in parallel. Data was analysed using appropriate statistical methods.

Results

Data was analysed for 207 people with a diagnosis of salivary gland malignancy, affecting both major (56.5%) and minor (54.5%) salivary glands. The mean age at presentation was 59.8 years. Major gland malignancy was more common in males, with female predilection noted for minor gland sites. Tumour distribution in the major gland sites were: parotid gland (77.8%), submandibular gland (13.7%), and sublingual gland (7.7%). The oral cavity was the most common site for minor gland malignancy (62.8%) and most frequently presented on the palate (30.2%). The dominant histopathological diagnoses for all sites were adenoid cystic carcinoma (23.2%) and mucoepidermoid carcinoma (23.2%). Minor salivary gland malignancies presented at an earlier clinical stage compared with major gland sites. Surgery alone was the most common treatment of minor gland disease, whereas surgery was combined with chemoradiation to treat major gland malignancies. To date, 26.2% of people recruited with salivary gland malignancy have died.

Conclusion

This study presents a descriptive analysis of a subgroup of participants who were recruited to the HN5000 study with a diagnosis of salivary gland malignancy. We outline important details of patient demographics, clinical presentation, histopathological diagnosis, disease management and outcome.

Reference (If applicable)

1. Bradley, P.J. and McGurk, M., Incidence of salivary gland neoplasms in a defined UK population. British Journal of Oral and Maxillofacial Surgery 51 (2013)399-403.

2. Ness, A. R., *et al.* Establishing a large prospective clinical cohort in people with head and neck cancer as a biomedical resource: head and neck 5000. BMC Cancer 2014, 14:973.

SIP SMART – A parallel group randomized feasibility trial of swallowing pre-habilitation for patients with head and neck cancer

Oral

Dr. Roganie Govender¹, Dr. Benjamin Gardner², Dr. Christina Smith³, Dr. Helen Barratt³, Prof. Stuart Taylor¹

1. University College London Hospital NHS Foundation Trust/UCL, 2. Kings College London, 3. UCL

Aim

Background & Aims: Dysphagia affects the majority of patients treated for head and neck cancer, with many experiencing long-term impact on function and quality of life. *Pre-habilitation* offers good biological plausibility and has shown some promise. However, a recent Cochrane systematic review of pre-treatment swallowing exercises reported no clear efficacy, calling for new vanguard studies to address this uncertainty.¹

SIP SMART – [Swallowing Intervention Package: Self-Monitoring, Assessment, Rehabilitation Training] aims to improve post treatment swallowing outcomes through a targeted and tailored pre-treatment intervention. The feasibility study reported here follows on from extensive intervention development work drawing upon behaviour change theory and implementation science.

The main aims of the current trial were to examine: 1) recruitment and retention, 2) patient acceptability of randomization and participation, 3) patient adherence and 4) the identification of a suitable primary outcome for a definitive trial, including sample size estimation.

Method

Methods: This single centre, two-arm parallel group randomized feasibility trial recruited patients newly diagnosed with stage III/IV head and neck cancer to a swallowing pre-habilitation study with a 6-month follow-up.² A range of outcomes were collected at baseline, 1-month, 3-months and 6-month timepoints. Patients were randomized via an online web-based system (UK trials regulator approved), and were not blinded to their allocated group. SIP SMART comprised two 45-minute consultations delivered by a specialist speech and language therapist before cancer treatment. The package included baseline clinical measures and instrumental swallowing assessment, relevant educational information, targeted swallowing exercises, and specific behaviour change strategies to increase exercise adherence. Usual care comprised a single session including baseline clinical measures and generic information about the likely impact of treatment on swallowing. Both qualitative and quantitative metrics were collected over the duration of the trial.

Results

Results: A total of 106 patients were identified at the multidisciplinary team meetings (pre-screening) of which 70 were assessed for eligibility. Twenty six patients did not meet eligibility criteria [0.37, 95% CI 0.27 to 0.49]. Five of 44 eligible patients were missed in clinic [0.11, 95% CI 0.05 to 0.24]. Seven of the 39 approached declined participation [0.18, 95% CI 0.08 to 0.33]. Target recruitment was achieved within the timeframe and recruitment ceased when 32 patients were consented. At 6-months 29 patients remained in the trial [0.91, 95% CI 0.76 to 0.97]. Acceptability to randomization and participation in the intervention was favourable, and adherence to the exercises exceeded the minimum criterion. The MDADI swallow related quality of life measure was deemed the most suitable primary outcome for sample size estimation. No serious adverse effects arose from the intervention, or participation.

Conclusion

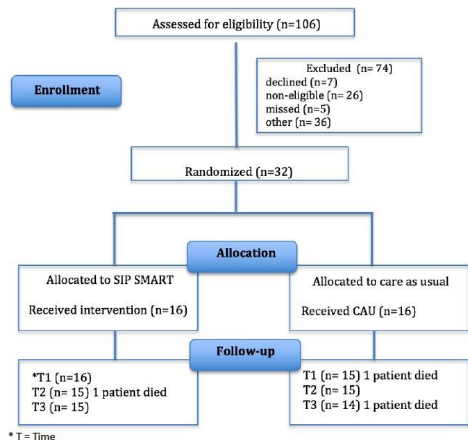
Conclusions:Based on the a priori criteria, a definitive trial of the SIP SMART intervention compared to usual care is feasible and can be delivered within the clinical pathway for patients treated for head and neck cancer on the National Health Service. Information and lessons learned from the study around context and trial implementation will be useful for the next phase of this work. Whilst not an explicit feasibility aim, preliminary results favoured the new intervention adding to the rationale (successful feasibility criteria) for taking the study forward to a larger multi-centre trial.

ISRCTN40215425

Reference (If applicable)

1. Perry, A., Lee, S., Cotton, S. and Kennedy, C. (2016). Therapeutic exercises for affecting post-treatment swallowing in people treated for advanced-stage head and neck cancers. *Cochrane Database of Systematic Reviews*. [online] Available at: <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD011112/>

2. Govender, R., Smith, C., Gardner, B., Barratt, H. and Taylor, S. (2017). Improving swallowing outcomes in patients with head and neck cancer using a theory-based pre-treatment swallowing intervention package: protocol for a randomized feasibility study. *BMJ Open*, 7(3), p.e014167.



Sip smart-consort flow diagram.png

The cytocidal effect of irrigation with water on cancer cells: relevance to surgical practice

Oral

Mr. Navin Vig¹, Prof. Ian Mackenzie²

1. UCL Head and Neck Academic Centre and Queen Mary, London, 2. QMUL

Aim

The aim was to investigate the cytocidal efficacy of water on oral cancer cells.

After a surgical resection and neck dissection for head and neck cancer, surgeons may irrigate the field with water. The use of water is based on the premise that cancer cells are more susceptible to osmotic lysis than normal cells. Theoretically, this lowers the number of cancer cells more than if only saline is used, potentially improving survival outcomes. However, evidence for its efficacy in head and neck cancer is limited.

Water lavage has been described for ovarian and colorectal cancer animal models and in vitro. The peritoneal cavity or equivalent is irrigated with water (or saline) for between 10 and 30 minutes. Results suggest greater cancer cell death with water but the literature also indicates poorer outcomes with water lavage in mouse models of these cancers.

Method

Two oral cancer cell lines (LuC4 and Ca1) were cultured as monolayers at 37°C in standard culture medium in 24-well plates. In order to determine the impact of water on other cell types, in addition to cancer cells, normal oral fibroblasts and immortalised normal oral keratinocytes (NOKs) were also cultured, in identical conditions. At Day 3, cells (n=3 for all lines) were exposed to one of the three irrigation solutions; control phosphate-buffered saline (PBS), distilled water (dH₂O) or 2.5% povidone-iodine (P-I). This was for no more than 30 seconds, representing the typical period of exposure in the surgical environment. After this, cells were washed with PBS and trypsinised, and both their number and survival (live/dead status) determined using the NovoCyt flow cytometer.

Results

Comparing dH₂O to control solution PBS, there was no significant difference in either absolute cell number in the count or cell survival in any cell line or type, cancer or normal. Approximately 95% of all cells survived when exposed to these solutions. However, exposure to P-I led to a significant reduction of LuC4 cells (although not Ca1) and fibroblast survival (by 13.7% and 8.4% respectively, both $p < 0.02$) when compared to PBS. P-I application to fibroblasts also led to a significant fall in absolute cell number (to approximately 2% of control number, $p = 0.0023$). This may represent a limitation of in vitro culture or the more selective loss of fibroblasts with P-I. Clinical relevance to wound healing will also be investigated using wound healing assays.

Conclusion

Although evidence for the use of water against cancer cells in ovarian and colorectal cancer exists, its clinical relevance is unclear. Lavage is performed in a contained cavity and over a relatively long time period. Lavage with water is not possible in the same way in the head and neck. Normally, the operative field is irrigated with water for only a very short period.

The data generated here demonstrated no cell survival difference between irrigation with dH₂O or PBS. When further contaminated with tissue exudate and blood, water is extremely unlikely to have any impact upon the survival of any cancer cells present. P-I may have a greater cytocidal effect than water but its impact on fibroblast number has to be more fully evaluated before it can routinely be recommended. With further investigation,

this might be the irrigation solution of choice in the head and neck.

Reference (If applicable)

Hah, JH, et al. Selection of irrigation fluid to eradicate free cancer cells during head and neck cancer surgery. *Head Neck*. 2012;34(4):546-550.

Morris, PC, Scholten, V. Osmotic lysis of tumor spill in ovarian cancer: a murine model. *Am J Obstet Gynecol*. 1996;175(6):1489-1492.

Huguet EL, Keeling NJ. Distilled water peritoneal lavage after colorectal cancer surgery. *Dis Colon Rectum* 2004; 47: 2114–2119.

Ito F, Camoriano M, Seshadri M, Evans SS, Kane JM, Skitzki JJ. Water: a simple solution for tumor spillage. *Ann Surg Oncol* Springer-Verlag. 2011;18:2357–2363.

Lodhia KA, Dale OT, Winter SC. Irrigation solutions in head and neck cancer surgery: a preclinical efficacy study. *Ann Otol Rhinol Laryngol* SAGE Publications. 2015;124:68–71.

Lenis AT, et al. Continuous saline bladder irrigation for two hours following transurethral resection of bladder tumors in patients with non-muscle invasive bladder cancer does not prevent recurrence or progression compared with intravesical Mitomycin-C. *BMC Urol* 2018;18(1):93

Too old for major free flap reconstructive surgery in Head and Neck cancer management?

Oral

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1. Southampton General Hospital

Aim

The increasing life expectancy of the population has resulted in an increasing incidence of elderly patients developing Head and Neck (H&N) cancer. Microvascular free flap reconstruction is often the optimal reconstructive option following ablative surgery. Elderly patients may be considered high risk for major surgery, due to their co-morbidities and decreased physiological reserves. We analyzed the surgical outcome of elderly patients undergoing free flap reconstruction for H&N cancer.

Method

A retrospective study, between 2016 and 2018, identified 18 patients over the age of 80 (two >90 years old) undergoing ablation and free flap reconstruction for H&N cancer. The details and surgical outcomes of these 18 patients were reviewed.

Results

The free flaps included 9 fibulas, 5 anterolateral thighs, 2 latissimus dorsi, 1 radial forearm and 1 jejunal. The median length of hospital stay was 23 days and the mean length of ITU stay was 3 days. 1 patient had a significant surgical complication requiring a return to theatre. 10 patients experienced systemic complications, with 4 developing delirium. Twelve out of 16 patients were alive at 1 year.

Conclusion

There is an increasing need for reconstructive surgery in the elderly. Our data showed that whilst there were minimal surgical complications, these patients frequently experienced post-operative medical problems. Management of H&N cancer in this population requires weighing of risks and benefits, and quality of life issues. Despite the challenges, this cohort of patients can be safely treated surgically, however a perioperative geriatric physician input may be desirable.

What is the evidence for clinical benefit in using proton or carbon ion therapy in head and neck cancer?

Oral

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Aim

With the introduction of a national proton therapy service into the UK, in 2019, some patients will have to travel considerable distances to access this innovative treatment modality. It is therefore important to demonstrate where proton therapy has been shown to have a positive clinical benefit, and which head and neck cancer subsites show most clinical gain, to enable optimal patient selection for proton therapy, which may be expensive in both time and resource costs. Equally important, is to show where there is no demonstrable proven benefit for particular head and neck sites and tumour biologies, and where current advanced radiotherapy technologies such as Intensity Modulated RadioTherapy (IMRT), or arc therapies may give as good outcomes, with the advantage of being delivered locally to the patient. The evidence for carbon ion therapy in head and neck cancer will also be included.

Method

A literature search was performed for both head and neck cancer with proton therapy and carbon ion therapy, and this showed a limited literature for use of both modalities in head and neck cancer (HNC). There were a large number of papers dealing with the physics and the dosimetric challenges involved and the optimisation of beam delivery and patient selection. There have been less than 30 papers in the literature in the last five years dealing with the clinical use, outcomes and benefits of proton therapy in HNC and even fewer dealing with carbon ion treatment.

Results

At present there are no prospective randomised controlled trials (RCT) published comparing proton therapy with Intensity Modulated RadioTherapy (IMRT) or ARC therapies in HNC. There is one ongoing prospective RCT, NCT 01893307, which will not report until at least 2023. Publications dealing with patient outcomes are mostly described in terms of toxicity reduction rather than improved survival benefit. Older reviews emphasise the *potential* for the use of proton therapy in HNC, and early studies using proton beam boosts within photon protocols have given a mixed and imprecise view of the proven outcome benefits for the use of proton's carbon ions in the common head and neck cancers. The carbon ion beam literature is even more limited, but one of our authors (SC) is pursuing the development of a carbon ion facility in his own hospital.

Conclusion

The use of proton therapy and to lesser extent carbon ion therapy, is increasing in head and neck cancer but this does not reflect the published evidence for survival benefit. This is an important issue as in the next few years, patients will be referred to the two national Proton Centres for management of HNC, and it is essential that we can describe which patients with cancers affecting particular HNC subsites, may benefit most from these new technologies, and where the evidence would suggest that the newer photon techniques, such as IMRT or arc therapies, may give as good outcomes and save patients travelling considerable distances for unproven benefit.

Reference (If applicable)

1 Randomized Trial of Intensity-Modulated Proton Beam Therapy (IMPT) Versus Intensity-Modulated Photon Therapy (IMRT) for the Treatment of Oropharyngeal Cancer of the Head and Neck
<https://clinicaltrials.gov/ct2/show/record/NCT01893307?view=record>

Poster

10 years experience of 468 cases of free flap reconstruction in head and neck cancer

Poster

Ms. Alexandra Green¹, Mr. Luke Cascarini¹, Mr. Alistair Fry¹

1. Guy's and St Thomas' NHS Foundation Trust

Aim

To audit 10 years of free flap reconstruction in head and neck cancer in a single unit

To evaluate the impact of current practice on the management of these cases having instituted several implementations to free flap pathway

Method

A free flap database was collected over this period and updated retrospectively with electronic and paper notes.

We evaluated the impact of a protocol 2ww pathway, with urgent biopsy and imaging protocols.

We looked at the usefulness of a specialised medical preoperative assessment clinic "POPS" in the face of an ageing population with complex co-morbidities, aiming to carefully evaluate and optimise pre-morbid state as well as expert care in the peri and post-operative periods.

We also looked at the impact of an institute two team operating as well as an elective cover tracheostomy and multidisciplinary protocol to tracheostomy decannulation.

Results

The radiology fast track service reduced the number of inappropriate scans as well as reducing the overall time from clinic review to scanning with a median of 4 days allowing earlier discussion of multidisciplinary management.

Specialised preoperative assessment aided with optimisation of preoperative patients as well as specialist guidance and contact in the postoperative phases which aided management of complex co-morbidity ageing patients as well as help risk stratify high risk patients and offering appropriate oncology management.

An elective tracheostomy was instituted in most free flap cases, in the summer of 2016 which led to reduction of our airway mortality from 3% to 0%. With a tracheostomy protocol this also led to earlier decannulation rates.

The use of multidisciplinary daily meeting as well as a specialist ward and tracheostomy protocols has led to an overall reduction in length of stay.

Conclusion

In review of the many implementations and learning experiences of the last 10 years, we have halved the overall reduction on the total complication rate from 22% to 11% and a flap survival rate of over 98%.

Reference (If applicable)

The United Kingdom Multidisciplinary Management Guidelines for Head and Neck Cancer Fifth edition. The Journal of Laryngology and Otology. Volume 130, Number S2, March 2016.

5 patient case series: The use of a submental flap in local head and neck reconstruction

Poster

Mr. Richard Pilkington¹, Dr. Arif Razzak¹, Dr. Manpreet Saggu¹, Mr. Sunil Bhatia¹

1. Princess Royal Hospital, Telford

Aim

Background

The use and application of local flaps are an important armamentarium for the reconstructive surgeon. They have the advantages when surgery time needs to be kept to a minimum and can reduce donor site morbidity. The use of the submental flap can reconstruct defects up to 8cm on their pedicle.¹ This enables the flap to be rotated up to the cheek/zygoma region, to be inset into the floor of mouth and for hypopharyngeal reconstruction.² Local flaps have been shown to give a good quality of life to head and neck patients and should not be overlooked for more time-consuming techniques³. They can greatly reduce surgical time, where in the patient with multiple co-morbidities they can reduce surgical morbidities.

Method

We describe a 5 patient case series (4 female, 1 male) in the use of this versatile local flap in head and neck reconstruction. Used in 2 floor of mouth reconstructions following carcinoma in situ resection. 3 melanoma resections on the face and neck. We describe a novel technique in which the flap can be divided down to the subdermal plexus. This allows the flap to give rise to two separate island flaps to reconstruct two separate melanoma excisions. We highlight the technical aspect of how to chase the submental artery off the facial artery.

Results

No loss of flap / flap compromise in the series. One patient who underwent reconstruction in the floor of mouth/ventral surface of tongue required a debulk. Two of the patients reported dog ears, one of which resolved several months later.

Conclusion

It allows the surgical defect to be repaired in one stage. It has a good arc of rotation and its donor site scar is easily closed and hidden under the chin. Can be easily raised, less time consuming to more complex reconstructive flaps where surgery time needs to be kept to a minimum due to medical co-morbidities. Excellent flap for trainees to learn when microvascular surgery is not possible and a local pedicle flap in the head and neck is required.

Reference (If applicable)

1. Sterne DG, Januszkiwicz JS, Hall PN, Bardsley AF. The submental island flap. British Journal Plastic Surgery 1996, 49:85-89
2. Amin A, Sakkary MA, Khalil AA et al. The submental flap for oral cavity reconstruction: Extended indications and technical refinements. Head & Neck Oncology 2011, 3:51
3. Boyapati RP, Shah KC, Flood V, Stassen LFA. Quality of life outcome measure using UW-QOL questionnaire v4 in early oral cancer/squamous cell cancer resections of the tongue and floor of mouth with reconstruction solely using local methods. BJOMS 2013, 51, 502-507

5 year experience of head and neck cancer free flaps in an ageing population

Poster

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1. Guy, 2. St George's Hospital

Aim

To evaluate our 5 year experience of head and neck cancers cases which undergo free flap reconstruction in the over 70 year population.

Method

We retrospectively collected data over the past 5 years of 203 head and neck free flaps in a single regional head and neck unit from January 2013 to December 2017.

We collected data on patient demographics, TNM staging, co-morbidity index as well as surgical and medical outcomes as well as the success of the treatment.

Results

The overall surgical outcomes were good with an acceptable rate of surgical and medical complications in the over 70s age group in comparison to younger patients.

The choice of surgical treatment should be based on all the factors which can influence the final treatment outcome.

Medical co-morbidities should be carefully evaluated at the preoperative stage of treatment and optimised with specialist help as indicated. Treatment should then be tailored to the individual taking in the premorbid stage and closely monitored in the peri operative and post operative phases of treatment.

Conclusion

With careful preoperative planning and optimisation as well as perioperative and postoperative management can help reduce the morbidity from oncological operations which means that the ageing population should be treated appropriately according to their premorbid stage and not solely on their advancing age.

Reference (If applicable)

Surgery for head and neck skin tumours in the elderly. Dhiwakar M, Khan N, McClymont L. 11 April 2007 Wiley InterScience.

Head and Neck Cancer in the Elderly Patient. Cervenka B, Rao S, Bewley A. Otolaryngology Clinics of North America 2018

Major surgery in elderly head and neck cancer patients: immediate and long-term surgical results and complication rates. Zabrodsky M, Calabrese L, Tosoni A, Ansarin M, Giugliano G, Brushini R, Tradati N, De Paoli F, Tredici P, Betka J and CHiesa F. Surgical Oncology 2004.

Is there any age cutoff to treat elderly patients with head and neck cancer? Comparing with Septuagenarians and Octogenarians. Kim H, Kim, S, Shim YJ, Lee SY, Sung M-W, Kim KH and Hah J. JKMS April 2016

A case report of heterotopic gastrointestinal mucosa (HGM) tissue within the tongue and review of the Literature

Poster

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1. Princess Royal Hospital, Telford

Aim

Heterotopic gastrointestinal mucosa (HGM) found within the oral cavity has been reported as a rare type of cyst. Subdivided into a duplication cyst (surrounded by a muscular wall) or a choristoma (no muscular coat). The exact aetiology is poorly understood; the most commonly held hypothesis is that it is thought to arise from the sequestration of the endoderm from the primitive stomach into the anlage of the tongue

Method

We present a rare case of a healthy 37-year-old gentleman who presented with HGM within the anterior ventral surface of the tongue.

Results

A systematic review of Embase and Pubmed was conducted, revealing 54 reported cases in the English language. 35 cases have presented in infants, with only 9 reported in adults. Male:Female 2:1 showing a predominantly male predilection. Of these adults 1 reported previous surgery in childhood. In infancy/childhood it usually presents with problems with feeding, swallowing and respiratory obstruction.

Conclusion

An MRI scan was conducted and the lesion was homogeneously hyperintense on the T2 weighted images and mirrored the appearance as shown in infants. These findings were consistent with a benign cystic lesion. The lesion had remained asymptomatic for over 30 years before causing discomfort with swallowing. This case reveals that these lesions can remain asymptomatic before causing problems in later life.

Reference (If applicable)

Gorlin R. (1970). Oral Cysts containing gastric or intestinal mucosa. *Journal of Otolaryngology*. 91 (1), 594-597.
Hambarde S. (2011). Foregut duplication cyst presenting as lingual swelling: Case report and review of literature. *National Journal of Maxillofacial Surgery*. 2 (1), 2-5.

A Multidisciplinary Audit of Inpatient and Outpatient Enteral Tube Feeding in Head and Neck Cancer Patients

Poster

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1. The Royal Marsden Hospital, 2. Formerly The Royal Marsden Hospital

Aim

National guidance recommends head and neck cancer patients are assessed by Dietitians and Speech and Language Therapists (SLT) prior to commencing treatment.^{1,2,3} Malnutrition maybe as high as 80%⁴ and dysphagia up to 40%.⁵

Nutrition support aims to improve quality of life, reduce adverse effects and maximise completion of curative treatment. Patients nil by mouth for less than 5 days or with inadequate food intake for less than 10 days require an enteral feeding tube (EFT).^{1,3}

Our audit determined whether the planning and insertion of EFT is in accordance with the Royal Marsden Hospital (RMH) policy; whether patients are being assessed by a multi professional team prior to insertion of an EFT and if there is a delay in insertion of an EFT. To determine the length of hospital stay and cause for delayed discharge. To establish rates of dysphagia and diet textures tolerated at EFT placement.

Method

Data was collected from all head and neck cancer patients who had undergone (chemo)- radiotherapy and/or surgery with an EFT inserted for more than 5 days. Patients who had an EFT placed were identified by the Dietetic team between July 2018 and January 2019 across both RMH sites. Metrics were collected via an Excel database and jointly collated weekly by Dietitians and SLT. Approval for the audit was obtained from RMH Trust Clinical Audit Committee.

Results

Data will be presented on the number of people who were identified as requiring an EFT, MDT members involved in decision making, timeliness of EFT insertion and reasons for delays incurred. Numbers of dysphagic patients will be noted, along with texture of diet tolerated as well as other reasons for EFT placement such as pain. These results will be separated into different treatment and tumour groups. Percentage of weight lost and time in treatment of EFT placement will be noted.

The results for this audit are still being processed but will be available by end of February 2019.

Conclusion

Results will be used to determine whether the planning and insertion of EFTs are in accordance with the RMH policy and national guidance. Furthermore action points will be developed to improve patient care, reduce patient length of stay in hospital and improve quality of life when an EFT is required. By identifying delays in EFT insertion, improvements will be made which can lead to cost savings. These results can provide patients with more detailed information when pre-assessed for (chemo)-radiotherapy and/or surgery regarding the possibility of requiring an EFT.

Reference (If applicable)

1. National Institute for Health and Care Excellence (NICE), Head and Neck Cancer. 2017, NICE: London.
2. Ed Paleri V & Roland N. (2016). UK National Multidisciplinary Guidelines. Journal of Laryngology and Otolaryngology, 130, s2.

3. Talwar B, et al. (2016). Nutritional management in head and neck cancer: United Kingdom National Multidisciplinary Guidelines. *Journal of Laryngology and Otolaryngology*, 130, s2, S32-S40.
4. Muller-Richter U, et al. (2017). Nutrition management for head and neck cancer patients improves clinical outcome and survival. *Nutr Res*, 48: 1-8.
5. Arrese LC, Hutcheson KA. (2018). Oral Maxillofacial. *Surg Clin N Am*, 30: 397-410.

A service evaluation looking at weight change during surgical and/or chemo-radiotherapy treatment, in newly diagnosed head and neck (H&N) cancer patients, from a single centre between April 2016-April 2017.

Poster

Ms. Annabel Leather¹, Ms. Kelly Wade-Mcbane¹

1. Imperial College Healthcare Trust

Aim

This evaluation is a retrospective study, following patients who were newly diagnosed with H&N cancer at Imperial College Healthcare Trust (ICHT) between April 2016 and April 2017. The aim was to determine the percentage weight change between pre-treatment and end of treatment for patients undergoing both surgery and radiotherapy and to compare the data gained from this study with other centres and guidelines

Method

Data was pulled from The Somerset Cancer Register and a total of 199 patients were identified for ICHT. Data collection from these patients was gathered retrospectively from the electronic database of patient records. They were then split into different groups: 'surgical', 'radical radiotherapy' and 'patients not included'. For the radical radiotherapy group, the 'pre-treatment' weight was ideally at their 'pre-treat' clinic, or if they did not have a 'pre-treat' appointment or were not weighed, the weight chosen was closest to their first radiotherapy fraction. The 'post-treatment' weight was at the end of radiotherapy. For the surgical patient group, the 'pre-treatment' weight was ideally at their 'pre-treat' clinic or if not available, it would be the patient's weight on admission to the ward. The 'post-treatment' weight was the patient's weight on discharge from the ward. This information was then analysed and compared to other studies and guidelines.

Results

61% (n=121 patients) of the newly diagnosed H&N cancer patients were seen by a dietitian. A dietitian saw 42 patients on the ward post-surgery, with an average weight loss of 2.6% in the surgical group. 64 patients were seen by a dietitian during radical radiotherapy, 42% of these had a gastrostomy inserted prophylactically. 87.5% of patients lost weight during their radiotherapy with an average weight loss of 7.4%. 25% of patients lost >10% of their body weight during radiotherapy with 50% of these patients having a T4 tumour. 75% of the patients who lost >10% of their body weight had a Radiologically Inserted Gastrostomy (RIG) in situ during their treatment.

Conclusion

It is well known that weight loss during H&N cancer treatment can have a significant impact on patient-centred outcomes. H&N cancer patients can be at high risk of malnutrition due to patient's lifestyle, sarcopenia and cancer cachexia, as both the disease and its treatments are compromising their nutritional status. Weight is not a true indicator of nutritional status and other anthropometric measures should be considered to help provide a more accurate measure of nutritional status in the future. Weight loss within this service evaluation at ICHT appears to be in line with international guidelines and other studies available for comparison. Comparison between studies is difficult due to study design limitations and classifying data into groups by similar treatment modality. Future guidelines and studies will be beneficial to help centres compare their outcome measures, aiming to improve patients nutritionally

and optimise them for treatment.

A Systematic Review of Quality of Life Post Laryngectomy

Poster

Ms. Sarah Healy¹, Mr. James Moor¹, Prof. Anastasios Kanatas¹

1. Leeds Teaching Hospitals NHS Trust

Aim

Since the early nineties we have witnessed a transformation in the way laryngopharyngeal cancers are treated with a move away from surgery to non-surgical, organ-preserving techniques. Work from the Veterans Affairs Laryngeal Cancer Study Group was amongst the first to demonstrate comparable survival rates using induction chemotherapy and radiotherapy, leading the way in this revolution. But, should survival be the ultimate goal? We need to prioritise laryngeal function if these patients are to maintain an acceptable quality of life post-treatment, and avoid the effects of late toxicity, aspiration, and the increased risk of complications from salvage surgery. The aim of this study was to review the available literature on all aspects of quality of life post laryngectomy and draw conclusions to enable us to optimise care to improve life for our patients post-treatment.

Method

A Pubmed search was conducted using the key words "laryngectomy" and 'quality of life'. Papers were included if patients in the study had undergone a total or partial laryngectomy and if the outcome measures focussed on quality of life.

The Head and Neck Database Listing Evidence on Quality of Life (HaNDLE-on-QOL) database was also used to identify papers published on quality of life in head and neck cancer patients where questionnaires have been used. The same inclusion criteria were used. This was a valuable resource as much of the data on this subject is qualitative.

Patients were organised into total versus partial laryngectomy groups. Within these groups, essential and relevant components of quality of life such as voice, swallowing, social impact, mental health and sexual function were analysed.

Results

A total of 83 papers were identified using PubMed and 109 papers were identified from the HaNDLE-on-QOL database. The data was very detailed and complex with some papers comparing total with partial laryngectomy, and some comparing quality of life in patients who received surgical versus non-surgical treatment modalities. A variety of assessment tools were used including the MDADI and SF-36 questionnaires to evaluate dysphagia and voice respectively. Several studies emphasised how both the functional and psychological state of the patient was significant and how factors such as coping strategies and social support were significant in influencing quality of life. Women may be more adversely affected after laryngectomy, whilst good speech rehabilitation and input from speech and language therapists showed a beneficial effect on reported quality of life in many of the studies. A more thorough breakdown and analysis will be discussed.

Conclusion

I think the amount of research being done in this area particularly over recent years is very reassuring and represents a much needed cultural shift towards patient-centred care. It is clear that simply surviving a laryngectomy is not enough. The literature illustrates how the effects of surgery impact on all aspects of life, and as members of the head and neck team we have a responsibility to prepare and support our patients as they navigate their way through a new and challenging chapter in their lives. The data available is heterogeneous and it is therefore difficult to generate definitive conclusions. However, it clearly demonstrates the need for

standardisation and multidimensional tools to assist in reporting markers of quality of life in future studies, and that we need to be aware of the issues our patients deal with on a daily basis if we are to provide the care they need.

Reference (If applicable)

Induction chemotherapy plus radiation compared with surgery plus radiation in patients with advanced laryngeal cancer. The Department of Veterans Affairs Laryngeal Cancer Study Group. *N Engl J Med*. 1991;324:1685–90. [PubMed]

Lefebvre JL, Chevalier D, Lubinski B, Kirkpatrick A, Collette L, Sakhmoud T. Larynx preservation in pyriform sinus cancer: Preliminary results of a European Organization for Research and Treatment of Cancer phase III trial. EORTC Head and Neck Cancer Cooperative Group. *J Natl Cancer Inst*. 1996;88:890–9. [PubMed]

Sassler AM, Esclamado RM, Wolf GT. Surgery after organ preservation therapy. Analysis of wound complications. *Arch Otolaryngol Head Neck Surg*. 1995;121:162–5. [PubMed]

Further references to be included at presentation.

A technical note describing the use of a carotid artery bypass graft in the management of head and neck cancer with carotid artery involvement and review of literature.

Poster

Dr. Christopher Hamps¹, Mr. Richard Pilkington¹, Ms. Catherine Merriman¹, Mr. Suraj Thomas², Mr. Sunil Bhatia²

1. Shrewsbury and Telford Hospital NHS Trust, 2. Princess Royal Hospital, Telford

Aim

Carotid blowout syndrome (CBS) refers to rupture of the carotid artery and is an uncommon but often catastrophic complication of head and neck cancer when arterial wall integrity is compromised, particularly where surgical procedures and radiotherapy are involved. Rupture occurs most commonly in the common carotid artery in proximity to the furcation, often within 10-40 days post surgery. We aim to outline the use of a carotid artery bypass graft in the management of head and neck cancer. We seek to appraise the literature evidencing the use of this surgical technique.

Method

We present the use of a great saphenous vein carotid artery bypass graft in the management of a 47-year-old woman with recurrent squamous cell carcinoma (T2 N1 M0 RO V1) utilizing the Pruitt F3® carotid shunt system to minimize cerebral perfusion compromise. We explore pre and post-operative surgical considerations including suggested graft-monitoring protocols.

Results

The body of evidence supporting the use of carotid bypass grafts is limited. Despite data paucity, case series are available demonstrating variable mortality. A systematic review of PubMed was conducted revealing three English language case series. One series reported a 2-year survival of 82% with carotid sacrifice and autogenous venous graft where distant metastatic disease is absent. 96% of patients experienced no neurologic sequela whilst 3.9% suffered CVA post-operatively. Our own patient remains free of neurologic symptoms and graft patency has been confirmed at 3 months.

Conclusion

Tumour resection involving the carotid artery presents an array of surgical management possibilities including tumour shaving, artery ligation or resection. The long-term survival of carotid bypass graft is unknown and reported complications vary, it remains a promising technique in the prevention of carotid blowout syndrome.

Reference (If applicable)

- Mourad M, Saman M, Stroman D, Lee T, Ducic Y. Carotid Artery Sacrifice and Reconstruction in the Setting of Advanced Head and Neck Cancer. *Otolaryngol Head and Neck Surg.* 2015; 153(2): 225-230.
- Muhm M, Grasl MCh, Burian M, Exadaktylos A, Staudacher M, Polterauer P. Carotid resection and reconstruction for locally advanced head and neck tumors. *Acta Otolaryngol.* 2002; 122(5): 561-4
- Wright JG, Nicholson R, Schuller De, Smead WL. Resection of the internal carotid artery and replacement with greater saphenous vein: a safe procedure for en bloc cancer resection with carotid involvement. *J Vasc Surg.* 1996; 23(5): 775-80

A WHO safety checklist for the expected difficult airway

Poster

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Aim

It has been over ten years since the head and neck CEPOD report and there is worrying evidence of failure to learn important lessons¹. Whilst head and neck patients are recognised to have difficult airways due to obstructive lesions, frailty and previous radiotherapy, there were still incidences in NAP4 of poor planning resulting in death, brain damage or unexpected ICU admission. The main themes were:

1. Location -anaesthetic room hidden from early access to surgical help and equipment
2. Poor appreciation of difficulty pre-operatively
3. Repeated direct laryngoscopy causing tumour bleeding or oedema
4. Post-operative airway compromise

This project aimed to improve safety for patients with expected difficult airways when undergoing a head and neck procedure.

Method

Approval to trial the checklist was gained from the ENT Clinical Governance Meeting. The checklist incorporated the existing WHO safety check to prevent repetition and checklist exhaustion and was done at the beginning of an identified difficult airway case with surgical and anaesthetic teams in theatre (patient may be present). The list (Figure 1) underwent four revisions over 6 months and was trialled in 20 procedures as a pilot. It has now been used for a further 12 months in our Trust.

Results

During the pilot, anaesthetic intubation was successful in 90% of intubations (n=18). Surgical intubation after bleeding was required in 5% (n=1) and front of neck access was performed in 5% (n=1) due to a large oropharyngeal tumour. All theatre staff found the checklist useful, particularly in cases involving a tubeless field. Criticisms were around still needing to complete the electronic proforma regarding the WHO.

During the pilot period, we encountered two occasions where the checklist was not used and the jet catheter became dislodged during patient transfer. In these cases, prompt visualisation by the head and neck surgeon was required when equipment was not ready or checked by the scrub staff.

After gaining positive feedback from our Anaesthetist colleagues regarding improved safety and better communication, the checklist has been continued.

Conclusion

Human factors related to 40% of poor outcomes in NAP4. This checklist alerts the whole team about a difficult airway so that emergency equipment is located and key team members are present during intubation.

We noticed a delay in prompt action when the checklist was not used. This delay did not occur during unsuccessful intubation in the pilot cases. The checklist aids communication, states clearly plans A-B for airway, checks availability of equipment and draws attention to post-operative monitoring. We believe it can be utilised by other high-risk cohorts such as obstetric and obese patients.

Reference (If applicable)

1. 4th National Audit Project of the Royal College of Anaesthetists and the Difficult Airway Society. Royal College of Anaesthetists, London 2011

Who checklist.png

An Audit of Patient Waiting Times for Treatment of Thyroid Cancers in NHS Lothian Against Government Published Standards

Poster

***Mr. Dominic Gardner*¹, *Mr. Ashley Hay*², *Prof. Mark Strachan*³, *Mr. Iain Nixon*⁴**

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Aim

NHS Scotland mandates that patients with a suspicion of cancer should have a diagnosis within 31 days and should commence treatment within 62 days (1). At present, these targets currently apply to 10 major cancer types, which excludes differentiated thyroid cancer (DTC). This is due to the relatively indolent nature of the disease, with DTC having a 5-year survival rate of over 90% in most series (2). Whilst there is little evidence to suggest that waiting times have an impact on survival in DTC, there is a significant potential for psychological impact on patients (3, 4). The aim of this study was to assess times from referral to diagnosis and treatment, with a focus on factors which influence times within our cancer network, and to assess the relevance of cancer waiting time targets for DTC.

Method

The study was a review of a prospectively held database of patients discussed at our Tertiary Referral Endocrine Multidisciplinary Team Meetings between January 2016 and September 2018. Patients were included if they had a new diagnosis of DTC and if both primary care referral and treatment details were available. Exclusions included patients who were treated out of area, those with recurrent disease and those referred within secondary care.

Of 708 records reviewed, 271 consecutive patients with DTC were identified. Of the 153 NHS Lothian patients, 32 (21%) were identified incidentally following thyroidectomy for an indication other than DTC. These patients were also excluded from further analysis leaving a cohort of 62 patients.

Results

The median age was 47 years (range 17-87y). There were 20 males (32%) and 42 females (68%). 44 had papillary cancer (71%), 14 follicular cancer (23%), two patients had foci of anaplastic cancer (3%) and two (3%) had areas of both papillary and follicular cancer. **Table 1** shows TNM characteristics.

The median time to diagnosis was 129 (1-177) days and time to treatment was 133d (47-754) from initial GP referral. 16% of patients met the 31-day target and 10% met the 62-day target.

Patients with a suspicious FNA or biopsy had a significantly faster median time to theatre than those who did not (125d versus 179.5d, $p=0.016$). There was a trend for patients higher U or Thy scores to be treated more quickly (**Figure 1**). Those referred as 'suspicion of cancer' were diagnosed and treated more rapidly (**Table 2**). One patient died of disease after presenting with T4aN1M1 papillary cancer.

Conclusion

As expected, oncological outcomes were good, despite the fact that few patients were diagnosed and treated within national target times. The high number of incidentally identified lesions (32, 22%) and the number patients diagnosed post-operatively (28, 45%) confirms that the pattern of disease does not lend itself well to cancer waiting time target assessment.

However, our findings highlight the importance of accurate pre-operative investigations in triaging patients

for surgery. The psychological impact of long waiting times for those pre-operatively diagnosed with cancer remains uncertain.

It is likely that trying to meet national cancer targets for thyroid cancer would require high levels of resource investment with little return in terms of oncological outcome improvement. Nonetheless, clinicians involved in the management of patients with potential thyroid cancer should prioritise accurate investigation and consider the potential psychological impact of long waiting times on their patient group.

Reference (If applicable)

1. Scottish Government and NHS Scotland. Cancer Waiting Times LDP Standard <https://www.gov.scot/About/Performance/scotPerforms/NHSScotlandperformance/CWT-LDP>: Scottish Government; 2018 [updated 4/10/18; cited 2018 10/10/18]. Available from: <https://www.gov.scot/About/Performance/scotPerforms/NHSScotlandperformance/CWT-LDP>.
2. Khawaja A, Allan S. Has the breast cancer «two week wait» guarantee for assessment made any difference? European journal of surgical oncology. 2000;26(6):536-9.
3. Eskander A, Devins GM, Freeman J, Wei AC, Rotstein L, Chauhan N, et al. Waiting for thyroid surgery: a study of psychological morbidity and determinants of health associated with long wait times for thyroid surgery. The Laryngoscope. 2013;123(2):541-7.
4. Buchmann L, Ashby S, Cannon RB, Hunt JP. Psychosocial distress in patients with thyroid cancer. Otolaryngology-Head and Neck Surgery. 2015;152(4):644-9.



Table 1.png

Figure 1.jpg

GP Referral Type	Number of Patients	Median (Range) Days to Diagnosis	Median (Range) Days to Treatment	Number Meeting 31-Day Target	Number Meeting 62-Day Target
Routine	17	135 (1-720)	133 (52-697)	4 (24%)	2 (12%)
Urgent	21	133 (35-777)	181 (55-754)	0 (0%)	2 (10%)
Urgent – Suspicion of Cancer	24	114 (10-609)	111 (47-598)	6 (25%)	2 (8%)

Table 2.png

Analysis of Hospital admissions and length of stay subsequent to primary laryngectomy surgery.

Poster

Mrs. Jo Wheeler¹, Dr. Camilla Dawson¹

1. Speech & Language Therapy Department. The Queen Elizabeth Hospital Birmingham

Aim

As survival for patients who undergo total laryngectomy (TLE) improves, it is important to understand and establish ongoing health care needs beyond initial surgical outcomes.

Method

We carried out a retrospective analysis of hospital admissions for patients with a TLE presenting to a large acute teaching hospital over a 2 year period

Results

Sixty-three patients were admitted a total number of 301 times. The number of bed days amounted to 1603. On average, there were 2.2 patients with a TLE present in the hospital at any time, excluding patients in their immediate post-operative stay. Reasons for admission and length of stay are also explored

Conclusion

Patients who have undergone a TLE may present an acute hospital with specific needs and safety concerns, particularly with respect to the management of their altered airway. Patients' ability to communicate their own needs may be impaired due to the impact of their TLE on communication and further compounded by their acute illness. The information gathered may inform safety and quality of care improvements for potentially vulnerable patients with a TLE entering an acute hospital.

Audit of multidisciplinary team care in altered airway patients

Poster

Ms. Lauren Leigh-Doyle¹, Mr. Jorn Rixen-osterbro², Mr. Cyrus Kerawala², Mrs. Jessica Whibley², Mrs. Grainne Brady², Mrs. Penelope McTaggart²

1. The Royal Marsden NHS Foundation Trust, 2. The Royal Marsden Hospital

Aim

An altered airways multidisciplinary team (MDT) and altered airway weekly ward round was initiated at the Royal Marsden NHS Foundation Trust (RM) in October 2017 as a result of learning from the National Confidential Enquiry into Patient Outcome and Death examines tracheostomy care (2015) and in keeping with Intensive Care Standards (2014) and UK National Tracheostomy Safety Project (2012) recommendations.

An audit was undertaken to measure key outcomes of the MDT ward round including safety checks, clear documentation and timely MDT referrals. The purpose of the ward round was to: 1) improve patient safety by reducing the number of clinical incidents and CCU admissions/ re-admissions, 2) decrease length of stay and 3) improve MDT communication.

Method

A multidisciplinary team (MDT) was formed of representatives from Head and Neck Surgery, CCU Outreach, Nursing, Speech and Language Therapy, Physiotherapy and Dietetics. Metrics were agreed by the RM Audit Committee and collected on a weekly basis by the MDT. We report on data collected in the first year.

Results

- The audit included data on 107 contacts over 12 months.
- 2 contacts were excluded as were end of life.
- 82% had tracheostomy tube in situ
- 17% had a laryngectomy surgery
- 1% had a laryngectomy and a tracheostomy tube
- 53% of tracheostomy tubes were size 8 and 39% size 7
- 75% of tracheostomies inserted percutaneously

Measuring against audit standards:

- 91% had a tracheostomy passport
- 88% had emergency algorithms at bedside
- 91% had already been referred to SLT
- 42% of all cases had a swallow assessment
- 27% were not surgically fit for swallow assessment
- 92% had a form of nutrition in place
- 75% showed readiness to wean, 13% were N/A and 11% were not deemed ready by the MDT

Conclusion

The initiation of the altered airways MDT and ward round ensured compliance with national standards and recommendations. This has improved the care and safety of patients by ensuring screening for communication needs, emergency algorithms at bedside and clear documentation of responsible clinician and tracheostomy management. By initiating the MDT ward round we have ensured that all patients received referral to necessary teams in a timely manner. Discussion regarding tracheostomy wean was clearly documented and need for altered airway to remain in place. An action plan comprising of education needs for nursing and medical teams has been generated. As a result of this audit and due to the success of the initiative, the weekly MDT ward round will continue, ensuring the delivery of safe, proactive and high quality care.

Reference (If applicable)

Intensive Care Society Standards 2014 <https://www.ics.ac.uk/ICS/guidelines-and-standards.aspx>

McGrath, Brendan A., and Sarah Wallace. "The UK National Tracheostomy Safety Project and the role of speech and language therapists." *Current opinion in otolaryngology & head and neck surgery* 22.3 (2014): 181-187.

NICE- Translaryngeal tracheostomy IPG462 2013 <https://www.nice.org.uk/guidance/ipg462>

Pryor, Lee, et al. "Patterns of return to oral intake and decannulation postInternational journal of language & communication disorders 51.5 (2016): 556-567.

Wilkinson, K., H. Freeth, and K. Kelly. "'On the Right Trach?' A review of the care received by patients who undergo tracheostomy." *British Journal of Hospital Medicine* 76.3 (2015): 163-165.

Wilkinson, K. A., H. Freeth, and I. C. Martin. "Are we 'on the right trach?' The National Confidential Enquiry into Patient Outcome and Death examines tracheostomy care." *The Journal of Laryngology & Otology* 129.3 (2015): 212-216.

The ROYAL MARSDEN
NHS Foundation Trust

Altered Airway Weekly Ward Round Metrics and outcomes

Date:

RMH number:	Patient Initials:		D.O.B.:		Cons:			
Tracheostomy Passport	Emergency airway plan visible?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Type of Altered Airway	Tracheostomy	Yes <input type="checkbox"/> No <input type="checkbox"/>	Initial reason for tracheostomy has resolved?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Type:	Equipment: Emergency equipment present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Laryngectomy	Yes <input type="checkbox"/> No <input type="checkbox"/>	Effective cough:	Yes <input type="checkbox"/> No <input type="checkbox"/>	Decannulation pathway followed?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
Size:	If not, what is missing?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Microtracheostomy	Yes <input type="checkbox"/> No <input type="checkbox"/>	Weaning:	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Date of insertion:	Cuff UP/DOWN/NO CUFF	Yes <input type="checkbox"/> No <input type="checkbox"/>	Any concerns regarding stomatopathy?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	Communicating effectively:	Yes <input type="checkbox"/> No <input type="checkbox"/>	Advice/Action:	Yes <input type="checkbox"/> No <input type="checkbox"/>
SL Trach (at point when alert and weaning)	Humidification	Yes <input type="checkbox"/> No <input type="checkbox"/>	Self-feeding?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Writing:	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Method of insertion:	Safety Questions: Pressure monitored (if cuff present)?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>			Other:	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Percutaneous:	Inner tube changed 2 hours?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>			Managing oral secretions:	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Surgical:	Safety equipment: Working suction?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Nutrition (oral or enteral within 24hrs of tracheostomy placement)	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Emergency:	Suitable suction catheters?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Swallow assessed (at point when alert and weaning)	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Planned:	Nearest intubation (initial)?	Yes <input type="checkbox"/> No <input type="checkbox"/>			Commenced oral intake:	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Tube change documented								
Team Present:	Surgeon	CCOT	SLT	Physio	Dietician	Nurse	Other:	

Aawr.png

Case Reort: Suspected sarcomatoid carcinoma arising within 12 months of tongue SCC resection, reconstruction and chemoradiotherapy. Review of the literature included.

Poster

Dr. Christopher Bradley¹, Mr. Richard Pilkington¹, Dr. Katherine Harrison¹, Mr. Sunil Bhatia¹

1. Princess Royal Hospital, Telford

Aim

Sarcomatoid carcinoma (SC) is a rare aggressive squamous cell carcinoma (SCC) variant characterised by a dysplastic surface squamous epithelium along with an invasive spindle cell element that arises through monoclonal de-differentiation. SC comprises less than 1% of oral cancer and predispositions include previous radiotherapy, trauma, tobacco &/or alcohol use. Through this case report and literature review, we discuss in detail all aspects of presentation, investigations, management and prognosis. In particular, the report focuses on the difficulties of achieving a definitive histological diagnosis and the importance of immunohistochemistry in attempting to achieving this.

Method

A case of a 63-year-old gentleman presenting with a rapidly enlarging right lateral tongue neoplasm approximately one year after right lateral tongue SCC resection, free flap reconstruction and chemoradiation therapy. A diagnosis of SC was made on the basis of immunohistochemistry findings and the latent period being short if lesion were to be a radiation induced sarcoma (RIS).

Results

A systematic review of oral AND "sarcomatoid carcinoma" using Healthcare Database Advanced Search (HDAS) was conducted, revealing 60 articles. 5 articles presented detailed case reports on a total of 8 patients with SC. Histology revealed pleomorphic spindle and stellate cells dispersed in an inflamed myxoid vascular stroma. Immunohistochemistry on the submitted specimens were negative for Cam 5.2, EMA, AE1/3, CK5/6, p63, SMA, desmin, CD34, CK7, CK20, MNF116 and ERG. The most likely interpretation in this setting is sarcomatoid carcinoma although the above tests do not confirm it definitively. The time interval would be short for the usual post-radiation sarcoma.

Conclusion

Definitive diagnosis of SC is difficult as histologically there are significant overlapping features with other spindle cell tumors. The use of immunohistochemical technique (IHC) is fundamental to establishing a diagnosis although this is not always possible. The aggressiveness of SC warrants early definitive diagnosis to best guide treatment modality options.

Comparison of once-weekly 35mg/m² and 40mg/m² concurrent cisplatin regimens for radical head and neck cancer chemoradiotherapy

Poster

Dr. Asad Mahmood¹, Ms. Shelly English¹, Dr. Seema Dadhania¹, Dr. Gillian Marks¹, Dr. Helen Swannie¹, Dr. Atia Khan¹, Dr. Anna Thompson¹

1. North Middlesex University Hospital NHS Trust

Aim

The addition of concurrent cisplatin-based chemotherapy to radical radiotherapy improves overall survival in locally advanced head and neck squamous cell carcinoma (Blanchard et al, 2016). Concurrent cisplatin can be given three-weekly at 100mg/m² or once-weekly at 35-40mg/m². Improved survival is associated with a cumulative dose of >200mg/m² delivered during radiotherapy (Ang, 2005). We compared the cumulative delivered dose and dose-limiting toxicities in patients treated with different once-weekly cisplatin regimens concurrent with radical radiotherapy in a single institution.

Method

We retrospectively reviewed the electronic chemotherapy prescriptions, clinic notes and admission notes for patients treated using cisplatin chemotherapy concurrent with 'step-and-shoot' intensity-modulated radiotherapy (IMRT) or volumetric arc radiotherapy (VMAT). Myelosuppression was defined to include neutropaenia and/or thrombocytopaenia occurring during radiotherapy. Admissions were defined as unplanned emergency admissions during radiotherapy; planned elective admissions for gastrostomy insertion were excluded.

Results

From May 2015 to November 2015, 27 patients received once-weekly cisplatin 35mg/m² with IMRT. 100% (n=27) received 65Gy in 30 fractions (#). Median age was 62 years and 85.2% (n=23) were male. 22.2% (n=6) received >200mg/m², 29.6% (n=8) were admitted, and at least 11.1% (n=3) discontinued chemotherapy due to myelosuppression. From December 2016 to May 2018, 45 patients received once-weekly cisplatin 40mg/m² with VMAT. 91.1% (n=41) received 65Gy/30#, and the rest were treated on a clinical trial with either 70Gy/35# or 64Gy/25#. Median age was 56 years and 80.0% (n=36) were male. 42.2% (n=19) received >200mg/m², 44.4% (n=20) were admitted, and at least 13.3% (n=6) discontinued chemotherapy due to myelosuppression.

Conclusion

Increasing once-weekly cisplatin chemotherapy dose from 35mg/m² to 40mg/m² increases the proportion of patients receiving >200mg/m² cumulative dose during radiotherapy and is associated with comparable rates of myelotoxicity, albeit with a higher admission rate, in this patient cohort. Further work should compare once-weekly and three-weekly regimens alongside modern radiotherapy techniques.

Reference (If applicable)

- Ang KK. Concurrent radiation chemotherapy for locally advanced head and neck carcinoma: are we addressing burning subjects? J Clin Oncol 2005; 23(1):248.
- Blanchard P, Landais C, Petit C, et al. Meta-analysis of chemotherapy in head and neck cancer (MACH-NC): An update on 100 randomized trials and 19,248 patients, on behalf of MACH-NC group. Annals Oncol 2016; 27(s6):9500.

Composite audit of outcome after surgery for HNSCC

Poster

Mr. David Tighe¹, Dr. Artysa Tailor¹, Ms. Luisa Ramirez¹, Ms. Sue Honour¹, Mrs. Sarah Stevens², Mr. Jeremy Mckenzie¹, Mr. Nic Goodger¹, Mr. Alistair Balfour¹, Mr. Khari Lewis¹, Mr. Kemal Tekeli¹, Mr. Chris Theokli¹, Mr. Vikram Dhar¹, Ms. Lauren Diamond³

1. East Kent Hospitals University Foundation NHS Trust, 2. EKHUFT, 3. East Kent University Hospitals NHS Foundation Trust

Aim

We aim to present multiple outcome measures pertaining to quality of care after surgery for Head and Neck Squamous cell carcinoma (HNSCC).

Method

We have internally validated risk-adjustment algorithms for 30 morbidity, 30 day severe morbidity (Clavien-Dindo Scale >3) and length of hospital stay. We present 2 years of 5year survival rates (disease specific and overall) for our department. We report functional outcome measures including 100ml swallow test, PEG dependency rates, GRABAS speech intelligibility. Finally University of Washington Head and Neck questionnaire results pre-treatment and 12 month post-treatment are reported for anatomical subsites and T classification.

Results

Risk adjustment algorithms including neural networks, decision tree analyses and random forest plots are used to present funnel plots and scatter diagrams comparing our units' performance to (aggregate) performance of units in the South East region. Complication rates (30-50%) and severe complication rate (6-30%) varied widely, as did case-mix. Our crude 30 day complication and 30 day severe complication rate and length of stay, adjusted for case-mix compare favourably. Prolonged ITU stay due to slow wean and donor site complications are areas of concern. Disease specific 5year survival rates are 70-80% for patients receiving surgery for HNSCC. Functional status and Quality of Life outcomes will be presented.

Conclusion

Head and Neck surgery has profound impacts on patients functional and quality of life. In-hospital care is complex and fraught with risks. Measuring complication rates is key to understanding quality of care, but we argue, is insufficient in our subspeciality, where functional outcome and quality of life are key especially as survivorship increases.

Reference (If applicable)

Validating a benchmarking tool for audit of early outcomes after operations for head and neck cancer. Tighe D, Sassoon I, McGurk M. Ann R Coll Surg Engl. 2017 Apr;99(4):299-306.

Developing a risk stratification tool for audit of outcome after surgery for head and neck squamous cell carcinoma. Tighe DF, Thomas AJ, Sassoon I, Kinsman R, McGurk M. Head Neck. 2017 Jul;39(7):1357-1363. doi: 10.1002/hed.24769. Epub 2017 Mar 29.

Cranioplasty Material Analysis: A Systematic Review and Proposal for Uniform Data Presentation in Future Research

Poster

Mr. Luke Western¹, Mr. Connor Moore¹, Mr. Richard Pilkington¹

1. Princess Royal Hospital, Telford

Aim

Cranioplasty is a widely used procedure in maxillo-facial and neurosurgical reconstruction of skull defects. Indications for such a procedure include trauma, brain tumour, ischaemic injury and haemorrhage. Autologous bone is currently the preferred material of choice to reconstruct the bony defect caused from injury or surgery (Goldstein, 2013). However, recent advancements in alloplastic alternatives, such as titanium, polymethylmethacrylate and porous polyethylene may be changing this paradigm. The aim of this study is to systematically review recent literature on cranioplasty materials for their efficacy and safety in all indications to establish whether any material stands out as the best choice for surgeons.

Method

A systematic review of the literature was undertaken according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement guidelines. A search of the Medline, Embase, and Web of Science were performed for articles published from December 2007 to December 2018 were included. Systematic reviews, abstracts and papers without information on procedure complications or follow up were excluded. Twenty-six papers met the inclusion criteria and data were extrapolated by two authors independently. This provided details of 2148 cranioplasty procedures for 2123 patients. Odds ratios and confidence intervals were calculated for individual complications of each material against autologous bone, which is the historical gold standard treatment.

Results

There was no significant difference in complication rates and revisions ($p = >0.05$) between materials. The consensus of the literature was that computer-tomography scan modelled titanium materials were the easiest to fit in theatre. There were large inconsistencies in complication, cosmetic outcome and demographic reporting among the papers included in the trial.

Conclusion

Discrepancy in methodology and reporting of complications resulted in difficulty of valid comparison between cranioplasty materials. The lack of standardisation of data collection and presentation meant that compiling complications of materials of the same type may be unreliable, and comparison to other materials more so. We suggest a standardisation for data presentation in future research, such as that recommended in Orthopaedic implant research (Audigé, 2014), to allow better analysis of cranioplasty efficacy and safety. A review in 2013 suggested autologous bone remain the best option for cranioplasty (Goldstein, 2013). This review however indicates no substantial difference. Considering this change, we may see prosthetic materials continue to improve in efficacy in the future. Currently, we advise the choice of material should be left to personal preference, clinical judgement and expertise of the operating surgeon.

Reference (If applicable)

Goldstein JA, Paliga JT, Bartlett SP. Cranioplasty: indications and advances. *Curr Opin Otolaryngol Head Neck Surg*. 2013 Aug;21(4):400–9.

Audigé, L., Goldhahn, S., Daigl, M. et al. *Arch Orthop Trauma Surg* (2014) 134: 269.

<https://doi.org/10.1007/s00402-011-1384-4>

Developing a clinical trans-oral robotic program in a financially constrained system – a UK perspective

Poster

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1. Guy's and St Thomas' NHS Foundation Trust

Aim

The development of head and neck trans-oral robotic surgery (TORS) has expanded the role of the surgical treatment modality within the multidisciplinary team. Data continues to emerge on the advantages of this technique including shorter in-patient stay and improved diagnostics with favourable oncological and functional outcomes. Data on cost-effectiveness however is conflicting. We describe the setup and early experience of establishing a robotic surgery programme in a tertiary UK head and neck centre

Method

A structured approach to implementation, training and clinical governance was undertaken prior to establishing a clinical TORS practice. Prospective data for the first 26 patients from January to June 2018 undergoing TORS at Guys and St Thomas' NHS Foundation Trust were collected.

Results

Cases performed comprised tongue base mucosectomy +/- tonsillectomy for cancer of unknown primary (8), lateral oropharyngectomy (6), tonsillectomy (8), tongue base resection (2), parapharyngeal tumour excision (1) and posterior pharyngeal wall tumour excision (1). Robotic docking time averaged 5.5 minutes (range 2-15) and console time averaged 48 minutes (range 10-90) with estimated blood loss never exceeding 20 mls. No patient required a tracheostomy and no procedure was abandoned intra-operatively. Median length of stay was 1.5 days (range 0-15). Early post-operative complications comprised 2 haemorrhages and 1 orocutaneous leak. All patients were discharged on oral diet.

Conclusion

Favourable prospective data, clinical trial recruitment and new income streams continue to support a cost-effective programme.

A systematic approach to TORS implementation is essential to minimise patient risk. We describe a pathway for establishing a safe robotic practice. Favourable prospective data, clinical trial recruitment and new income streams continue to support a cost-effective programme.

Disseminated Metastatic Neuroendocrine Tumour – The “Numb Chin Syndrome”. A Case Report.

Poster

Mr. Khemanand Maharaj¹, Dr. Issar Hussain¹, Dr. Elyas Yonis¹, Mrs. Sharon Prince¹

1. Norfolk and Norwich University Hospital

Aim

Metastatic tumours to the oral cavity are uncommon, representing approximately 1% of oral cavity tumours⁽¹⁾. We present a rare case of disseminated neuroendocrine tumour (NEC) primarily from the lung, presenting to our Oral and Maxillofacial Department with a numb chin and hypoglossal nerve palsy.

Method

A 66-year-old female presented to our department with the symptoms of paraesthesia of the right chin and lip, and tongue weakness. She also gave a history of on-going chest infections and progressing back pain. Intra-oral examination was unremarkable but on further review of her orthopantomogram x-ray, the right mental region was suspicious of a lytic appearance. Further imaging of the mandible was undertaken via CT and MRI scans which showed marrow changes suspicious of a mitotic process, pathological fractures of T6, T7, T10, T11 and lytic lesion extending close to left hypoglossal canal.

Results

A bone marrow aspirate showed haematopoietic tissue replaced by cohesive sheets of highly atypical cells with basophilic cytoplasm with fine granular karyoplasm and numerous sometimes atypical mitoses. This picture confirmed metastatic neuroendocrine carcinoma, with the lung mass being the likely source. Unfortunately this patient succumbed to her illness within 3 months of initial presentation to our department.

Conclusion

Neuroendocrine carcinoma arise from neuroendocrine cells, most commonly in the lungs. These tumours are a heterogeneous family of neoplasms with a broad spectrum of histomorphology, tissue origin, and clinical behavior⁽²⁾.

The most common location for bony metastasis is the mandible (81%), with most cases occurring in the premolar/molar regions⁽³⁾. Histological examination is usually insufficient to render the final diagnosis, immunohistochemical staining is important to determine the origin of the tumor cells.

This case report highlights the importance of considering sinister pathology when presented with mental nerve paraesthesia given that it may be the first symptom of metastasis in 30% of patient⁽¹⁾.

Reference (If applicable)

1. Salama AR, Jham BC, Papadimitriou JC, Scheper MA. (2009). Metastatic neuroendocrine carcinomas to the head and neck: report of 4 cases and review of the literature. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod*. 108 (2), 242-7.
2. Coleman H, Kennedy M, Altini M, Crooks J, Tsakiris P. Neuroendocrine (carcinoid) tumor of the mandible: a case report and review of the literature. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 1996;81:74-8.
3. Hirshberg A, Leibovich P, Buchner A. Metastatic tumors to the jawbones: analysis of 390 cases. *J Oral Pathol Med* 1994;23:337-41.

Drain-less Day Case Superficial Parotidectomy Using Artiss - Our Experience

Poster

Mr. Craig McCaffer¹, Mr. Jacob Duffin¹, Mr. Winson Wong¹, Mr. Shane Lester¹

1. South Tees Hospitals

Aim

Through previous experience our unit have shown the feasibility and safety of day case, drain-less parotidectomy using the stepwise introduction of Artiss, an internal fibrin wound glue, and then the reduction in drain use. Haematoma rates with Artiss and no drain were shown to be the better than traditional practice with a drain. Since then we have been routinely undertaking all superficial parotidectomy operations as a drain-less day case procedure. We present our experience, follow up and complications.

Method

Prospective data collection was undertaken between July 2016 and January 2019. All patients included had benign disease on pre-operative cytology or histology. Each patient had a superficial parotidectomy performed without a drain. A thin film (2mls) of Artiss was sprayed into the wound, adhering the skin flap onto the parotid bed and pressure was applied for 2 minutes to allow polymerisation to occur. Patients were sent home later that day but advised to return if there was acute swelling in the peri-operative area. Follow up was undertaken at 6-8 weeks post-operatively to check facial nerve function, the wound and review and document any other post-operative issues.

Results

22 patients had a superficial parotidectomy undertaken with Artiss and no drain, 13 females and 9 males. All patients were discharged home from hospital on the same day as the operation. The most common resection histology was pleomorphic adenoma (11/22) followed by Warthin's tumour (10/22). One patient's resection histology demonstrated high grade salivary duct carcinoma, despite pre-operative sampling being suggestive of a benign lesion. At a later date this patient had a completion parotidectomy, selective neck dissection and radiotherapy. One patient (1/22) had a marginal mandibular nerve weakness immediately post operatively, House-Brackmann grade III. This recovered back to normal at the 6 week review, House-Brackmann I. One other patient (1/22) developed a wound infection 9 days post-operatively which settled with oral antibiotics, admission to hospital was not required. No patients (0/22) returned due to acute swelling, haematoma formation or salivary collection or leak.

Conclusion

In our experience drain-less, day-case parotidectomy appears to be a safe procedure with a low risk of complications and low re-admission rates. Future studies could look at the potential improvement in patient reported outcome scores or potential cost saving benefits to the NHS. A larger study with more patients may demonstrate these qualitative and health economic benefits.

Electrochemotherapy on non-cutaneous head and neck cancer: our experience and national survey

Poster

Mr. Winson Wong¹, Mr. Craig McCaffer², Mr. Shane Lester³, Mr. Tobian Muir¹

1. South Tees Hospital NHS Foundation Trust, 2. cmccaffer@nhs.net, 3. South Tees Hospitals

Aim

Electrochemotherapy (ECT) uses electric fields to allow the influx of chemotherapeutic drugs into cancer cells, producing a localised effect. In head and neck cancer, it is mainly used for cutaneous metastatic disease in a palliative setting. National Institute of Clinical Excellence (NICE) has produced guidance regarding ECT use in metastatic disease from a non-cutaneous origin as well as primary BCC/SCC treatment. Despite the promising results and the expanding roles of ECT over the years it is still uncommonly employed in the UK. As one of the early centres in the UK providing an ECT service we present our experience in head and neck cancer. We have also conducted a national survey to identify its practise in the UK.

Method

A prospective database between April 2016 to December 2018 was reviewed. Only non-cutaneous malignancy were included in the study. Patient demographic details and disease profile (e.g. histology, site and TNM) were collected. More specially, we looked at survival and complications following ECT. In the second part of the study, a national survey was conducted via email. A list of ECT users and sites was obtained from IGEA Medical the only ECT provider currently. ECT users who don't treat head and neck cancer were excluded from the mailing list (e.g. gynaecology or breast surgeons). Emails were sent to explore how many specialists provide ECT for non-cutaneous head and neck cancer. Two reminder emails were sent two weeks apart

Results

There were 4 patients identified. They were male; age ranged from 42 to 79. There were three squamous cell carcinomas (SCC) and one olfactory neuroblastoma. All had skin infiltration where ECT was used. Three were recurrent local regional disease following standard chemoradiotherapy. One patient declined radiotherapy and was not fit for surgery. Survival ranged from 1 month to 8 months. One patient is still alive at 23 months. In term of complications, one patient required a planned split skin and one patient had facial swelling which was spontaneously resolved. Of the 29 ECT users from 18 hospitals we received 16 (55%) responses which represents 13 (72%) of hospitals. Some hospitals have more than one named person providing ECTs. Of those responders, the service was provided to 15 of the 69 head and neck MDTs (22%)

Conclusion

ECT is a valid alternate to standard palliative treatment. Complications were minimal with low morbidity of treatment. It can be effective in palliating symptoms and in some cases improve survival. The procedure is minimally invasive and majority of patients would be suitable for same day discharge. Our experience is keeping with literature findings. Head and neck MDTs should be aware of this option and offer it to appropriate patients. Further research should look into expanding scope of its use

Enabling patients with head and neck cancer to make informed decisions about their dental treatment through provision of a patient information leaflet prior to their dental assessment

Poster

. Laura Graham¹, Dr. Simon Killough¹

1. Belfast Health and Social Care Trust

Aim

The diagnosis of head and neck cancer can have a significant impact on the dental status of patients. There is a lack of awareness that radiotherapy can complicate future dental treatment and result in reduced salivary flow, radiation caries and osteoradionecrosis.

Previous qualitative research within our department highlighted that patients often feel rushed to make decisions about their care. Some felt ill-equipped to make an informed decision, particularly about extractions at a time when they were still struggling with their cancer diagnosis.

Our aim was to enable patients diagnosed with head and neck cancer to make better informed decisions about their dental treatment.

Method

We carried out a prospective audit of all dentate patients referred from our local head and neck multi-disciplinary team to our restorative department for a dental assessment over a 1 month period. We then devised a patient information leaflet(PIL) to explain what to expect at their dental assessment which was distributed to patients at the time of their cancer diagnosis

Results

Preliminary results suggest that the majority of patients were not aware of the reason for their referral to the restorative department for a dental assessment. A second round of data collection is currently underway following the introduction of the PIL.

Conclusion

Initially the majority of patients were not aware of the purpose of their dental assessment. To enable patients to make an educated decision it is important to provide relevant information in a timely fashion. Working closely with colleagues at this difficult time can ensure patients can provide informed consent and gain autonomy over their care.

Endoscopic pharyngeal pouch stapling: A study comparing intubation difficulty and patient weight as factors for success and recurrence.

Poster

Ms. Summy Bola¹, Mr. Alex Ashman¹, Mr. Stuart Winter¹

1. Oxford University Hospitals

Aim

Endoscopic techniques are supported by NICE as the primary treatment modality for pharyngeal pouch patients. However, as endoscopic surgery has a technical failure rate of up to 18%¹, patient selection is key in preventing repeated anaesthesia and maximising theatre utility. We consider whether the following factors affect the success of endoscopic pouch stapling:

1. Size of pharyngeal pouch
2. Mouth opening
3. Intubation difficulty
4. Body mass index (BMI).

We also investigate if pouch size and BMI affect recurrence rates.

Method

Retrospectively study of pharyngeal pouch surgery performed between January 1st 2013 and 31st December 2016 at a tertiary centre.

Records were examined for anaesthetic documentation, patient demographics, surgical technique, outcome and details of any previous surgery. As well as procedure abandonment, failed endoscopic procedure was also defined as a recurrence of symptoms within 6 months alongside evidence of a persistent pouch. Patients were followed up until 31st December 2018 to determine any re-presentations to clinic or if revision surgery was required. The pre-operative contrast study was examined and pouches were categorised according to the Morton System of small (less than 2cm), medium (between 2-4cm) and large (more than 4cm).

Anaesthetic records were examined for the Modified Mallampati score and the Modified Cormack-Lehane (MCL) score to indicate the grade of intubation difficulty.

Results

Fifty endoscopic pouch procedures were attempted, of which 44 were successful. The most common presenting complaints were of partial dysphagia and the regurgitation of food. Ten patients were classified as overweight or obese; these patients were more likely to present with cough and globus as their primary symptom.

There was no statistically significant difference in failure rates between small, medium and large pouch sizes (Table 1). Better mouth opening (Modified Mallampati score) was not a significant predictor for a failed procedure however a Modified Cormack-Lehane grade of 2b or above, was associated with failed endoscopic stapling (Table 2). Using Bayes Rule, the probability of failed stapling can be calculated as 81% if Modified Cormack-Lehane score was 2b or 3.

The recurrence rate after pouch stapling was 6.8%. Four patients had already undergone pouch stapling at their local Trust. The majority of these patients had a high BMI (Table 3).

Conclusion

Our series suggests that Modified Cormack-Lehane score is a sensitive predictor for failed endoscopic stapling and so reviewing previous anaesthetic charts may help decide the approach, better prepare the patient and help

plan theatre time. In the absence of this data, we would suggest that Mallampati score is a less useful predictor. Patients with small pouches can still have attempted pouch stapling with a good success rate. It is likely that favourable conditions aligning the stapler help advance the staple anvil further. There was no significant failure or recurrence rate for these patients.

The majority of revision stapling was performed on patients with a high BMI and whilst the reason for this is unclear, a combination of fibro-adipose deposition in the cricopharyngeus² could explain both the development and recurrence overweight patients. These patients should be encouraged to lose weight prior to surgery and open repair may be more appropriate¹.

Reference (If applicable)

- Verdonck J, Morton RP. (2015) Systematic review on treatment of Zenker's diverticulum. *Eur Arch Otorhinolaryngol.* 272:3095-107.
- Siddiq MA, Sood S, Strachan D. (2001) Pharyngeal pouch (Zenker's diverticulum). *Postgrad Med J.* 77:506-11.

Pouch size (cm)	Number in study	Number of failed stapling procedures
Small (<2)	16	1
Medium (2-4)	29	4
Large (>4)	7	1
Total	50	6

Table 1 – Failure of endoscopic stapling versus pouch size

Patient No.	Pouch size (cm)	Mall	MCL	BMI	Failure details
12	1.8	2	26	32	Failure to engage anvil
18	2.0	2	3	27	Failure to engage anvil
24	2.1	2	1	32	Persistence of pouch
34	2.8	2	3	22	Failure to engage anvil
43	3.9	3	3	23	Failure to engage anvil
49	5.9	1	1	27	Persistence of pouch

Table 2 – Details of patients with failed endoscopic stapling. Mall = Modified Mallampati score, MCL = Modified Cormack-Lehane grade, BMI = Body Mass Index

Patient No.	Pouch size (cm)	Mall	MCL	BMI	Details
1	1.8	1	1	32	Patient's second procedure
8	1.4	2	1	32	Recurrence within study period
25	2.3	2	1	18	Patient's second procedure
38	2.5	2	1	32	Patient's second procedure
30	2.5	1	1	40	Recurrence within study period
44	4.0	1	1	34	Patient's second procedure
50	6.0	2	2a	27	Recurrence within study period

Table 3 – Details for patients who had recurrence of pharyngeal pouch. Mall = Modified Mallampati score, MCL = Modified Cormack-Lehane grade, BMI = Body Mass Index

Tables for bahno.png

Extending voice prosthesis lifespan in patients following total laryngectomy: an effective antifungal treatment strategy

Poster

Mrs. Sarah Stevens¹, Mrs. Leila Williams², Mr. Daniel Pentland³, Dr. Campbell Gourlay³

1. East Kent Hospitals University Foundation NHS Trust, 2. Kent Community Health NHS Foundation Trust, 3. University of Kent

Aim

In East Kent, a multi-disciplinary team of NHS clinical specialists and university researchers from the Kent Fungal Group have developed the 'East Kent clinical guidelines for the management of early voice prosthesis failure associated with Candida infection'. The key component of these guidelines is the direct application of topical antifungal medication (Nystatin or Miconazole gel) to the voice prosthesis. The aim of this study was to examine whether implementation of our clinical guidelines increases device lifespan.

Method

A retrospective case note review was carried out for all laryngectomy patients living in East Kent who have been managed using the East Kent clinical guidelines. Information was recorded about device lifespan, device type, device width, reason for change where known (e.g. leakage, extrusion) and antifungal regime. 38 patients from East Kent were managed using the clinical guidelines. Patients were excluded when there was missing data (e.g. because of shared care with other centres), insufficient data (less than two voice prosthesis changes both before and after guidelines implementation), incomparable data (e.g. change of voice prosthesis type) or known patient non-adherence to the guidelines. Data from 20 patients was included and device lifespan compared before and after implementation of the clinical guidelines, regardless of reason for voice prosthesis change. Statistical analysis was carried out using a one-tailed paired t-test with a 0.05 significance level within Microsoft Office Excel and R Studio.

Results

A total of 20/38 patients had sufficient comparable data for analysis. The data showed a significant increase in voice prosthesis lifespan following implementation of the East Kent clinical guidelines. 18 of the 20 patients had an improved voice prostheses lifespan after the introduction of the clinical guidelines, with the other 2 having a slight decrease in lifespan (Figure 1). Overall, there is a significant increase in voice prosthesis lifespan ($p < 0.001$) (Figure 2). The mean voice prostheses lifespan before guideline implementation was 71.8 days; this increased to 184.2 days afterwards.

Conclusion

Implementation of the 'East Kent clinical guidelines for the management of early voice prosthesis failure associated with Candida infection' was shown to significantly increase the lifespans of our laryngectomy patients' voice prostheses. Direct application of topical antifungal medication is an effective treatment strategy.

Reference (If applicable)

Daniel Pentland, Sarah Stevens, Leila Williams, Mark Baker, Alistair Balfour, Carolyn McCall, Julie Hawkes-Reekie, Moira Talpaert, Viktorija Makarovaite, Fritz Mühlischlegel, Campbell Gourlay. 'An Effective Antifungal Treatment Strategy to Extend Voice Prosthesis Lifespan in Patients Following Total Laryngectomy' – *under preparation*.

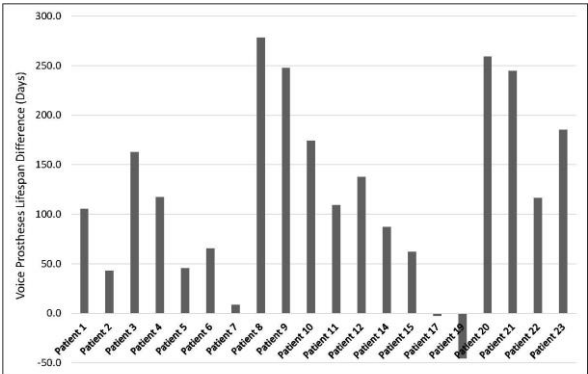


Figure 1: Average lifespan change of voice prostheses after implementation of the East Kent clinical guidelines. 20 of the patients in this study had at least two voice prosthesis changes before and after the clinical guidelines implementation. All except 2 of these patients had an improved voice prostheses lifespan post guidelines.

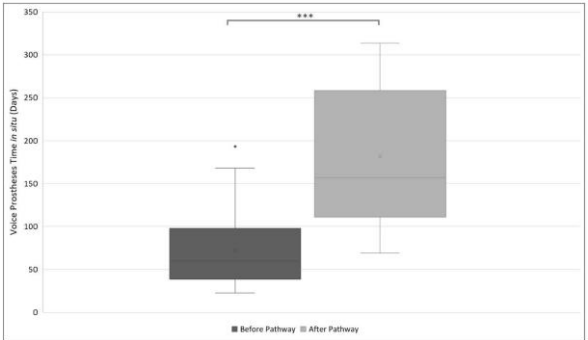


Figure 2: Boxplot to show overall increase in voice prostheses lifespan after implementation of the East Kent clinical guidelines. The mean voice prostheses lifespan before guideline implementation is 71.8 days, this increases to 184.2 days afterwards. ***p<0.001, paired t-test.

Stevens williams pentland and gourlay figures 1 and 2.jpg

Factors affecting swallow outcomes following free flap head and neck reconstructive surgery: a retrospective cohort study.

Poster

Mr. James Higginson¹, Ms. Emma Houlston¹, Ms. Elizabeth Gould¹, Mr. Samuel Mattine¹, Mr. Timothy Hall¹

1. Worcestershire Acute Hospital

Aim

12,000 new cases of Head and Neck Cancer (HNC) present annually in the UK. Treatment is either surgery or radical chemoradiotherapy. Ablative defects after primary surgery of the oral cavity commonly need free flap reconstruction. Radiotherapy is associated with long-term risk of osteoradionecrosis (ORN), which can also require ablation and free flap reconstruction.

Head and neck surgery and radiotherapy are known to have a detrimental effect on swallowing, and accordingly on quality of life (QoL). Patients with poor swallow will often require long-term gastrostomy for nutritional support, and swallow function in the first 6 months following head and neck surgery is highly predictive of long-term outcomes.

Aims:

- To establish the impact of head and neck reconstruction on swallowing outcomes,
- To help patients understand the impact of surgery on swallowing,
- To determine which factors predicted poor swallow function scores, or predict the need to convert to gastrostomy feeding.

Method

All patients undergoing head and neck reconstruction with a free or pedicled flap at our unit in 2017 were included.

Data were collected from operation notes and clinical records, including: reason for surgery, history of previous surgery and/or radiotherapy, tracheostomy, neck dissection/access, whether there was a conversion to PEG during admission, swallow complications, and swallow function pre-operatively, at discharge and at six months post-operatively. The Performance Status Scale for Head and Neck cancer patients (PSS) was used to quantify swallow function.

Descriptive and analytical statistics were calculated using the R statistical programme.

Results

39 patients were included. The mean age was 64.6. 15 patients were female. 5 patients had ORN, 5 had recurrent disease, 27 had primary OSCC. 12 had previously had radiotherapy.

Patients undergoing surgery following previous treatment for head and neck cancer were no more likely to require a gastrostomy ($p > 0.05$).

Mean preoperative PSS was 64.1. This decreased to 21.3 at the time of discharge, and recovered to 38.0 at six months post surgery, but this was still significantly lower than at baseline ($p < 0.001$)

The reduction in PSS at 6 months was greater in patients who had previously undergone radiotherapy or surgery for head and neck cancer ($p < 0.001$). Patients undergoing reconstruction with a pedicled flap had a greater loss of PSS than those with a free flap ($p > 0.05$). There was no significant difference associated with age, gender, or between composite and soft-tissue only reconstructions.

Conclusion

Our data add to the growing body of evidence suggesting that patients undergoing treatment after previous surgery or chemoradiotherapy for head and neck cancer, have substantially worse swallowing outcomes. These patients may require more intensive support from speech and language therapists in the post-operative period for optimal rehabilitation of their swallowing. This raises the issues of dependence on hospital services and living beyond cancer treatment.

A better understanding of chronic dysphagia in such patients may lead to different feeding decisions by patients and the multi-disciplinary team during the work up, consent process and immediate postoperative recovery period.

We feel that co-ordinated efforts to collect outcome data on functional outcomes in head and neck cancer patients will provide for a better understanding by multi-disciplinary teams and assist decision making for complex salvage or post-radiotherapy pathology.

Reference (If applicable)

- Dawson C, Gadiwalla Y, Martin T, et al. Factors affecting orocutaneous fistula formation following head and neck reconstructive surgery. *Br J Oral Maxillofac Surg* 2017; 55:132–135
- Schache AG, Lieger O, Rogers P, et al. Predictors of swallowing outcome in patients treated with surgery and radiotherapy for advanced oral and oropharyngeal cancer. *Oral Oncol* 2009; 45:803–808.
- Wilson JA, Carding PN, and Patterson JM. Dysphagia after Nonsurgical Head and Neck Cancer Treatment: Patients' Perspectives. *Otolaryngol Head Neck Surg* 2011; 145(5):761–771.

Fine needle aspiration cytology versus ultrasound guided core biopsy in the diagnosis of parotid neoplasms: A review of the literature.

Poster

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Aim

Parotid tumours encompass a wide array of pathologies posing a significant diagnostic challenge clinically, radiologically and pathologically. Fine needle aspiration and cytology (FNAC) is a safe and well-established parotid biopsy technique, although concerns have been raised about diagnostic adequacy and accuracy. More recently, ultrasound-guided core biopsy (USCB) has been described for the diagnosis of parotid neoplasms. The authors perform a literature review of parotid needle biopsy techniques with a discussion of diagnostic adequacy, accuracy and complication rates.

Method

Literature search using MEDLINE, EMBASE databases from 1990-2018. The following search terms "parotid neoplasms" ("carcinoma" OR "lesion" OR "mass" OR "tumour" OR "cancer"), "fine needle aspiration cytology" ("FNAC" or "FNA") and "ultrasound guided core" ("USCB" OR "UCB") were used, supplemented by a manual search of article reference lists.

Results

USCB has significantly higher adequacy rates, with more uniform technique implementation between institutions and operators. USCB has significantly higher sensitivity, accuracy and ability to establish a specific histological diagnosis for malignant neoplasms. The techniques are similar in performance in specificity and differentiation of neoplasms from non-neoplastic pathology. Both techniques have a good safety profile and are well-tolerated. Risk of tumour seeding is very low with rates <1 in 10,000 for both techniques.

Conclusion

USCB appears a better diagnostic test compared to FNAC in terms of adequacy, sensitivity, accuracy, and ability to establish a specific histological diagnosis. Current data suggest it is safe and well-tolerated although longer follow up data is needed to define any potential risk of tumour seeding. There is no evidence to date to suggest this is a concern.

Keywords; ultrasound guided core needle biopsy; fine needle aspiration cytology; parotid neoplasms; systematic review; biopsy technique.

Gastrostomy dependence is deescalated when head and neck cancer patients have risk stratified follow up with the CNS and AHP team in a joint clinic.

Poster

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Aim

To establish if intensive risk stratified follow up with the Head and Neck CNS and AHP team post radical treatment, reduces gastrostomy dependence, improves swallowing outcomes and reinforces achievable goals.

Method

Data was collected prospectively from 3 groups of patients prior to and following, the instigation of an intensive, risk stratified post treatment CNS and AHP led clinic as part of the national Macmillan Recovery Package. The use of Motivational Interviewing by the team and assessment of psychological and social needs were pivotal in enabling recovery to be made, as well as timely and responsive pain management. Cost analysis was undertaken for the supplemental gastrostomy feeds and opioids prescribed.

Risk stratification was based upon, tumour site, TNM stage, HPV status and socioeconomic background.

Data collected included age, gender, tumour site, TNM staging, HPV status, treatment modalities, UoW QoL, MDADI score, post treatment RIG dependence time and opioid dependence. Statistical comparison of the demographic, tumour and treatment related data was undertaken with the Mann-Whitney U test. Kaplan-Meier analysis was used to determine the significance of the post treatment gastrostomy dependence time.

Results

Analysis of the data demonstrated no significant differences in the demographics between the groups. There were a variety of tumour sites and stages in each group, these were broadly similar, but for this study no attempt was made to look at historic controls.

Kaplan Meier analysis of the gastrostomy dependence time demonstrated significant reduction in dependence, and reduced time to gastrostomy removal. The intervention group had an average length of time of 10 weeks for RIG placement post completion of treatment. The comparison group, who did not receive intensive risk stratified care had an average length of RIG time of 26.5 weeks post completion of treatment before removal.

The intervention group demonstrated improvements in MDADI, QoL scores and a 90% reduction of analgesic dependence following intensive risk stratified follow up.

Cost analysis demonstrated a cost saving of almost £2000 per patient due to the reduced dependence on supplemental feed alone.

Conclusion

This study validates clear benefits of risk stratified, intensive CNS & AHP support for Head and Neck cancer patients, which can begin at the prehabilitation stage. The data provided confirms clear improvements in MDADI and relevant QoL markers, together with a notable reduction in patients Gastrostomy dependence following this collaborative support. We have also provided a cost analysis to show the savings that can be achieved due to the reduction in requirement for supplemental enteral feeding, and ongoing Dietetic support.

Future work should take in to consideration radiotherapy planning techniques such as VMAT and how de-escalation of therapy regimes affect swallowing, QOL measures and the development of late side effects.

Head and Neck Cancer in the Digital Age: an evaluation of mobile health applications

Poster

Mr. Jason Fleming¹, Mr. Jean-Pierre Jeannon¹

1. Guy's and St Thomas' NHS Foundation Trust

Aim

It is an exciting time for technology in healthcare. The global digital health market was expected to reach £43 billion in 2018, with the UK market reaching almost £3 billion, much of this driven by digital mobile applications. This technology is developing on a background of unprecedented demand for GP and medical services. The new health secretary Rt Hon Matt Hancock MP has listed technology as one of his top priorities in his NHS vision. The ability to recognise early red flag symptoms and direct patients promptly to urgent referral pathways is a hugely attractive benefit of smartphone or accessible web applications. This study was performed to assess the performance of popular 'artificial intelligence' (AI) symptom checkers currently available to the public and evaluate their accuracy as a screening tool for head and neck cancer symptoms.

Method

We selected three of the most popular symptom checkers available via the UK app store (cross-platform), corresponding to those most often quoted in online commentaries: Babylon (London), Your.md (London) and Ada (Ada Health GmbH, Munich). A recent Pan London Suspected Cancer Referral Guide was obtained and distilled into a list of qualifying symptoms for referral to secondary care on a two week wait cancer pathway. A generic patient scenario was devised, whose prime symptom was categorised as an individual recommended symptom on the cancer referral guide, and background generically constructed to combine high risk features so as to maximise the possibility of the symptom checkers reaching a potential cancer diagnosis: male, 50 years old, BMI 25-30, current smoker (20/day), current drinker (21 units/week), no significant past medical history and a family history of type 2 diabetes mellitus. Each symptom was passed through the selected symptom checker applications and outcomes recorded.

Results

Overall differential diagnoses were supplied in 80% (n=53) of 66 case scenarios. Out of the 22 individual scenarios, Ada had the least failure to diagnose episodes with 86% (n=19) scenarios resulting in a differential diagnosis, Babylon next with 68% (n=15) and finally Your.md with 64% (n=14). There was an overall lower yield of cancer diagnoses in the differential diagnosis lists, supplied in overall 32% of scenarios. As a screening tool, Babylon was the most accurate for including a potential cancer diagnosis in the differential diagnosis, with a sensitivity of 45% (n=10) cases, Ada with 27% (n=6) and Your.md 23% (n=5). Medical triage advice was provided in cases where diagnoses were offered, and often when symptoms were unrecognised. Ada was overall the most risk averse program, with 63% (n=12/19) stated medical triage outcomes recommending medical advice immediately or within hours, compared to 29% (n=5/17) with Babylon and 13% (n=2/15) Your.md.

Conclusion

The ability of modern symptom checkers to promote health awareness and self-checks is promising, but the accuracy of these applications to pick up symptoms that might represent a new cancer diagnosis should be a fundamental standard. This study shows that deficiencies in this technology still exists. In addition the risk averse nature of these applications was also evident, which has the significant potential to cause undue patient anxiety. We emphasise the need for a robust regulatory framework for these applications. Despite significant improvements in the technology, the sensitivity of the tested symptom checker applications remains low for

head and neck cancer and do not yet demonstrate significant sophistication to reliably direct patients towards appropriate health interventions.

Head and Neck Oncology Pathways: The importance of Restorative Dentistry and its early involvement.

Poster

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1. University College London Hospital NHS Foundation Trust, 2. Guy's and St Thomas' NHS Foundation Trust

Aim

The diagnosis of oral head and neck cancer carries significant and long lasting psychological burden, impacting function and social wellbeing. The 5 year survival rate has steadily improved since 1975 with coordinated oncology treatments, however, quality of life does not follow this trend. The latter is often due to severely altered anatomy and compromised basic oral functions leading to embarrassment, frustration and affects social reintegration. Despite national service guidelines, Restorative Dentistry involvement often occurs towards the end of the pathway adding to this burden. At the Eastman Dental Hospital, Restorative Dentistry has been integrated and involved at all stages of the Head and Neck Cancer Pathways. Services are led by Restorative Dentistry Consultants, who provide early expert insight, to promote health, oral rehabilitation and long term support helping to reduce this burden. This project demonstrates the role and importance of early Restorative Dentistry involvement with Head and Neck Cancer Pathways.

Method

Retrospective analysis of pre-oncology head and neck cancer patients referred to the Restorative Department at the Eastman Dental Hospital. Data was captured from patient referrals, patient records and entered onto a centrally held database for analysis.

Results

In excess of 200 patient cases were analysed. The results demonstrated that greater than 90% of patients referred, were provided with consultant led treatment plans and treated within 10 days prior to the proposed radiotherapy start dates. 100% of patients were provided with information leaflets, which included information on trismus, xerostomia, mucositis and osteoradionecrosis. 100% of patients were provided preventative fluoride supplementation. If intervention was required 100% of dental extractions were carried out within a hospital setting as well as 100% of cases provided with hospital lead hygiene and therapy treatment if indicated. Additionally, it was shown that only 46% of patients were registered with dentists and 85% of cases referred required dental extractions. The data also showed the 60% of patients were diagnosed with dental caries, 94% of patients with periodontal disease and 23% of cases required dental restorations.

Conclusion

The data collected demonstrates the high levels of oral disease and dental extractions required by these patient groups. The majority of patients referred were not registered with general dental practitioners to provide even the basic of dental support when urgent attention was required. In such cases, Oral Maxillofacial Surgeons are often tasked to make crucial decisions about patient's dentitions having limited involvement with oral rehabilitation. These patients are often further compromised by trismus, xerostomia, severely altered anatomy, progressive dental disease and risks of developing osteoradionecrosis and referred to Restorative Dentistry towards the end of the pathway. Having early Restorative Dentistry input, allows prompt intervention without delaying urgent oncology treatment and provision of expert advice. Treatment planning can be undertaken from the outset with a long term view toward oral rehabilitation, its challenges and the support required via multidisciplinary dental and oncology teams.

Reference (If applicable)

Morris, N., Moghaddam, N., Tickle, A. and Biswas, S. (2017). The relationship between coping style and psychological distress in people with head and neck cancer: A systematic review. *Psycho-Oncology*, 27(3), pp.734-747.

Ray-Chaudhuri, A., Shah, K. & Porter, R.J., 2013. Radiotherapy: Oral management of patients who have received radiotherapy to the head and neck region. *Vital*, 10(2), pp.30–36.

Butterworth, C., Mccauley, L. & Barclay, C., 2016. Restorative dentistry and oral rehabilitation: United Kingdom National Multidisciplinary Guidelines. *The Journal of Laryngology & Otology*, 130(S2).

Predicting and Managing Oral and Dental Complications of Surgical and Non-Surgical Treatment for Head and Neck Cancer. RD-UK. Available at: [https://www.restdent.org.uk/uploads/RD-UK H and N guideline.pdf](https://www.restdent.org.uk/uploads/RD-UK%20H%20and%20N%20guideline.pdf) [Accessed January 14, 2019].

Rogers, S.N. et al., 2016. Quality of life considerations in head and neck cancer: United Kingdom National Multidisciplinary Guidelines. *The Journal of Laryngology & Otology*, 130(S2).

Impacted denture in the oesophagus: Review of the literature and its management

Poster

. Zahir Mughal¹, Mr. Alex Charlton², Mr. Raghav Dwivedi³, Mr. Basavaiah Natesh¹

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Aim

Denture ingestion has a high misdiagnosis rate of 47%. The published literature contains reports of patients discharged home from the emergency department with missed impacted dentures in the oropharynx and upper oesophagus. The consequences can be disastrous, including requirement for tracheostomy, mortality, and litigation. We discuss these diagnostic barriers and propose potential solutions in this case report and review of the literature.

Method

We describe a case in which considerable delays to treatment were encountered, and discuss the pitfalls and lessons learnt. This case and review of the literature draws attention to clinical assessment, investigation and treatment options for oesophageal dental plate impaction. A literature search was conducted between 2008 and 2018, limited to adults. Databases included were Medline, NICE Evidence, PubMed, TRIP Database, UpToDate, Dynamed, and additional papers were identified from reference lists. Key words used were foreign body or denture or dental plate or prosthesis and ingest or ingested or ingestion or swallow or swallowed.

Results

Bandyopadhyay et al(1) reported a series of 47 patients with upper oesophageal denture impaction and found that dysphagia and tracheal tenderness were the most consistent clinical findings.

Most dental prostheses are made from poly(methylmethacrylate) plastics, which are designed to be radiolucent. Radiolucency of dentures is a well documented cause for misdiagnosis and delayed treatment. However indirect signs on neck radiograph can sometimes be present, and make early detection and prompt retrieval possible. Introducing a radio-opaque marker may facilitate radiological detection of dentures, however this is not standard practice in industry.

There is no statistically significant difference in efficacy or complication rate between flexible and rigid oesophagoscopy according to meta-analysis data, although no randomised controlled trial has been conducted on this topic. In difficult retrievals a crossover strategy between flexible to rigid and vice versa may be useful. In cases of failed endoscopic retrieval, open transcervical approach has been described.

Conclusion

The history given by the patient is paramount in obtaining the diagnosis, planning investigations and determining treatment for oesophageal denture impaction. Dental plates are usually radiolucent and therefore a negative plain film radiograph does not exclude its presence in the oesophagus. A low threshold for CT scan is required if the diagnosis is uncertain or there is a concern about complications. Treatment by endoscopic retrieval must be performed urgently for sharp and pointed objects in the oesophagus. Generally flexible OGD is preferred for impacted foreign bodies in the oesophagus, except at the level of cricopharyngeus where a rigid oesophagoscope is more appropriate.

Reference (If applicable)

1. Bandyopadhyay SN, Das S, Das SK, Mandal A. Impacted dentures in the oesophagus. J Laryngol Otol. 2014;

Improving Head & Neck Cancer Network Imaging Efficiency Using Mobile Technology

Poster

Mr. Chrysostomos Tornari¹, Mr. Jason Fleming², Ms. Akshaya Rajangam¹, Mr. Milad Golsharifi¹, Dr. Dhulshan Preena¹, Mr. Philip Touska¹, Mr. Steve Connor¹, Mr. Richard Oakley¹, Mr. Asit Arora¹

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Aim

We aimed to optimise radiological diagnostic efficiency in our service to optimise cancer outcomes and improve the patient experience. Imaging pathway delays negatively impact cancer diagnosis and cause financial losses. To reduce delays, we identified areas for improvement and changed our pathway protocols.

Method

A week-long rapid improvement event resulted in a streamlined imaging requesting protocol. This was converted into a cross-platform mobile app and supplemented with educational posters. The new tools were circulated to the multidisciplinary team by emails and educational talks. A number of same-day appointment slots for CT and MRI were also created. A prospective audit of Multidisciplinary Meeting discussions and online clinician survey allowed us to assess the impact of our changes. In the second round, we repeated this audit to assess the effectiveness of the new pathways and resources.

Results

Imaging was the most common reason for diagnostic delays in our patient group. CT was the most commonly delayed imaging modality, followed by MRI and PET-CT. Our survey showed that clinician confidence and accuracy in imaging requests varied according to the complexity of the clinical scenario. Finally, we demonstrate the changes to the above results that were brought about by our novel pathways and decision support tools.

Conclusion

In a resource-limited NHS, we strive to increase efficiency despite stagnant funding. Therefore, the incorporation of new technology and novel pathways in Head & Neck cancer protocols is pivotal. The method presented in this project serves as a model for similar services that are aiming to improve their diagnostic efficiency, cost efficiency and patient experience.

Intra-operative surgical management of iatrogenic thoracic duct injury during lower neck procedures

Poster

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Aim

Chyle leak is an uncommon but potentially morbid complication of both neck dissection and thyroid surgery. When it occurs, it can be difficult to manage post-operatively and often results in a long hospital stay. Therefore ideally it should be recognized and managed at the time of surgery. Aim of this article is to review literature systematically on the practice of intra-operative surgical management of thoracic duct injury and from this we have attempted to reach a systematic approach on the intraoperative management of thoracic duct injury.

Method

We have evaluated the current literature in an attempt to reach a systematic approach on the intraoperative management of the thoracic duct injury. The preventive aspect of the thoracic duct injury has been stressed upon based on the anatomical knowledge and risk factors. A comprehensive and systematic literature search was performed using Medline through Pub Med (1950-2017), EMBASE (1980-2017), Ovid (1958-2017) and also Google search engine, e-Medicine, and Wikipedia. A total of 685 peer-reviewed articles were identified in this process using the key words thoracic duct injury or trauma. However 96 publications were found to be associated with chyle leak in the neck surgery after excluding publications related to thoracic and axillary procedures; so this was rationalised to 49 publications referring to intra-operative surgical management of thoracic duct injury.

Results

Risk factors for leak include patient factors such as higher stages of disease, presence metastatic lesions in the region of the IJV/subclavian vein, and previous radiotherapy; and surgical factors including the extent and side of the neck dissection, and tissue handling.

On table techniques to detect leaks include having a detailed knowledge of the anatomy as well as possible variations; and using the Cerna et al method of abdominal compression to elicit visible leak; and high magnification. Current best practice for intra-operative management includes delicate ligation of the thoracic duct, biological glues/meshes and muscular flap coverage.

Conclusion

Our literature review revealed that there is paucity of peer-reviewed publications to establish an evidence-based guideline on management of intra-operative thoracic duct injury. This review also reflects a lack of consensus protocol among the head and neck surgeons. Authors have made an effort to explore the suitable intra-operative management and treatment options of thoracic duct injuries during lower neck procedures.

Jaw reconstruction With Printed Titanium and free-tissue transfer (JaW PrinT): an update.

Poster

Mr. Alex Goodson¹, Mr. Madhav Kittur², Mr. Peter Evans², Mrs. Sarah Davies², Mrs. Julie Rees²,
Prof. mark williams¹

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Aim

When compared to intraoperative plate bending, a mandibular reconstruction plate pre-bent to a digitally designed physical stereolithographic model improves accuracy and efficiency in mandibular reconstruction (Gil et al., 2015). Nevertheless, this type of 'crude customisation' still remains open to considerable inaccuracies/human error and risks introducing mechanical stresses into and ultimately premature mechanical failure of the plate. It has been proposed that 3D-printed (additively-manufactured) mandibular reconstruction plates further reduce the duration of surgery and frequency of complications, as well as producing a more accurate reconstruction due to the elimination of human error in the final stages of fabrication (in contrast to pre-bent plates) (Tarsitano et al., 2016). With a lack of high-level evidence to date, any ability of 3D-printed plates to improve functional outcomes for head and neck cancer patients undergoing mandibulectomy needs to be quantified. JaW PrinT is a NIHR-registered portfolio study aiming to provide pilot data for this purpose.

Method

JaW PrinT is a prospective cohort study evaluating outcomes of patients over the age of 18 years undergoing mandibular reconstruction with either a pre-bent or 3D-printed titanium reconstruction plate and fibular free-flap, following mandibulectomy for tumour or osteoradionecrosis. Exclusion criteria include patients unfit for surgery, formal condylar reconstructions (joint prostheses) and free-flap failure.

Participants are allocated to groups alternatively, independent of the study according to the training requirements of the host unit and stratified by complexity of the surgical reconstruction (1/2/3-part fibular free-flap). The study aims to recruit 20 patients at the lead site over 2 years (10 per group), based on local caseload.

Primarily, dimensional accuracy of the neo-mandible compared to the virtual surgical plan will be evaluated using clinical surveillance CT-scanning 6 months postoperatively. Secondary outcomes are short-term (duration of surgery, usability, complication rates) and medium-term (dental, facial aesthetics and psychosocial quality-of-life), with economic evaluation of treatment pathways.

Results

To date, 7 patients have been recruited over 9 months, with recruitment ongoing. Two patients were excluded for reasons of flap failure (participant 001) and intraoperative change in surgical plan (participant 003). By May 2019, participant 002 will have completed the study's 1 year follow up period. Patients 004, 005, 006 and 007 will have reached 6 months follow-up with post-operative CT scanning. We present an analysis of dimensional accuracy of mandibular reconstruction in the above patients as well as a summary of the secondary outcomes data, including duration of inset of the fibular flap, surgical 'usability' ratings, peri/post-operative complications and quality-of-life scores. With the participants recruited to date, no clear differences have been observed between treatment groups.

Since the study started, a second centre has applied to join the portfolio study and aims to commence recruitment in the summer of 2019.

Conclusion

JaW PrinT is a feasible real-world observational clinical study which has the potential to provide meaningful

pilot data, upon which larger randomised trials can be designed and powered. Recruitment rate appears to be within target at the host institution. The study methodology has been tested effectively and outcome measures have been successfully recorded: in terms of being a practicable pilot study, the design appears to be robust and incorporation of additional centres will further enhance the study's output. To date, insufficient numbers of participants have been recruited to infer any significant differences between the two treatment pathways although subjectively, no clear differences have been seen.

Reference (If applicable)

GIL, R., ROIG, A., ARRANZ OBISPO, C., MORLA, A., MARTI PAGES, C. & LLOPIS PEREZ, J. 2015. Surgical planning and microvascular reconstruction of the mandible with a fibular flap using computer-aided design and rapid prototype modelling, and precontoured titanium reconstruction plates: a prospective study. *Br J Oral Maxillofac Surg*, 53, 49-53.

TARSITANO, A., BATTAGLIA, S., CRIMI, S., CIOCCA, L., SCOTTI, R. & MARCHETTI, C. 2016. Is a computer-assisted design and computer-assisted manufacturing method for mandibular reconstruction economically viable? *J Craniomaxillofac Surg*, 44, 795-799.

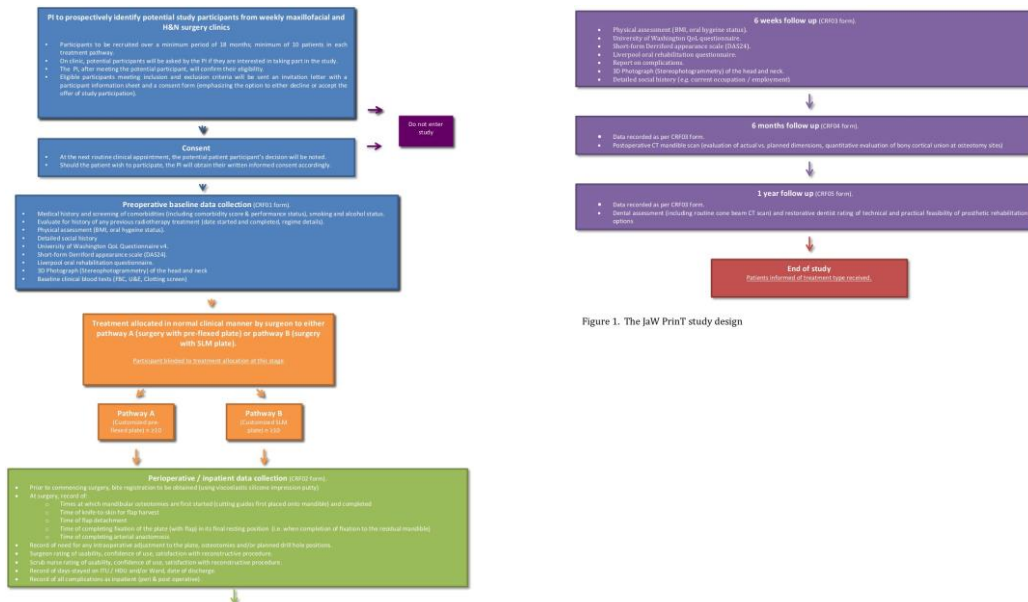


Figure 1. The JAW Print study design

Jaw print flow chart v1.9.jpg

Jaw print flow chart v1.9 page 2 .jpg

Management of 'late effects' in Head and Neck cancer. A multi-disciplinary approach.

Poster

Ms. Rebecca Lantz¹, Ms. Sam Bacon¹

1. Guys and St Thomas' NHS Foundation Trust

Aim

There is growing recognition of late symptom effects of oncological head and neck cancer (HNC) treatment. The cause of this is likely multifactorial, including: advances in oncological treatment, increases in long term survival, an ageing population and an increase in HPV associated HNC within a younger patient population [1]. People are therefore living longer with the side effects of their cancer treatment, with a high impact on their quality of life [2]. The South East London Community Head and Neck Cancer Team (CHANT) is a multi-professional team specialising in early rehabilitation of patients on completion of their treatment and in 'living with and beyond' cancer treatment.

We observed an increasing proportion of referrals to our service for patients with late presentation of difficulties with swallowing, jaw, neck and shoulder dysfunction. We aimed to identify the incidence of this, and to determine the range of needs these patients have.

Method

We conducted a retrospective case notes audit of patients referred to our service with late effects over a six month period. Data was collected from an electronic patient record system. We collected information on:

- Percentage of patients referred with late symptom effects of treatment
- The presenting symptoms of the patients with a focus on swallowing, jaw, neck and/or shoulder dysfunction
- Which members of the multidisciplinary team had been involved in their rehabilitation based on the impairments identified

Results

Approximately 15% of the new referrals to CHANT during this time period were due to reported 'late effects'. The predominant primary referral reason was for dysphagia (swallowing difficulties).

Of the 18 patients referred with late effects, all required input from speech and language therapy for dysphagia. 16 also required dietetic input and 7 required physiotherapy input. 6 patients required rehabilitation from all three disciplines. Only one patient required speech and language therapy alone.

Impairments requiring specialist physiotherapy input were issues with neck and/or shoulder function and restriction in jaw opening.

Conclusion

People presenting with late symptom effects of HNC treatment represent a significant proportion of patients requiring rehabilitation. They are a highly complex population with often co-occurring and interrelated clinical symptoms. Multi-disciplinary rehabilitation encourages a holistic, responsive and individual approach to patient care. It can be difficult to achieve multi-professional management in the living with and beyond cancer phase outside of a multi-professional community team. In addition to the core multi-disciplinary contribution of speech and language therapy and dietetics, the importance of access to specialist physiotherapy input within this population is highlighted by our data.

Future research or service development could include consensus and classification of late effects, predictive factors, development of a multi-professional late effects assessment tool, treatment approaches and specific pathways for this population. A proactive approach to long term surveillance is essential with this population, par-

ticularly in view of the range of late developing symptoms[3].

Reference (If applicable)

- [1] Petkar, I., Rooney, K., Roe, J., Patterson, J et al (2016) DARS: a phase III randomised multicentre study of dysphagia- optimised intensity modulated radiotherapy (Do-IMRT) versus standard intensity modulated radiotherapy (S-IMRT) in head and neck cancer. BMC Cancer 16:770
- [2] Department of Health and Social Care (2013) Living with and Beyond Cancer: Taking Action to Improve Outcomes
- [3] Goldsmith, T. and Jacobson, M.C. Managing the late effects of chemoradiation on swallowing: bolstering the beginning, minding the middle, and cocreating the end (2018). Current opinion in Otolaryngology Head and Neck Surgery. 26 (3): 180-187

Motivational Interviewing in SALT clinic - the Bradford Experience.

Poster

Ms. Margaret Evans¹, Mrs. Sarah Jordan², Mrs. Nicola Verity¹

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Aim

Our aim was to explore whether adding Motivational Interviewing (**MI**) technique to intensive Speech Therapy follow up has improved speech and swallow related quality of life outcomes for patients who do not progress in our joint Nurse-AHP follow up clinics.

The Bradford Speech and Swallow (**SAS**) Clinic evolved from a Macmillan funded service redesign. The redesign included training the nurse and Allied Health Professionals (AHP) team in MI. SAS was originally a MI-driven SALT/Dietetic clinic, which experienced several changes to staffing and evolved into a stand-alone SALT clinic in December 2017. Although the majority of patients progress sufficiently within the joint Nurse/AHP clinic, for a small number it was not enough to help them surmount physical and psychological changes related to swallow and communication and they became 'stuck'. SAS is designed to give extra intensive SALT therapy to these patients.

Method

We audited outcomes for patients referred to SAS since December 2017.

18 patients were identified as suitable for SAS at joint Nurse/AHP clinic.

15 patients consented to referral.

5 of these did not complete the block of therapy.

1 patient was seen for speech concerns and the remaining 9 for swallow problems.

9 dysphagic patients were audited.

We excluded any patient who had an aspiration/choking risk not remediated by texture modification or safe swallow manoeuvres. The clinic runs once per week for one session and offers appointments of between 45-60 minutes in length. Therapy was given, and achievable goals set, within an MI framework.

These outcome measures were taken pre and post SAS input:

PSS Normalcy diet, MDADI, Patient Satisfaction Survey and verbal feedback.

Results

MDADI

The best improvements were in the Emotional section, the second best in Physical, with more disappointing results in Global and Functional. A similar pattern is seen in audits of intensive SALT clinics in other centres.

PSS Normalcy Diet

5/9 patients improved their score, 3 maintained their score. One person reduced their score, however this was intentional aim due to his high choking risk and poor compliance with recommendations. (His MDADI score had actually improved post-SAS).

Patient Satisfaction Survey results (see pie charts) include:

5/9 patient's swallow related Quality of life improved "a lot"

5/9 reduced or stopped reliance on supplement drinks after SAS input.

2/9 stopped RIG feed and had tube removed after SAS - this appears a poor outcome however 6/9 had no gastrostomy when they started SAS.

Patient verbal feedback was very positive

Conclusion

Outcomes from MI driven SAS clinic suggest that swallow-related limitations persisted. This reflects outcomes from similar national and international SALT clinics.

Despite this, our results suggest we can help to make living within these limitations more psychologically bearable and help patients move past them.

MI has been a very helpful strategy to use with dysphagic patients who 'get stuck'. It is difficult to determine whether improvements we saw are related entirely to MI, or also partly to having more dedicated SALT-only time, when this can be limited in joint Nurse/AHP clinic. We will continue to use it within our clinics.

We need to collect a bigger sample size and continue to audit the clinic. The current audit was inconclusive in terms of effect on RIG removal. Examining the longevity of improvements seen in this audit by re-auditing in 12 months from end of therapy block may be indicated.

Reference (If applicable)

• Sobell, L. C., & Sobell, M. B. (2003). Using motivational interviewing techniques to talk with clients about their alcohol use. *Cognitive and Behavioral Practice*, 10, 214-221.

• Miller, W. R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people to change (2nd edition)*. New York: Guilford.

• <http://www.jeffallison.co.uk/> (MI trainer).

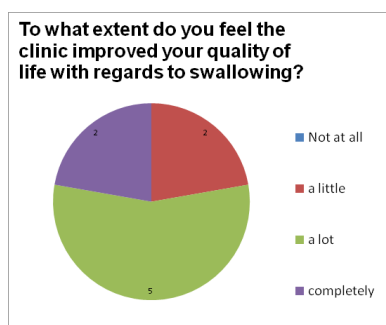
• Quick MI sources **YouTube** for good and bad MI examples search for:

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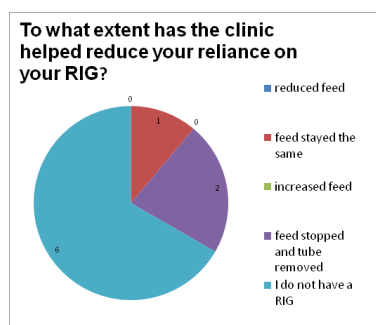
Miller, W. R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people to change (2nd edition)*. New York: Guilford.

• <http://www.jeffallison.co.uk/> (MI trainer).

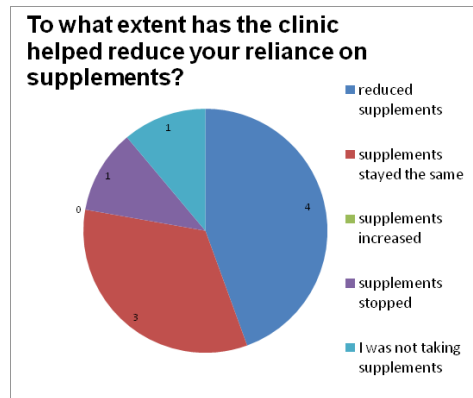
• Quick MI sources **YouTube** for good and bad MI examples search for:



Patient satisfaction pie chart 1.png



Patient satisfaction pie chart 2.png



Patient satisfaction pie chart 3.png

Multi-Disciplinary decision making in oropharyngeal cancer: Do we follow guidelines and are treatment decisions being implemented? A retrospective analysis.

Poster

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Aim

A Multi-Disciplinary Team (MDT) approach to cancer management, including cancer of the head and neck, is gold standard. With an increasing disease incidence and growing research into the role of Human Papillomavirus (HPV) in the aetiology of cancer of the oropharynx, updated guidelines were recently published outlining UK recommendations for management. This study aimed to evaluate the MDT decision making process among oropharyngeal cancer patients at a tertiary centre.

Method

All MDT meetings over a 12-month period (1 September 2017 - 31 August 2018) were analysed retrospectively at the Regional Head and Neck Cancer Centre, Aintree University Hospital, Liverpool, UK. MDT decisions for oropharyngeal cancer cases were compared with guidelines and patient records were examined to identify implementation of decisions. Reasons behind any discordant decisions were explored.

Results

A total of 140 patients were included in the study. Thirty-three patients (23.6%) were not tested for HPV. Patients aged over 70 years with a smoking history treated with palliative intent were more likely to not be tested ($P=0.017$). Eighty-five percent of decisions agreed by the MDT followed guidelines with the majority of those not complying (76.2%) related to patient comorbidity. Ten MDT decisions (7.1%) were not implemented. Reasons included: Seven due to patient choice, of which four patients (57.1%) were only seen following the MDT meeting, and three due to clinician decisions as new clinical information emerged. Decisions were more likely to change for patients with early rather than advanced stage disease ($P=0.009$).

Conclusion

The majority of MDT decisions followed guidelines and any discordant decisions were justifiable and sensible. Furthermore, the vast majority of MDT decisions were also implemented. This study highlights the importance of seeing and discussing management options with patients before the MDT meeting, as decisions can potentially change after seeing the patient. Progress is still needed to ensure all patients with oropharyngeal cancer are HPV tested. However, the HPV testing rate identified is higher than that documented at other comparable head and neck centres. Reasons for not testing could include subliminal decision making among clinicians and patients falling between centres during the patient journey. Most importantly, the role of the MDT in head and neck cancer should be to ratify decisions rather than making them, hence the need to see patients prior to MDT discussion.

Outcomes of T3 Laryngeal Cancer: Is vocal cord fixation a predictor of salvage laryngectomy?

Poster

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1. Bradford Teaching Hospitals NHS Foundation Trust

Aim

Laryngeal cancers attain T3 classification if they have vocal cord fixation, paraglottic space invasion, pre-epiglottic space invasion, post-cricoid extension, or minor thyroid cartilage erosion.

National guidelines state advanced laryngeal cancers should receive multimodality therapy consisting of surgery with adjuvant therapy or non-surgical larynx preservation therapies. Surgical treatment includes partial or total laryngectomy and transoral laser microsurgery/transoral robotic surgery. Most patients with T3 glottic or supraglottic tumours are suitable for non-surgical larynx preservation therapies. Recent advances in the field of oncology have led to a reduction in the number of primary total laryngectomies whilst salvage surgery numbers for failed non-surgical treatment have increased.

The aim of this study is to determine whether vocal cord fixation and involvement of the paraglottic or pre-epiglottic space in T3 laryngeal cancers at presentation is a poor prognostic indicator which can then be used to predict the need for salvage laryngectomy.

Method

Retrospective review of case notes for patients diagnosed with T3 laryngeal cancer between 2014-2016. Data collected on tumour site, vocal cord mobility, clinical and radiological staging, primary treatment received, recurrences and the incidence of salvage total laryngectomy.

Results

38 patients (32 males, 6 females) consisting of 21 glottic (10 fixed cords) and 17 supraglottic (8 fixed cords) tumours were included. One patient underwent primary laryngectomy with the remaining 37 receiving non-surgical larynx preservation therapies (36 with curative intent, 2 palliative). Locoregional recurrence occurred in 10 patients, one of which also had distant metastases. Two patients had persistent disease and 1 developed a new subglottic primary. Ten patients with recurrence had fixed cords at presentation with 7 of these proceeding to salvage laryngectomy (+/- neck dissection +/- free flap). Five salvage surgery patients had radiological involvement of the paraglottic/pre-epiglottic space. In patients initially presenting with fixed cords without evidence of recurrence, 7 had involvement of the paraglottic or pre-epiglottic fat. In our cohort, only 3 patients with mobile cords had a recurrence with one requiring salvage laryngectomy, none of which had radiological involvement of the paraglottic/pre-epiglottic fat.

Conclusion

The immobile vocal cord is associated with a worse prognosis and is therefore factored into the American Joint Commission on Cancer staging for laryngeal tumours. Salvage laryngectomy was required more often in those with fixed cords at presentation. We show that vocal cord fixation is an independent risk factor for salvage laryngectomy and can be used to predict treatment failure in T3 lesions of the larynx. A larger sample size is required to show whether involvement of the paraglottic or pre-epiglottic fat plane is a predictor for recurrence or salvage surgery.

Parapharyngeal abscess secondary to lymphovenous malformation

Poster

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Aim

Deep neck space(DNS) abscesses are life-threatening presentations to ENT surgeons. We present a novel case of a palatine tonsillar low-flow lymphovenous malformation pre-disposing to multifocal DNS collections and resultant airway compromise.

Method

37-year-old male presented with sore throat and pyrexia, rapidly developed trismus, complete dysphagia and stridor. Examination identified fluctuant masses over the right parotid and in level IIa. Immediate management consisted of intravenous steroids, fluids and antibiotics with the airway secured in theatres using nasotracheal intubation prior to imaging.

Contrast-enhanced computed tomography revealed two DNS collections; in the right parapharyngeal and masseteric space and within the inferior aspect of the masseter muscle (Figure 1).

Results

After surgical tracheostomy, the abnormal tonsil was removed by bipolar dissection and pus drained intraorally. Externally, the parapharyngeal space was opened and blunt dissection was performed between the parotid gland and masseter where the final abscess was drained

Histology revealed tonsil lined with squamous epithelium and MALT tissue but extending into the submucosa is a focus of dilated vascular(CD31 and CD34 positive) and lymphatic(D2-40 positive) tissue without atypia consistent with cavernous lymphangioma (Figure 2).

Conclusion

Tonsillar low-flow lymphovenous malformations are rare in adults with on 32 cases reported in the literature¹. Lymphatic stasis can predispose to secondary deep neck space infection. Management centres on basic principles of airway management and formal drainage.

Reference (If applicable)

1. Mardekian S, Karp JK. Lymphangioma of the Palatine Tonsil. *ArchPatholLab Med.* 2013 Dec;**137**(12):1837-42.



Figure 1.png

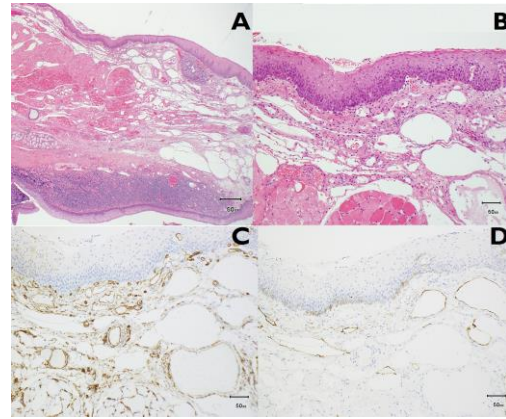


Figure 2.png

Patient-related factors describing those under investigation for suspected head and neck cancer – the case for pre-diagnosis pre-rehabilitation.

Poster

*Mrs. Alison Dinham*¹, *Dr. Dhulshan Preena*², *Dr. Jugdeep Dhesi*², *Mr. Richard Oakley*², *Mr. Gareth Jones*¹

1. Guys and St Thomas' NHS Foundation Trust, 2. Guy's and St Thomas' NHS Foundation Trust

Aim

Pre-rehabilitation (prehab) is a complex intervention aiming to maximise patients' physical and mental preparedness before a health-care challenge¹, mitigating the impact of medical/surgical treatment, to reduce financial burden, and increase quality of care².

Studies show cancer patients are in decline before oncological treatment³; particularly for those with Head and Neck Cancer (HNC)^{4,5}. However, time from diagnosis to treatment is short (locally a median of 17 days), and may be insufficient to observe the benefits of prehab^{6,7}. The epoch from initiating investigations to receiving definitive treatment offers a novel window to commence prehab.

Local data showed the investigation most likely to yield a HNC diagnosis was the operating-theatre-based biopsy (28% positive; GSTFT, 2015). However, these patients are under-described with regard to physical and mental condition in order to understand the potential prehab and optimisation needs. Characterising these may help identify which patient-related factors need considering if designing a future health-promotion intervention pilot-study.

Method

A set of "patient-related factors" were collected to describe the physical / psychosocial status of convenience-sampled adult volunteers from a pool of patients referred for operating-theatres based biopsy with suspected HNC.

Those without a good command of English, lacking capacity to consent or participate, with experience of previous HNC, or requiring significant physical assistance to mobilise were excluded for practical reasons, and because these patients may have needs requiring separate consideration.

Six key domains of patient descriptors were identified:

- i) demographic,
- ii) health status,
- iii) function,
- iv) physical status,
- v) symptoms, and
- vi) psychological/cognitive.

Social and environmental factors were included across and within these domains.

Results

At the current time, 32 patients had completed from 123 screened, with study ongoing. Statistical testing showed a sample representative of the eligible cohort, with no significant differences ($p < 0.05$) in key demographic variables (age, gender, ethnicity, eventual cancer-diagnosis or not).

For 66% self-reported health-status was good-excellent, 22% fair and 12% poor. 48% had no comorbidity, 37% mild, 11% moderate and 4% severe. 44% never smoked, 24% exsmokers and 32% current smokers.

Average BMI was 26 (17-38); 2 scoring underweight (MUST) and 1 reporting >5% weightloss.

37% were working, 25%retired and 22%out of work due to ill-health. 56% were fully active (ECOG), with 27%restricted, and 17%incapable of work/limited to bed/chair.

Timed-up-and-go revealed a falls-risk in 3patients and handgrip was average 80-85% predicted.

8 had mod-severe fatigue, and 10 mild fatigue (FACT-Fatigue). Pain was a more widely reported symptom (6somewhat, 6quite a bit and 8very much, on FACT-GP pain).

HAD scores revealed 12 with borderline anxiety:5anxious, and 5 borderline depressed:3depressed.

Conclusion

The current dataset reveals that up to a third of patients have impairments and/or health-promotion needs, at first entry to the investigation process for suspected HNC.

Even for those not ultimately diagnosed with cancer, offering health-promotion interventions, when the suspicion of cancer is first raised, may help to augment behaviour modification, embracing the teachable-moment concept.

Proactive, holistic, pre-diagnosis health-promotion poses an opportunity to achieve timely optimisation of patients.

9/32 patients in this dataset had a confirmed diagnosis of cancer. Ongoing data collection up to 30 with confirmed cancer will enable evaluation of whether there is any meaningful detectable difference between patient-related factors affecting those ultimately found to be with and without cancer, and may help to guide refinement of the assessment process indicated. It is hoped this number will be achieved prior to conference for presentation.

Reference (If applicable)

- 1.] Silver, J.K. and Baima, J. (2013) 'Cancer prehabilitation: An opportunity to decrease treatment-related morbidity, increase cancer treatment options, and improve physical and psychological health outcomes', *Am J Phys Med Rehabil*, 92(8),pp.715–727.
- 2.] Silver, J.K. (2015) 'Cancer prehabilitation and its role in improving health-outcomes and reducing health-care costs', *Semin Oncol Nurs*, 31(1),pp.13–30.
- 3.] Gillis, C. *et al.* (2014) 'Prehabilitation versus Rehabilitation', *Anesthesiology*, 121(5),pp.937–947.
- 4.] National Cancer Patient Experience Survey (2013) *National Report*.
- 5.] Funk, G.F. *et al.* (1997) 'Baseline and post-treatment assessment of the general health status of head and neck cancer patients compared with United States population norms', *Head and Neck*, 19(8),pp.675–683.
- 6.] Le Roy, B., Selvy, M. and Slim, K. (2016) 'The concept of prehabilitation: What the surgeon needs to know?', *J Visc Surg*, 153(2),pp.109–112.
- 7.] Singh, F. *et al.* (2013) 'A systematic review of pre-surgical exercise intervention studies with cancer patients', *Surg Oncol*, 22(2),pp.92–104.



Figure 1: Head and Neck (H&N) Referral-to-Treatment Time (GSTFT, 2015)

Figure 1 h n referral to treatment time gstft 2015 .jpg

Pharyngeal Reconstruction with a Modified Free ALT Flap with Parastomal Fascial Wings

Poster

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1. Newcastle, 2. Northern Centre for Cancer Care, Freeman Hospital, Newcastle upon Tyne., 3. ENT Department, Freeman Hospital, Newcastle upon Tyne, 4. newcas, 5. The Newcastle upon Tyne Hospitals NHS Foundation Trust, Newcastle, 6. Northern Centre for cancer Care, Freeman Hospital

Aim

When performing a free ALT for pharyngeal reconstruction, the use of an external skin paddle for monitoring and fascia lata for waterproofing has been well described. However if only a single perforator ALT flap is possible, the use of an external skin paddle necessitates a de-epithelialised bridge and often a skin paddle placed directly above the tracheostoma. This results in additional tension at this suture line, a risk of parastomal dehiscence and subsequent exposure of the internal jugular vein and carotid artery. We report a modification of a single perforator free ALT flap pharyngeal reconstruction with external skin paddle, utilizing vascularised fascial wings or extensions placed in the parastomal gutters to cover major vessels.

Method

Single centre retrospective review of outcomes in all patients undergoing pharyngeal reconstruction after laryngopharyngectomy using the above technique. Incidence of parastomal dehiscence, fistula and flap failure as well as basic speech and swallow outcomes were recorded.

Results

Between Nov 2017 and Jan 2019, 9 patients (mean age 60.2, range 35 to 73, 2 female, 1 male) underwent above technique. 4 patients had laryngopharyngectomy for radiorecurrent larynx SCC, 2 for primary, advanced laryngeal SCC and 3 for primary hypopharyngeal SCC. All patients had adequate swallow after rehab so as not to require tube feeding. One patient had tracheoesophageal puncture and failed valve placement (TEP). Two patients have been assessed as appropriate for TEP and are awaiting placement. One patient is using electrolarynx device and 4 patients rely on aphonic speech only. One patient died 2 months after the procedure from chest infection. There were no flap failures, no fistulas and no strictures. One patient with salvage laryngopharyngectomy experienced parastomal wound dehiscence, which healed within 6 weeks requiring dressings only.

Conclusion

We report outcomes of a modified single perforator ALT flap using fascial extensions to line parastomal gutters in free ALT flap pharyngeal reconstruction combined with previously described, simple and reliable technique for external clinical flap monitoring. The placement of vascularized tissue parastomally may facilitate spontaneous healing in the event of parastomal dehiscence, prevent major vessel exposure and negate the need for further surgery.

Postoperative use of Continuous Positive Airway Pressure (CPAP) after transoral robotic surgery (TORS) for Obstructive Sleep Apnoea (OSA)

Poster

Mr. Henry Zhang¹, Mr. Khalid Ghufoor¹, Mr. Jahangir Ahmed¹

1. Barts Health and UCLH

Aim

CPAP remains the gold standard of treatment in patients with moderate to severe OSA. In patients who are unable to tolerate CPAP, surgery remains a viable option. Surgery to the oropharynx, specifically the velum, tonsils, and tongue base areas has been shown to be effective in curing OSA and therefore removing the need for CPAP.

Currently, at our unit, all patients who undergo surgery for moderate to severe OSA require airway monitoring post-surgery on the high dependency unit. The rationale for this is that there may be oedema of the upper airway, and the patient may require ventilatory support with non invasive ventilation.

The aim of this audit is to determine the actual requirement of the high dependency unit monitoring for patients with OSA who are undergoing TORS, to propose a new pathway for these patients, so the risk of on-day cancellation is minimised.

Method

This is a retrospective, single cycle audit in one single centre that performs TORS for OSA. The inpatient notes of all patients were reviewed by a single clinician. Inclusion criteria: All patients underwent TORS for OSA, used CPAP preoperatively, were booked a high dependency unit bed post operatively. Outcome measures: length of stay in hospital, length of stay in HDU, post-operative use of CPAP, post-operative oxygen supplementation. The patients were risk stratified into subgroups; mild, moderate and severe OSA. Patients with other co-morbidities that may have deemed their need for HDU were excluded.

Results

A total of 11 patients underwent TORS for OSA between January to October 2018. Of these, 9 were male and 2 female. 9 patients underwent TORS Bilateral tonsillectomy and base of tongue resection, 1 patient TORS completion tonsillectomy and base of tongue resection, and 1 patient TORS lingual tonsillectomy. 10 patients stayed in the HDU for 1 night. 1 patient did not require HDU.

8 out of 11 patients brought their CPAP machine with them. There was no recorded use of CPAP in 10 patients in HDU. 1 patient self-administered their CPAP. Reviewing the nursing notes, a majority of patients did not require CPAP due to adequate oxygenation. In a minority of patients, nursing staff attempted to place CPAP mask, but patient 'could not tolerate CPAP due to post surgery discomfort'. Humidified oxygen was adequate in these patients to maintain oxygenation >94%.

Conclusion

TORS for OSA remains a good option for patients who have failed CPAP therapy. Adequate airway monitoring is vital in any patient who has undergone upper airway surgery, and maintaining oxygenation in these patients is vital in their post-operative recovery. The results of this single cycle audit has shown that CPAP was very infrequently used in the post-operative setting, in patients who have undergone TORS for OSA, either because humidified oxygen alone was adequate, or because the patients could not tolerate due to pain.

CPAP use post TORS, therefore, is not a requirement in patients with pre-existing OSA. The limitations of this

audit is that is a small retrospective study, and therefore the correlation between pre-operative OSA severity and post-operative CPAP use cannot be analysed. Caution may need to be taken in patients who have severe OSA.

Pre-operative vitamin D optimisation reduces rates of post-operative hypocalcaemia after retrosternal thyroidectomy

Poster

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1. Barts Health and UCLH, 2. Barts Health

Aim

Thyroidectomy is a commonly performed operation worldwide, with a variety of indications including diagnosis, confirmed malignancy, and compressive symptoms.

Hypocalcaemia is a common and serious complication following thyroidectomy. Persistent hypocalcaemia can lead to complications including tetany, intracranial lesions and cardiac arrhythmias. Risk factors leading to increased rates of hypocalcaemia include retrosternal extension of the thyroid goitre.

Evidence suggests that patients with pre-existing vitamin D deficiency are more likely to develop symptomatic hypocalcaemia following thyroidectomy. Other studies suggest no link between pre-operative vitamin D levels and post-operative hypocalcaemia. However, a meta-analysis showed that oral supplementation of vitamin D prior to surgery reduces the rates of hypocalcaemia post thyroidectomy.

The objectives of this retrospective cohort study is to assess whether pre-operative vitamin D optimisation reduces the risk of post-operative hypocalcaemia, in patients undergoing total/partial thyroidectomy for retrosternal thyroid goitres.

Method

All patients were treated in one high volume thyroid surgical centre by a team of endocrine physicians and highly-specialised surgeons in head and neck surgery and cardiothoracic surgery. All retrosternal thyroidectomies were performed by a single senior head and neck surgeon. Bloods were taken for total serum calcium, albumin, and thyroid function tests. The patients were divided into two groups. Group A, who were patients undergoing the procedure between 2013-2017, did not receive pre-operative vitamin D optimisation. Group B, who underwent the procedure in 2018, received vitamin D optimisation prior to their surgery. Measurements of corrected calcium levels were taken 6 and 12 hours post-surgery. Early hypocalcaemia was recorded as patients who had a corrected calcium level less than 2.20mmol/l <72 hours post-surgery, and permanent hypocalcaemia as being > 6 weeks post-surgery.

Results

86 patients underwent retrosternal thyroidectomy in total.

In group A, 43 out of 64 patients were found to be normocalcaemic after surgery. 21 (32.8%) patients developed early hypocalcaemia. The mean post-surgery corrected calcium level was 2.17. All hypocalcaemic patients were treated with a combination of oral and intravenous supplementation. 1 (1.6%) patient remained on calcium supplementation 6 weeks after surgery.

Group B included a total of 23 cases who received pre-operative Vitamin D optimisation. 3 developed post operative hypocalcaemia. The mean post-surgery corrected calcium level was 2.24.

Conclusion

This study shows that pre-operative vitamin D deficiency may be linked to post operative hypocalcaemia after retrosternal thyroidectomy. Further studies are warranted with larger numbers, but there is supporting evidence for ensuring vitamin D levels are adequate to minimising risk of hypocalcaemia.

Preclinical evaluation of a next-generation system to perform transoral robotic surgery

Poster

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1. West Suffolk Hospital, 2. Guy's and St Thomas' NHS Foundation Trust

Aim

Transoral robotic surgery has led to a paradigm shift in the treatment of upper aerodigestive tract neoplasms. The Versius CMR system is a novel platform featuring an open console that controls multiple separate robotic arms. The aim was to evaluate the feasibility of this robotic platform to perform minimal access transoral surgery.

Method

Two index procedures were performed bilaterally in two fresh frozen cadavers by two robotic-trained surgeons: lateral oropharyngectomy and tongue base resection. Feasibility was evaluated using a 1-10 Likert scale (10 being optimal) and standardised qualitative feedback.

Results

The system's modularity allowed for a portable solution. The 10mm endoscope provided adequate 3-dimensional views. The optimal configuration (measured from virtual fulcrum to upper incisors) was established. A fourth robotic arm was used for trans oral retraction. Both procedures rated favourably in terms of procedural steps (median 8.25), haptics (7), ergonomics (7.5), equipment (7) and visualisation (7.25). Inter-observer agreement was high. One clash was recorded during the entire evaluation. Soft robotics allowed repositioning of the arms without instrument adjustment. Alongside this, the relatively small footprint improved patient access for the bedside surgeon with straightforward positioning of 4 transoral robotic arms.

Conclusion

This first-in-cadaveric study demonstrated procedural, ergonomic and visual equivalence compared with existing systems. Further development is envisaged to improve arm stabilisation and access to the larynx and skull base.

Reference (If applicable)

Hutcheson KA, Holsinger FC, Kupferman ME, Lewin JS. Functional outcomes after TORS for oropharyngeal cancer: a systematic review. *Eur Arch Otorhinolaryngol.* 2015;272:463-71.

Primary Intraosseous Carcinoma (PIC) and TNM Staging: A Case Report

Poster

Mr. Khemanand Maharaj¹, Dr. Elyas Yonis¹, Dr. Issar Hussain¹, Mr. Richard Sisson¹

1. Norfolk and Norwich University Hospital

Aim

Primary intra-osseous carcinoma (PIC) is a rare type of squamous cell carcinoma (SCC) only found within odontogenic cysts of jawbones. The World Health Organisation (WHO) classifies PIC as an odontogenic carcinoma, but in correlation with the TNM7 staging there are some conflicts with staging and prognosis. We present a case of PIC with a dilemma of appropriate staging and prognosis according to the TNM7 staging for oral cavity cancers.

Method

A 43-year old male presented with a one-month history of pain radiating to the right ear and intermittent numbness on the right lower lip. Intra-oral examination revealed grade II mobility associated with the lower right 2nd molar and no obvious bony expansion. An Orthopantomogram (OPG) was requested which showed an impacted lower right wisdom tooth associated with a well-defined radiolucent lesion. A provisional diagnosis of a Dentigerous cyst was made, and extraction of Lower right 2nd and 3rd molars with enucleation of the cyst was performed. Subsequent histopathological analysis indicated SCC originating from the cystic lining with a diagnosis of PIC.

Results

Following discussions at the Head and Neck Multi-Disciplinary Team (MDT) meeting, this patient was TNM7 classified as T4N0M0 with Stage IV disease based on location. The new TNM8⁽¹⁾ classification incorporates depth of invasion into the 'T' category which will re-stage his cancer as T1N0M0 indicating stage I disease. He subsequently underwent Right Segmental Mandibulectomy, Selective Neck Dissection and Free Fibula Flap reconstruction.

Conclusion

This case highlights the discrepancies with the TNM staging and Tumour classification systems. Based on mere size of the tumour and depth of invasion of the cystic lining, this patient can be classified as T1N0M0 with Stage I disease if using the new TNM8 classification. This changes his 5 year survival to well over 80% indicating a much better prognosis.

Reference (If applicable)

(1) Mahul B. Amin. American Joint Committee on Cancer, Cancer Staging System 8th Edition.

Quaternary referral centre 20-year experience of lateral neck cyst; a protocol for diagnosis and management

Poster

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1. Oxford University Hospitals

Aim

To determine the incidence of benign branchial cysts in the adult population with implications on their diagnosis and management.

Method

To determine the incidence of histologically proven branchial cysts over a period of 20 years in various age groups, and a retrospective review of management of lateral neck cystic lesions in adults from period December 2014 to January 2019. MDT outcome pro-forma's were reviewed to ascertain the screening investigations patients presenting with lateral neck cyst underwent.

Results

While majority of branchial cysts present in young adults, some occur in later adult life. In our experience 27.2% of branchial cysts occurred over the age of 41 years, with 13.9% occurring over 51 years and 3.6% over 61 years of age. Preoperative FNA assessment was suggestive of branchial cyst in most who had the test; there were no false negative cytology results.

Conclusion

A significant proportion of lateral neck cysts in patients over 45 years old are benign branchial cyst. Our proposed management algorithm in patients above the age of 35 with a lateral neck cyst + FNA cytology diagnosis of benign/equivocal squamous epithelial lesion + no obvious primary in the upper aerodigestive tract on clinical examination and cross sectional imaging is to undergo a PET-CT scan. In the absence of a FDG avid PET-CT lesion in the upper aerodigestive tract, a panendoscopy and excision of the lateral neck cyst is carried out; routine tonsillectomy is not performed. While the role of cytology is limited if equivocal, it is an extremely effective triaging tool, especially as a significant proportion of lateral neck cysts in the adult population are benign.

Radiotherapy Induced Bilateral Hypoglossal nerve Palsy: A Case Report

Poster

Mr. Khemanand Maharaj¹, Dr. Roxanne Dean-Arshadi¹, Mrs. Sharon Prince¹

1. Norfolk and Norwich University Hospital

Aim

Bilateral hypoglossal nerve palsy is a rare complication following head and neck radiotherapy. With concern over abnormal airway related swallowing events and aspiration risk, treatment is focused on maintaining function and preventing such risk. We present a rare case of bilateral hypoglossal nerve palsy, 7 years Post Radiotherapy for a T2 N2B left tonsil Squamous Cell Carcinoma (SCC).

Method

A 61-year-old female presented to our Oral and Maxillofacial department with a 6-month history of progressive weakness of her tongue, dysarthria and dysphagia. She was previously treated with chemoradiotherapy for her left tonsil SCC in 2011 and received 65Gy of Intensity Modulated Radiotherapy in 30 fractions over 3 weeks with concomitant weekly carboplatin. Examination revealed limited protrusion and lateral movement of her tongue with visible fasciculation and atrophy on the left side.

Results

An urgent MRI scan was requested to rule out any recurrence, intracranial lesions or demyelinating disease and referral to our neurology team for assessment. On review of her scans she was diagnosed with radiation induced bilateral hypoglossal nerve palsy. She is having regular review by neurology and the speech and language therapist to monitor her progress and swallowing function. If her dysphagia progresses and risk of aspiration increases she will require a feeding gastrostomy in the future.

Conclusion

Radiation induced Hypoglossal nerve palsy is a rare complication following treatment of head and neck cancer and recurrence must be excluded. Maintaining function and improving quality of life is vital for these patients with provision of feeding gastrostomy if needed.

Rapidly progressive Sinonasal Carcinoma 10 years after External Beam Radiotherapy

Poster

Ms. Eloise Evans¹, Mr. Huw Jones², Mr. Jonathan Joseph²

1. UCL, 2. University College London Hospital NHS Foundation Trust

Aim

Sinonasal malignancies secondary to prior radiotherapy treatment are exceptionally rare. However, with more patients surviving for years after primary treatment, this may be a changing statistic. We aim to discuss the case of one patient with suspected post radiation secondary sinonasal carcinoma and the impact her case may have on consideration of clinicians of whether to treat with radiotherapy in this instance.

Method

Case Report

Results

We report the case of a 35-year-old lady with history of left temporofrontal oligodendroglioma 10 years previously treated with external beam radiotherapy. She presented with an incidental unilateral sinonasal mass on surveillance imaging and subsequent ENT review revealed a history of unilateral symptoms of discharge, obstruction and bleeding. Her symptoms worsened as the tumour grew and she underwent an urgent biopsy. This showed post radiation sinonasal carcinoma with squamous cell differentiation and interval imaging showed an aggressive rate of growth. She underwent endoscopic resection and debulking but unfortunately the tumour recurred aggressively and she is now spending time with her family after declining palliative chemotherapy. Aggressive sinonasal tumours at this age are rare and it has been suggested that the new lesion may have developed as a long-term complication of external beam radiotherapy treatment prior to its initial identification, as there were no other risk factors in this particular case.

Conclusion

Clinicians should be mindful of the possibility of tumourigenesis as a long-term complication of radiotherapy treatment, despite the rarity of the conditions involved. It is difficult to obtain a certainty on which preventative and treatment measures are best used when considering sinonasal malignancy. With further research, we hope that greater certainty can be obtained in both how to reduce the incidence of post radiotherapy sinonasal carcinoma and, for those that are unavoidable in occurrence, how to improve rapid diagnosis and treatment pathways in order for a more positive outcome for the patient and longer survival time to be achieved.

Real world survival outcomes and prognostic factors in patients with hypopharyngeal cancers - A retrospective audit from South Yorkshire over a 7 year period with a minimum follow up of 24 months

Poster

Dr. Satya Garikipati¹, Dr. Helen Duffy¹, Mr. Sidhartha Nagala¹, Mr. Richard Jackson¹, Ms. Jane Thornton¹, Ms. Ashley Kingsnorth², Ms. Rachael Hayton², Dr. Bernadette Foran¹

1. Sheffield Teaching Hospitals NHS Foundation Trust, 2. Barnsley Hospital NHS Foundation Trust

Aim

Background: Patients with hypopharyngeal cancer typically present at an advanced stage and have a poor prognosis despite multimodality treatment(1). In our center, all newly diagnosed patients with hypopharyngeal cancer are discussed in the multi-disciplinary meeting(MDM) and treatments are recommended based on tumour and patient characteristics. Radical radiotherapy with concurrent systemic treatment wherever appropriate is used to achieve organ preservation in patients presenting with good speech and swallowing function(2). VMAT (IMRT) technique has been in routine use for planning radiotherapy at our center since October 2012. Surgical techniques include combinations of laryngectomy with total or partial pharyngectomy, radial forearm free flap and neck dissection.

This audit aims

1. To obtain patient and tumour demographics
2. Record the management of patients presenting with hypopharyngeal cancer
3. To analyse local control and laryngeal preservation rates
4. To analyse survival rates, functional outcomes and associated prognostic factors.

Method

All patients discussed in the MDM with a new diagnosis of hypopharyngeal cancer between Jan 2010 and Dec 2016 were identified from the MDM database.

Data was collected retrospectively from case notes, electronic patient records, radiotherapy and surgical database. Survival and functional outcome analysis was based on patient status in Dec 2018 to allow for a minimum of 2 years follow up period. Kaplan Meier curves were used for survival outcomes and log-rank test for comparison

Results

n=78.

Patient and tumour demographics are described in Table 1.

Management received is shown in Table 2.

Survival rates

At the time of analysis, 52/78 were dead, 38 of which were directly cancer related.

Overall survival(OS) was 15.2 months and disease specific survival(DSS) was 26.4 months.

DSS for stage I and II disease was 68.8 months.

Of the 54 patients treated with radical intent for stage III-IVb disease, DSS was 61.1 months and progression free survival was 55.9 months.

3 year survival-69% and 5 year survival-44%.

Local control rates:

In patients receiving radical RT or CRT, 6/39(15%) had recurrent disease(5-loco-regional and 1-systemic recurrence). 1 had salvage laryngectomy and 2 needed neck dissection.

Functional outcomes:

Following RT or CRT 13 (33%) had long term swallowing problems and 6(15%) were peg dependent.

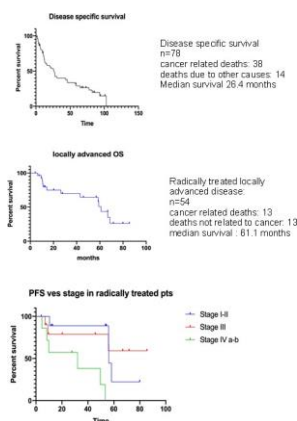
Following definitive surgery, 11/16(68%) had long term swallowing problems with 3 of them also requiring long term peg tube.

Conclusion

Survival and local control in our cohort are comparable to previously published data(3,4,5). Laryngeal preservation rate of more than 90% and local control rates of 85% with non-surgical treatments is reassuring. Despite the good local control, overall survival is still poor. This is likely related to advanced age of this patient cohort, co-morbidities and aggressive nature of the treatments with long term morbidities. Deaths due to neutropenic sepsis and serious complications from chemotherapy are to be borne in mind when considering chemotherapy in the neo-adjuvant setting. Functional outcomes can be adversely affected with surgery followed by post-operative radiotherapy.

Reference (If applicable)

1. CRUK Cancer Survival Statistics 2005.
2. NICE guideline [NG36] Cancer of the upper aerodigestive tract
3. Sewnaik A, Hoorweg JJ, Knecht PP, Wieringa MH, van der Beek JM, Kerrebijn JD: Treatment of hypopharyngeal carcinoma: analysis of nationwide study in the Netherlands over a 10-year period. Clin Otolaryngol 2005, 30: 52-57. 10.1111/j.1365-2273.2004.00913.x
4. Lee NY, O'Meara W, Chan K, Della-Bianca C, Mechalakos JG, Zhung J, Wolden SL, Narayana A, Kraus D, Shah JP, Pfister DG: Concurrent chemotherapy and intensity-modulated radiotherapy for locoregionally advanced laryngeal and hypopharyngeal cancers. Int J Radiat Oncol Biol Phys 2007, 69: 459-468.
5. Pignon J, Bourhis J, Domenge C, Designé L. Chemotherapy added to locoregional treatment for head and neck squamous-cell carcinoma: three meta-analyses of updated individual data. Lancet. 2000; 355(9208):949-55.



Survival curves.png

Patient and tumour demographics				
Age	Median: 66 years (range 45-88)			
Gender	Male: 77% Female: 23%			
Performance status	0- 20% 1- 44% 2- 18% 3- 16%			
Smoking status	Current smoker: 43%	Ex-smoker: 26%	Never smoked: 15%	
Primary site	Pharynx/larynx: 55%	Posterior pharynx: 7%	Posterior pharynx/larynx: 7%	Asplastic/other: 7%
Stage of cancer	Stage I (11/68): 16% (5/15) Stage II (20/68): 29% (8/75) Stage III (17/68): 25% (4/47) Stage IV (14/68): 20% (4/78)	Stage I (11/68): 16% (5/15) Stage II (20/68): 29% (8/75) Stage III (17/68): 25% (4/47) Stage IV (14/68): 20% (4/78)	Stage I (11/68): 16% (5/15) Stage II (20/68): 29% (8/75) Stage III (17/68): 25% (4/47) Stage IV (14/68): 20% (4/78)	Stage I (11/68): 16% (5/15) Stage II (20/68): 29% (8/75) Stage III (17/68): 25% (4/47) Stage IV (14/68): 20% (4/78)

Table 1.png

Table 2: Management received by stage of disease	
Stage I and II	4 received radical radiotherapy. 3 were treated with surgery.
Stage III	7 had radical radiotherapy two of which had cisplatin concurrently. 1 had surgery.
Stage IV a and b	39 patients were treated with radical intent. 16 had induction chemotherapy (3 of them died before receiving any definitive treatment due to unclear causes). 21 patients had radical chemoradiotherapy (CRT) (20 with cisplatin and 1 with cetuximab)(5 were treated within the ART DECO trial). 7 had radical radiotherapy (RT) alone. 11 were treated with definitive surgery, 7 of which required post-operative radiotherapy. 13 were treated with palliative intent (7-palliative radiotherapy, 4-palliative chemotherapy and 2- best supportive care (BSC).
Stage IVc	4-palliative chemotherapy, 1-palliative radiotherapy and 2-BSC.

Table 2.png

Renal Cell Carcinoma Metastasis to the Oro-Facial Region

Poster

Mr. Khemanand Maharaj¹, Dr. Issar Hussain¹, Dr. Elyas Yonis¹, Mr. David Mcanerney¹

1. Norfolk and Norwich University Hospital

Aim

Metastases to the oral cavity are rare and account for approximately 1% of oral malignancies⁽¹⁾. Renal Cell Carcinoma (RCC) accounts for 3% of adult malignancies and 90% of kidney tumours⁽²⁾. Approximately 30% of these patients have distant metastasis, but rarely do they spread to the mandible or maxilla. We present two rare cases of metastatic RCC to the orofacial region.

Method

Case 1 - A 61-year-old male presented with left sided facial swelling of suspected odontogenic origin. The patient complained of numbness to the lower lip, haematuria and persistent lower abdominal pelvic discomfort. An orthopantomogram revealed a large lytic lesion with pathological fracture of the left mandibular ramus. Computer Tomography (CT) demonstrated a large malignant mass from the left kidney which was biopsy proven RCC.

Case 2 - A 64-year-old male, presented following referral from his GGP after coincidental radiologic finding of a radiolucent area in the anterior maxilla. He had symptoms of weight loss, fatigue, night sweats and pain in the left pelvic region. CT imaging demonstrated hepatic, renal, adrenal and nodal masses thought to represent stage IV lymphoma. A para-aortic biopsy confirmed Renal Cell Carcinoma.

Results

Case 1 - This patient was diagnosed with metastatic renal cell carcinoma with mandibular, nodal and left clavicular metastases. Following multi-disciplinary team discussions, it was decided that palliative radiotherapy and chemotherapy was appropriate for the stage of disease.

Case 2 - The maxillary metastatic mass involved the midline of the hard palate extending towards the anterior hard palate and anterior nasal spine, causing mobility of the anterior teeth. This patient was diagnosed with metastatic papillary renal cell carcinoma. Following multi-disciplinary team discussions, it was decided that palliative treatment was appropriate for the stage of disease.

Conclusion

Metastatic malignancies of the jaws have differing signs and symptoms such as swelling, pain, paresthesia⁽³⁾. This case series highlights the importance of considering sinister pathology when patients present with paraesthesia, swellings and suspicious radiographic findings which warrant further investigations.

Reference (If applicable)

1. Abraham Hirshberg, Raanan Berger, Irit Allon, Ilana Kaplan. (2014). Metastatic Tumors to the Jaws and Mouth. Head and Neck Pathol. 8 (4), 463-474.
2. Louqiang Zhang, Hongbin Yang, and Xuebin Zhang. (2014). Metastatic renal cell carcinoma to the jaws: report of cases. World J Surg Oncol. 11 (12), 204.
3. Samira Derakhshan, Sedighe Rahrotaban, Nazanin Mahdavi, Faeze Mirjalili. (2018). Metastatic renal cell carcinoma presenting as maxillary lesion: Report of two rare cases. J Oral Maxillofac Pathol. 22 (1), 39-43.

Reported experiences of nasogastric tube feeding in the community from head and neck oncology service users discharged from a UK tertiary cancer centre

Poster

Ms. Florence Cook¹, Ms. Rebecca Currier², Ms. Preetpal Kainth²

1. University College London Hospital NHS Foundation Trust, 2. London Metropolitan University

Aim

Clinical equipoise exists nationally and internationally with regards to the route of enteral nutrition in head and neck cancer and the relationship between swallowing outcomes and choice of tube type and timing (Nugent *et al.*, 2013; NICE, 2016; Paleri *et al.*, 2018). Naso-gastric tube (NGT) use has become commonplace in some head and neck centres, however patient experience associated with tube management in the community is not well documented in the literature, requiring further research (Paleri *et al.*, 2018). Community support with NGT's is limited; therefore patients and carers are often expected to self-manage. Previous studies have investigated patient experiences of gastrostomy tube feeding at home and report themes of responsibility, psychological impact, social adjustments and importance of a support network (Mayre-Chilton *et al.*, 2011). The aim of this service evaluation was to evaluate patient experiences of being discharged home with a NGT from an acute head and neck centre.

Method

Study design:

130 patients were assessed for eligibility who had been under the care of the head and neck team and discharged with a NGT between 2015 and 2017. 14 patients (n=10 male, n=4 female) and 2 carers meeting the inclusion criteria opted to participate and attended two focus groups which were semi-structured with prewritten open-ended questions recorded by dictaphone. Demographic characteristics collected included gender, age, tumour site/staging and treatment details.

Participants were asked to sign a consent form prior to participating. This project was deemed as service evaluation thus ethical approval was not required.

Inclusion/Exclusion criteria:

Inclusion: Patients with a head and neck cancer diagnosis discharged from the acute centre with a NGT that they were responsible for managing at home.

Exclusion: Patients without a head and neck cancer diagnosis or did not self-manage their NGT

Analysis

Focus groups were transcribed and then thematically analysed.

Results

Participant demographics are listed in Table 1.

Themes identified and quotations are presented in Figure 1. Aspects relating to the impact of NGT on body image, tube perception and socialising were reported as a varied experience. Positive views related to themes of survival, tube training and support given by tube feeding companies and being able to be discharged home from the acute setting. Negative themes identified related to retention devices, comfort, sleeping, visibility of the tube, pH testing and risk of tube dislodgement and attendance to the emergency department for tube complications.

Conclusion

Participants varied in terms of their reported ability and experiences of managing a NGT in the community

setting and subsequent impact on the psychosocial and physical domains of everyday life. Overall, patients reported that despite any negative experiences, the requirement of NGT feeding was described as life-saving and life-sustaining.

Enteral tube feeding routes should be considered on an individual basis, accounting for practical management and support system in place. Patients should be counselled on tube management and potential challenges NGT feeding presents at the pre-treatment stage of their pathway to aid informed decision making, and help manage expectations.

The present study was limited in terms of study design. Further, more robust prospective qualitative research studies during treatment are warranted in this area.

Reference (If applicable)

Paleri, V. Patterson, J. Rousseau, N. Moloney, E. Craig, D. Tzelis, D. Wilkinson, N. Franks, J. Hynes, A. Heaven, B. Hamilton, D. Guerrero-Ubano, T. Donnelly, R. Barclay, S. Rapley, T. & Stocken, D. (2018). Gastrostomy versus nasogastric tube feeding for chemoradiation patients with head and neck cancer: the TUBE pilot RCT. *Health Technology Assessment*; **22**(16)

Mayre-Chilton KM, Talwar BP & Goff LM (2011). Different experiences and perspectives between head and neck cancer patients and their care-givers on their daily impact of gastrostomy tube. *Journal of Human Nutrition and Dietetics* **24**: 449-459

National Institute for Health and clinical excellence (2016). Cancer of the upper aerodigestive tract (2006) Clinical Guideline NG36 Available at: <https://www.nice.org.uk/Guidance/NG36/evidence>

Nugent, B., Lewis, S. and O'Sullivan, J. (2013). Enteral feeding methods for nutritional management in patients with head and neck cancers being treated with radiotherapy and/or chemotherapy. *Cochrane Database of Systematic Reviews*.

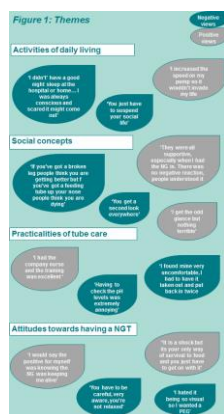


Figure 1 - results.png

Table 1: Patient demographics (n=14)	
Age (years)	Median = 57 [44-80]
Gender	M 71.4% (n=10) F 28.6% (n=4)
Tumour site (n=14)	
Mandible	14.3% (n=2)
Tongue	35.7% (n=5)
Floor of mouth	14.3% (n=2)
Anterior commissure	7.1% (n=1)
Cheek	7.1% (n=1)
Larynx	7.1% (n=1)
Oropharynx	14.3% (n=2)
TNM stage (n=13)*	
T	
T1	30.8% (n=4)
T2	35.7% (n=5)
T3	7.7% (n=1)
T4	23.1% (n=3)
N	
N0	84.6% (n=11)
N1	0% (n=0)
N2	15.4% (n=2)
M0	100% (n=14)
Treatment modality	
Surgery	57.2% (n=8)
Radiotherapy	7.1% (n=1)
Combined modality	35.7% (n=5)
Previous gastrostomy	21.4% (n=3)

*Of the 14 patients, n=3 sarcoma, n=11 squamous cell carcinoma. Staging missing for n=1

Table 1 bahno demographics.png

Review of clinical practice on U3 thyroid nodules (<10mm) against BAHNO Guidelines: UHCW experience

Poster

Mr. Sachin De Stone¹, Mr. Basavaiah Natesh²

1. Warwick Medical School, 2. University Hospital Coventry and Warwickshire

Aim

This audit compares management of patients with U3 thyroid lumps <10mm at University Hospital Coventry and Warwickshire (UHCW) against BAHNO national standards and comments on clinical acceptability.

Ultrasound guided Fine Needle Aspiration Cytology (FNAC) is generally recognized as the best technique for early detection of differentiated thyroid carcinomas¹. However, when it comes to small lesions of the neck, there is a dilemma. FNAC investigation not only requires specialists time in undertaking the procedure but can lead to anxiety and pain in patients undergoing the procedure². As such, it is prudent to only conduct FNAC if there is clinical benefit. Evidence suggests that a 'wait-and-see' approach in U3 thyroid lumps <10mm seen on ultrasound without suspicious lymphadenopathy, is clinically acceptable; that is, U3 lumps <10mm that do eventually progress to differentiated carcinomas are detected and can be surgically resected with acceptable outcomes to the patient³. This is the BAHNO recommendation.

Method

This study design was an audit registered with the audit department at UHCW with BSREC ethical approval. The radiology department provided patient identification details (PID) for any patient with 'U3' written in their patient notes over the last 4 years (April 2016-2018). Hospital online patient notes at UHCW were accessed to gather the following information for each patient: PID, Date of Birth, Date of Ultrasound Scan (US), Number of ultrasound scans prior to surgery, Whether repeat US changed the grading from U3 to something else, s=Size of U3 lesion, Cervical lymphadenopathy, FNAC result, Whether repeat FNAC changed the Thy grading, Post-op histology of lobectomy and Final treatment.

Results

158 patients had 'U3' thyroid nodules reported in their notes in the last 4 years at UHCW. After duplicates and negative results (for example, 'no evidence of U3 nodules apparent') were excluded, 138 patients remained. The size of 4 U3 nodules was not reported and so excluded. 16 patients (12%) had U3 nodules <10mm with no suspicious lymphadenopathy. Of these, 9 (56%) went on to receive FNAC and 7 (44%) did not. 21 US scans and 12 FNACs were conducted on the 9 patients receiving FNAC. 5 of the patients that did not receive FNAC were downgraded to U2 nodules and 2 were lost to follow-up. (see figure 1)

Conclusion

UHCW is 44% compliant with the BAHNO guidelines when conducting FNAC on U3 nodules with no suspicious lymphadenopathy. This audit clearly shows an excess of resources being used at UHCW department of head and neck surgery according to BAHNO guidelines, resources which are known to cause distress to patients. After discussion in clinical governance meeting, it was suggested that the British Thyroid Association (BTA) guidelines be included in future practice and audits. These guidelines make mention of extra-thyroidal extension in addition suspicious lymphadenopathy as indications for FNAC.

The audit was limited by the fact that 'U3 nodules' are not coded for and so the database was manually searched. It is suspected that more than 138 patients have been diagnosed with U3 nodules over the last 4 years. This audit recommends that no patients with <10mm nodules without suspicious lymphadenopathy receive FNAC.

Reference (If applicable)

1. Frasoldati A, P. M. (2003, January 1). Diagnosis of neck recurrences in patients with differentiated thyroid carcinoma. *Cancer*, 90-96.

2. Leenhardt L, E. M.-G., & 2(3):147-. (2013). 2013 European Thyroid Association Guidelines for Cervical Ultrasound Scan and Ultrasound-Guided Techniques in the Postoperative Management of Patients with Thyroid Cancer. *European Thyroid Journal*, 147-159. doi:10.1159/000354537

3. Rondeau G, F. S. (2011, August). Ultrasonographically detected small thyroid bed nodules identified after total thyroidectomy for differentiated thyroid cancer seldom show clinically significant structural progression. *Thyroid*, 845-53

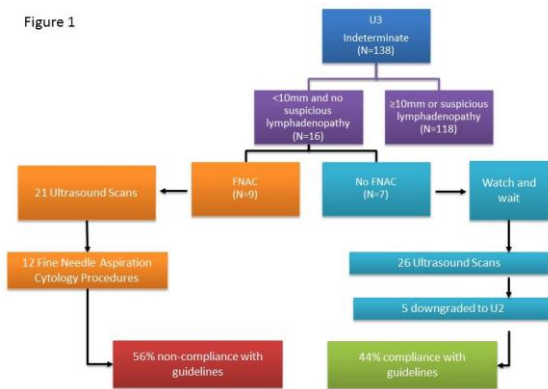


Figure 1 results.jpg

Setting up the Liteform Trial: patient and clinician perspectives.

Poster

Dr. Lyndsay Lindley¹, Dr. Joan Mackintosh¹, Dr. Nikki Rousseau¹, Mr. Michael Nugent², Prof. Tim Rapley³

1. Newcastle University, 2. City Hospitals Sunderland, 3. Northumbria University

Aim

An embedded qualitative study within the LiTEFORM trial (A Randomised Controlled Trial of the Clinical and Cost Effectiveness of Low Level Laser in the Management of Oral Mucositis in Head and Neck Cancer Irradiation), the aim was to generate a narrative of the set-up and launch of the pilot phase of the LiTEFORM trial. This would potentially inform the trial team of ways to optimise the process of opening further centres and ease the “fit” of the trial within the treatment pathway. In addition, this qualitative study would identify barriers and facilitators to recruitment with the intention of providing feedback to research teams and individuals and share good practice and support realistic recruitment rates. This study will also provide evidence for the effective implementation of Low Level Laser Therapy (LLLT) and the trial findings.

Method

The study employed a range of qualitative methods: interviews, observation and audio recording of recruitment consultations. A sample of patients (n≤36) who had consented or declined the main trial were invited to take part in telephone interviews. Patients would be interviewed soon after being informed of the trial and for those who agreed to take part in the main trial, a second interview was offered coinciding with trial reviews. Interviews were offered to clinicians and researchers at participating sites involved in trial recruitment and/or patient care, staff delivering LLLT, and other relevant members of the head and neck cancer teams. Observation took place at training and meetings at each of the seven pilot sites. Members of the trial recruiting teams were given an audio-recording device in order to record recruitment discussions to help identify issues raised by patients at this time as well as to recognise practices for successful recruitment.

Results

Themes emerging from the qualitative study include: the set-up of LiTEFORM, barriers to recruitment to the main trial and issues relating LLLT. Preparing for a trial which includes the use of lasers has brought about a range of challenges including specialist training, adaptations to clinic rooms and obtaining laser safety approvals. Local differences in procedure have resulted in delays during set-up. A slow start to recruitment in LiTEFORM highlighted unique challenges in this trial caused, not by a lack of eligible or willing patients, but by the capacity to deliver LLLT at each site. Patients have demonstrated a good understanding of the need for a control placebo and many feel they have benefited from receiving the treatment regardless of which arm they may be on. Although lasers are potentially seen as a hazard, patients overwhelmingly put their trust in the trial and accept the safety of the procedure.

Conclusion

The qualitative data generated thus far has enabled the trial management team to explain unique complications in set-up at each site and to develop solutions. Likewise, matters affecting recruitment have been elucidated and good practices have been shared across sites. Achieving a better understanding of the varied issues in running this trial will go forward to maximise capacity and “fit” with the treatment pathway and to implementation of the trial findings. The success of this trial lies in the commitment, of both patients and clinicians, to striving to improve outcomes for patients undergoing HNC treatment.

Reference (If applicable)

IRCTN. 2016. *LiTEFORM light therapy effectiveness for oral mucositis*. [ONLINE] Available at: <https://www.isrctn.com/ISRCTN14224600?q=&filters=&sort=&offset=9&totalResults=15645&page=1&pageSize=50&searchType=search>. [Accessed 26 January 2019]

Single centre experience of using Intensity-Modulated Radiotherapy for the primary treatment of oral tongue cancer

Poster

Dr. Aung Tin¹, Dr. David Wilkinson¹

1. The James Cook University Hospital

Aim

The optimal treatment for locally advanced squamous cell carcinoma (SCC) of the oral cavity is surgical resection with the addition of adjuvant radiotherapy (\pm chemotherapy) in selected cases. SCC of the oral tongue is associated with a particularly poor prognosis. Many patients present with disease which is technically unresectable or, are not considered medically fit enough to undergo surgical resection. This retrospective review aims to follow up and assess outcomes in patients presenting with non-metastatic SCC of the oral tongue, who did not have primary surgery and instead completed radical radiotherapy, with or without concurrent chemotherapy.

Method

A retrospective review of all patients in our centre treated with radical intensity-modulated radiotherapy (IMRT) (65Gy in 30 fractions) for the primary treatment of oral tongue SCC from June 2013 to March 2018 was performed. Clinical, pathological and radiological data were obtained from electronic records. Concurrent chemotherapy was administered in selected patients using weekly cisplatin (35mg/m²).

Results

A total of 24 patients were included. The median duration of follow-up was 11.7 months. Three (12.5%) patients had early-stage disease and 21 (87.5%) patients had locally advanced disease; including 20 (83.3%) patients with T4 primary disease (TNM staging 7th edition). The median age of patients was 60 years-old and most patients had an Adult Co-morbidity Evaluation grade of one.

Ten patients had a post-treatment PET-CT scan to evaluate response. Four (40%) of these patients had a complete response.

The median overall survival (OS) for the whole cohort was 12.7 months (95% CI 9.2-16.2) and the estimated 2-year OS was 19%. On univariate analysis, T4 disease and residual disease on post-treatment PET-CT scan were both significantly associated with inferior survival; median OS of 10.6 and 12.7 months, respectively. Three patients had subsequent treatment: two had surgery and one had palliative chemotherapy.

Conclusion

Our results indicate that radical IMRT is a poor treatment option for patients with unresectable oral tongue SCC. Few patients who have residual or progressive disease are fit enough to consider salvage or palliative treatment. There is a clear need to investigate and develop treatment options for these patients.

Speech and Language Therapy Screening for Laryngeal Cancer- a natural progression of our role?

Poster

Mrs. Suzanne Slade¹

1. Nottingham University Hospitals NHS Trust

Aim

The NHS Cancer Plan “two week wait” (2WW) referral pathway expects that patients referred with suspected Head & Neck cancer will see a head and neck cancer specialist within two weeks of receipt of referral (1).

Only 5.8% of these referrals are found to have malignancy (2) with hoarse voice the most common presentation (3).

With a reported national shortage of head and neck surgeons (4) and the incidence of oropharyngeal cancer predicted to rise 33% by 2035 (5) a sustainable solution in meeting referral targets is imperative.

At Nottingham University Hospitals NHS Trust (NUH) an average of 63 new referrals per month were referred via 2WW pathway in 2017. Patients with benign hoarse voice already progress on to Speech and Language Therapy (SLT) for further assessment and intervention.

This pilot study at NUH has been designed to test the feasibility of a new SLT-led 2WW assessment clinic.

Method

This presentation will describe the development of the pilot clinics which will test out the feasibility of undertaking this extended new role by the advanced clinical SLT practitioner.

It will describe the planned protocol to ensure a safe and efficient new service. This will include the clinic environment, the referral triage protocol, robust exclusion and inclusion criteria and the design and delivery of the training to equip the clinician with the additional skills, training and knowledge required to lead this clinic. Additionally, patient data on referral details and subsequent diagnosis will be collected.

Barriers to success and the early experiences of the Head and Neck Team designing and delivering this pilot project will be discussed.

Results

The speech and language therapy profession has its own problems of under-resourcing and recruitment difficulties. However, with the attrition of key staff groups in the Head and Neck specialism the further extension of the SLT scope of practice ensures that we can be creative in meeting the NHS skills shortage.

Already, in the report ‘Reshaping the workforce to deliver the care patients need’ the Nuffield Trust advised NHS Employers that it is ‘urgent and essential’ to expand the skills of the existing non-medical workforce to meet the big organisational challenges that NHS Trusts face (6).

Other SLT-led clinics have been reported, for example post-cancer treatment surveillance clinics.

This pilot clinic is in the early phase of its design and the presentation will describe the progress so far, and the barriers to and drivers of success already reported.

Conclusion

Sustainable and creative solutions to managing the increase in referrals to the Head and Neck Pathway are imperative. Extending non-medical roles to assess and manage low-risk patients is encouraged by NHS affiliated bodies. This pilot study will reveal the risks and benefits of a SLT-led 2WW clinic to manage lower-risk referrals. The clinic protocol will be described.

This presentation will offer an early opportunity to discuss the feasibility of this project and describe the early outcomes.

Reference (If applicable)

1. Department of Health (2000) **The NHS Cancer Plan: a plan for investment a plan for reform.** (Online). Available at: https://www.thh.nhs.uk/documents/_Departments/Cancer/NHSCancerPlan.pdf/
2. Pracy, P et.al.(2013) The 2-Week Wait Head & Neck Cancer Referrals: Is this System Working? **The Otorhino-laryngologist**; 6(3): 182-186
3. Rimmer, J. et. al. (2012) A head and neck 'two-week wait' clinic: Cancer referrals of the worried well. **Ann R Coll Surg Engl** (Suppl) 94:
4. York, A. (2004) **Shortage of head and neck surgeons could threaten treatment.** The Lancet Vol 5, No 10 p582
5. Smittenaar CR, Petersen KA, Stewart K, Moitt N.(2016) Cancer Incidence and Mortality Projections in the UK Until 2035 (link is external). Brit J Cancer.
6. Nuffield Trust (2016) **Expanding skills of existing staff best way to develop NHS workforce for 21st century.** (Online) Available at: <https://www.nuffieldtrust.org.uk/>

Speech and Language Therapy-initiated Holistic Needs Assessment for people diagnosed with head and neck cancer

Poster

Mrs. Grainne Brady¹, Dr. Justin Roe¹

1. The Royal Marsden NHS Foundation Trust

Aim

The NHS Five Year Forward View (NHS England, 2014) outlined recommendations for the use of the Holistic Needs Assessment (HNA) in care planning for all patients with cancer. Given earlier detection, improved treatment techniques, and the emergence of distinct disease entities such as HPV positive disease, HNC patients are now surviving longer and are subsequently living with the long term side effects of curative treatment (Nund et al 2014).

Speech and language therapists (SLT) are core members of the head and neck multidisciplinary team (Clarke et al, 2016; NICE 2016) In line with the national guidance, we offer pre-treatment clinics to obtain a baseline measure of function, information provision on the potential functional impact of treatments and to provide prophylactic/ pre-rehabilitative swallowing exercises. A pilot project was undertaken to see if SLTs could incorporate the London HNA within their pre-treatment assessment protocol.

Method

In October 2017 HNA was introduced into the SLT pre-treatment assessment protocol. For patients who did not have a HNA completed at the time of diagnosis by their CNS/Keyworker, the SLT completed the assessment within the pre-treatment assessment and counselling session. A sample of completed HNAs were analysed to look at the priority concerns and key action points discussed and agreed between SLT and patient.

Results

In total, 149 patients were seen in the SLT pre-treatment clinic between October 2017 and May 2018. SLTs successfully completed HNAs with 56% (n=88) of patients. Two patients chose not to complete the assessment. Twenty percent (n=30) of the HNAs were analysed to look at the key priority areas and action points discussed and agreed with patient and SLT. The key areas of concerns highlighted by patients were as follows: problems sleeping (n=13), sore/dry mouth (n=12), eating/appetite (n=12), worry, fear or anxiety (n= 11), fatigue (n=10) and pain (n=10). The key themes identified from an analysis of the documented summary discussions and action points were as follows: liaison with the CNS, referral to psychological support, SLT advice regarding sore/dry mouth and difficulties eating and advice/support provision by the dietitian regarding poor appetite.

Conclusion

The SLT department has demonstrated capacity to contribute to the recovery package by completing HNAs with head and neck cancer patients within designated SLT pre-treatment clinics. Ongoing close working will be required with our CNS colleagues and wider MDT to ensure that the complex needs of these patients are met. Ongoing audit of the SLT HNA completion rate is required to ensure that all head and neck cancer patients are offered a HNA to ensure that RMH is compliant with NHS England guidance.

Reference (If applicable)

Clarke, P., Radford, K., Coffey, M., & Stewart, M. (2016). Speech and swallow rehabilitation in head and neck cancer: United Kingdom National Multidisciplinary Guidelines. *The Journal of laryngology and otology*, 130(S2), S176-S180.

NHS England (2014) Five year forward view. Available at: <https://www.england.nhs.uk/wp->

content/uploads/2014/10/5yfv-web.pdf downloaded: 10 June 2018

NICE (2016) Cancer of the upper aerodigestive tract: assessment and management in people aged 16 and over. Available at <https://www.nice.org.uk/guidance/ng36>. Accessed 21.1.2019.

Nund, R. L., Ward, E. C., Scarinci, N. A., Cartmill, B., Kuipers, P. and Porceddu, S. V. (2014) 'Survivors' experiences of dysphagia *International Journal of Language & Communication Disorders*, 49 (3), pp. 354-363.

Surgeon Performed Ultrasound Guided Neck Lump Biopsy Clinic – Our Experience

Poster

Mr. Craig McCaffer¹, Mr. Shane Lester²

1. South, 2. South Tees Hospitals

Aim

Neck lumps are a common referral to ENT clinics. These are often palpable and amenable to freehand biopsy. The reliability of this technique can be low. A previous departmental audit suggested 42% of samples were deemed adequate by the histopathology department when performed by all grades. Often an additional ultrasound guided biopsy, performed by a radiologist, is required in order to gain an adequate sample. Due to pressures on our radiology department some patients can wait for some time for their ultrasound guided biopsy. This may prolong patient anxiety regarding their possible diagnosis and potentially delay treatment. We describe our experience of a single surgeon led ultrasound guided neck lump biopsy clinic. The aim of the service is two-fold. Firstly, to improve the reliability of a surgeon performed biopsies using ultrasound scanning instead of freehand. Secondly, to expedite the time taken for an ultrasound guided sample to be arranged.

Method

Following formal training in the technique, a single surgeon created a once weekly outpatient service performing ultrasound guided neck biopsies. The clinic has five slots, each lasting 30 minutes. In a slot each patient has an ultrasound guided neck lump biopsy performed by the surgeon. Ideally a core biopsy for histology and a fine needle aspiration for cytology are undertaken. Prospective data collection was undertaken between April 2017 and November 2018. Patient details, adequacy of sample and post-procedure complications were collected. Retrospectively, the diagnosis of the sample was compared final diagnosis in order to evaluate the how representative each sample was.

Results

162 patients had a surgeon performed ultrasound. 20 patients had no lump or reactive changes and no biopsy was undertaken. 4 patients were either already listed for excision biopsy or had histology confirmed from previous freehand biopsy, therefore an ultrasound guided biopsy was not performed. 138 patients had an ultrasound guided biopsy. 128 samples (92.7%) were deemed adequate. Common diagnoses included metastatic squamous cell carcinoma 21/128 (16.4%), reactive lymphadenopathy 19/128 (14.8%), Warthin's tumour 17/128 (13.3%), lymphoma 17/128 (13.3%) and pleomorphic adenoma 13/128 (10.1%). 10 samples (7.3%) were inadequate requiring a further ultrasound guided or open biopsy. Compared to final diagnosis, sample representation was correct in 125/128 biopsies (97.6%). Complications were infrequent. Two patients, both with cystic Warthin's tumours, had post-procedure infections requiring antibiotics and aspiration drainage. One patient had a temporary facial nerve weakness of unclear cause which has since resolved.

Conclusion

In our experience, when compared to freehand biopsies, this surgeon performed ultrasound guided neck lump biopsy clinic vastly improved the percentage of surgeon acquired samples deemed adequate by histopathology from 42% to 92.7%. The low number of complications and high sample representativeness suggests that this clinic is both safe and reliable. Diagnostic and complication rates also appear favourable to published data from similar radiology delivered clinics. Therefore not only is this clinic safe and reliable but may have benefits to the patient by streamlining their diagnostic journey.

Swallowing after laryngectomy; do flaps make a difference?

Poster

Mr. Michael Caygill¹, Dr. Jo Patterson¹, Ms. Laura-jayne Watson¹, Mrs. Lorna Raby¹, Mrs. Helen Cocks², Mr. Chris Hartley¹, Ms. Nashreen Oozeer¹, Mr. Frank Stafford¹

1. City Hospitals Sunderland, 2. Sunderland Royal Hospital

Aim

Total laryngectomy is a commonly used procedure to treat advanced laryngeal and hypopharyngeal cancer. Pharyngo-laryngectomy includes the partial or total removal of pharyngeal mucosa. The remaining pharyngeal mucosa may be used to close the defect directly or reconstruction with a pedicled or free flap may be indicated. Laryngectomy patients report long term swallowing difficulties including prolonged swallowing transit time and may develop stricture and fibrosis. Pharyngo-laryngectomy patients who have extended surgery and flap reconstruction have been reported to have additional problems depending on the extent of resection and nature of reconstruction. There is no evidence of the impact of time post-treatment. A systematic review was unable to draw conclusions regarding the comparison of swallowing outcomes for different reconstruction approaches.

6.

We have looked at swallowing outcomes following total laryngectomy and pharyngo-laryngectomy and will present this data and explore variables which are predictive of outcome more than three months post treatment.

Method

As part of our clinical practice we collect a range of standardised swallowing outcome measures; the Swallowing Outcome after Laryngectomy patient reported outcome measure (SOAL), the Performance Status Scale, a diet texture scale (PSS) and a timed 100ml water swallow test (WST).

We will present a review of our swallowing assessments for current laryngectomy and pharyngo-laryngectomy patients under the care of a single head and neck cancer centre, excluding patients with active disease or less than three months following treatment.

Swallowing outcomes will be described. Factors such as reconstruction type (primary closure, single flap closure, multiple flap closure), time since treatment, gender and age at time of treatment will be discussed and factors significantly predictive of outcome will be highlighted.

Data collection is ongoing and preliminary findings are described below. Full findings will be presented at the meeting.

Results

Our database of current patients includes a range of reconstructions, time post treatment, age at time of treatment. Some older records and records of patients transferred in from out of area are unclear regarding exact reconstruction and will require further investigation.

Our current laryngectomy population is 105 of whom 85 are male and 20 are female. Age at treatment ranges from 34-85 years. Range of time post treatment is 3 months to 390 months (32 years 6 months)

56 patients underwent primary closure. 35 patients had flap reconstruction of which 7 different types were noted (see table 1). 14 records are excluded as there was no clear record of reconstruction.

Conclusion

The large range of flap repairs will necessitate a large sample to be collected to be representative. The analysis is also likely to involve combining the outcomes of the different flap types.

Preliminary analysis shows poorer swallow outcomes for patients requiring extensive reconstruction with mul-

multiple flap repairs. These patients are likely to have had complications during surgery and recovery including fistulisation requiring secondary reconstructions.

Mean PSS scores for primary closure and single flap repair groups equate to patients managing a near normal diet ranging from only avoiding difficult meats to managing all foods with extra fluid assistance.

The comparison of outcomes from primary closure and single flap repairs counter intuitively suggests better outcomes for the flap group. We suggest that this is most likely due to the small numbers in the preliminary analysis and a larger sample will need to be analysed for presentation at the meeting.

Reference (If applicable)

1. E Burnip, S J Owen, S Barker, J M Patterson. Swallowing outcomes following surgical and non-surgical treatment for advanced laryngeal cancer *The Journal of Laryngology & Otology* 2013, 127, 1116–1121.
2. Govender R, Lee MT, Drinnan M, Davies T, Twinn C, Hilari K. Psychometric evaluation of the Swallowing Outcome after Laryngectomy (SOAL) patient reported outcome measure. *Head & Neck* 2016; **38**: E1639–E1645
3. List MA, Ritter-Sterr C, Lansky SB. A performance status scale for head and neck cancer patients. *Cancer* 1990; **66**:564–569
4. Rosenbek JC, Robbins JA, Roecker EB et al. A penetration-aspiration scale. *Dysphagia* 1996; **11**:93–98
5. Silverman, Puram, Rocco, Old, Kang, Salvage laryngectomy following organ-preservation therapy – An evidence based review *Oral Oncology* 88, 2019, 137–144
6. Terlingen, Pilz, Kuijer, Kremer, Baijens. Diagnosis and treatment of oropharyngeal dysphagia after total laryngectomy with or without pharyngoesophageal reconstruction: Systematic review *Head & Neck*. 2018;40:2733–2748.

Table showing range of flap repairs

No flap	Pectoralis Major	Jejunum	Anterior Lateral Thigh	Radial Forearm	Medial Sural Artery Perforator	Supraclavicular Artery Island	Stemomastoid	Multiple flaps
56	13	7	4	3	2	1	1	4

Table 1 range of flap repairs.png

Preliminary analysis of a subset of database shows

	Mean PSS / 100 (higher = less impaired)	Mean SOAL / 34 (lower = less impaired)	Mean 100ml WST time in seconds (lower = less impaired)
Primary closure	76	6.1	16.3
Single flap	90	7	10.5
Multiple flaps	35	22	25.5

Table 2 preliminary analysis.png

The development and utility of a new DOPS Formative Assessment protocol to support skills development in endoscopic assessment of voice and swallowing.

Poster

Ms. Fiona Robinson¹

1. Speech Voice and Swallowing Associates and Nottingham University Hospitals NHS Trust

Aim

Specialist Speech and Language Therapists (SLT) carry out fiberoptic endoscopic evaluation of swallowing (FEES) and endoscopic evaluation of the larynx (EEL) to inform diagnosis and management of swallowing voice disorders.

Traditionally, SLT training to acquire endoscopy skills is provided by one- or two- day courses, supported by a Competency Framework (1, 2), and supported by local clinical supervision to work towards and attain competence.

In medical education acquisition of practical skills is assisted by the routine use of the systematic DOPS (Direct Observation of Procedural Skills) framework, for both formative and summative assessment (3).

Combining experiential learning with formative assessment promotes deep learning and the consolidation of physical endoscopy skills (4).

The development and utility of a new DOPS framework to support the systematic acquisition of practical endoscopy skills by speech and language therapists undertaking EEL and FEES will be described.

Method

The RCSLT Position Papers for Endoscopic Evaluation of the Larynx - EEL (2008) and Fiberoptic Examination of Swallowing - FEES (2015) provide a competency framework which sets out the skills and knowledge required to carry out these procedures. However, the technical skill required to achieve competence is not sufficiently detailed and this lack of a practical skills framework prevents trainees, trainers and supervisors from systematically tracking and assessing the acquisition of endoscopy skills, impacting on the ability assess the outcomes of a practical endoscopy training programme.

In developing one external training course, with kind permission of the Joint Advisory Group on GI Endoscopy of the Royal College of Physicians, the Upper GI DOPS format has been adapted and extended. This new DOPS (EEL and FEES) compliments the RCSLT competency framework and links the practical training with formative assessment to support the acquisition of endoscopy skills by SLTs.

Results

Five endoscopy courses have been delivered which have used the new DOPS framework in conjunction with the RCSLT Competency Frameworks. Feedback from delegates has shown the value of the DOPS (EEL and FEES) in providing:

- the detail of the technical endoscopy skills being taught
- a systematic framework for the acquisition of technical and non-technical endoscopy skills
- a formative assessment tool to show progress and the level of supervision required
- a tool to support personal development plans
- a tool which compliments the RCSLT Competency Framework, which assists the supervisor when assessing whether the trainee is competent to deliver FEES and/or EEL autonomously

Conclusion

The development of a new DOPS Framework for Endoscopic Evaluation of the Larynx and Fibreoptic Evaluation of Swallowing has shown utility in supporting the development of, and providing evidence of competence in technical and non-technical endoscopy skills in speech and language therapists.

Reference (If applicable)

- (1) Fibreoptic Evaluation of Swallowing (FEES): the role of speech and language therapy. Royal College of Speech and Language Therapists Position Paper 2015
- (2) Speech and Language Therapy endoscopy for voice disordered patients. Carding PN et al. Royal College of Speech and Language Therapists Position Paper 2008
- (3) Formative DOPS_Upper GI (OGD).docx: Royal College of Physicians, London 2016. www.thejag.org.uk 2017
- (4) Teaching laryngeal endoscopy skills to speech and language therapists: applying learning theory to optimize practical skills mastery. Curr Opin Otolaryngol Head Neck Surg. 2015 Jun;23(3):197-201. Robinson HF, Dennick R.

The extent and depth of information desired by patients diagnosed with HPV positive oropharyngeal Squamous Cell Carcinoma

Poster

Mr. Mark Williams¹, Dr. Joanne Patterson², Ms. Michaela Fay³, Mr. David Hamilton², Mrs. Helen Cocks¹

1. Sunderland Royal Hospital, 2. Newcastle University, 3. Michaela Fay

Aim

HPV causes a significant proportion of oropharyngeal squamous cell carcinoma (OPSCC). It is unknown how much OPSCC patients understand about HPV, what sort of information they would like to receive and how and when they would prefer it to be delivered.

Method

Patients treated for HPV+ OPSCC >4 months were identified from clinical databases at Sunderland Royal Hospital and invited to a focus group. Patients were excluded if they were palliative or had cognitive deficits precluding group participation. The topic guide was based on literature review. The group was audio recorded and transcribed. The transcript was analysed using a coding framework and agreed by 2 researchers.

Results

7 patients, (age range: 44 - 70; 6 male, 1 female) attended the group, which lasted for 2 hours. Group was facilitated by an ENT doctor and an independent qualitative researcher. Four themes and several sub themes were identified; Diagnosing HPV (timing of information, manner of diagnosis), HPV and the future (prognosis, future infection), Immunity and HPV (protection of others) and Catching HPV (transmission, sexual behaviours).

Conclusion

The sexual transmission of HPV, particularly through oral sex dominated the concerns of the group, the negative connotations and the impact on personal relationships were considered key areas to address with clear and concise information. Subjects felt information on HPV should be given at multiple stages, which may prove difficult to address when imparting information through a single modality. Verbal, written and online resources are likely needed together to inform patients appropriately.

The immunotherapeutic role of indoleamine 2,3-dioxygenase (IDO) in head and neck squamous cell carcinoma: a systematic review.

Poster

Mr. Daniel Lin¹, Dr. James CK Ng², Dr. Lei Huang¹, Dr. Max Robinson³, Mr. James O'Hara², Prof. Janet A Wilson⁴, Prof. Andrew L Mellor¹

1. Institute of Cellular Medicine, Newcastle University, 2. ENT Department, Freeman Hospital, Newcastle upon Tyne, 3. Centre for Oral Health Research, Newcastle University, 4. Institute of Health & Society, Newcastle University

Aim

Novel cancer immunotherapy includes application of immune checkpoint inhibitors to the treatment of solid tumours. The body's own immune system is thereby harnessed to tip the balance in favour of antitumour activity. The intracellular enzyme indoleamine 2,3-dioxygenase (IDO) is a critical regulator of the tumour microenvironment (TME) via tryptophan metabolism. Programmed death protein 1 (PD-1) and programmed death-ligand 1 (PD-L1) are immune checkpoints involved in T-cell inhibition and immunosuppression. Another immune checkpoint, IDO1, breaks down tryptophan into its metabolites which results in immunosuppression in the TME. We aim to assess the evidence on IDO in head and neck squamous cell carcinoma (HNSCC).

Method

Medline, EMBASE using Ovid, Scopus, Web of Science, Cochrane Library databases and ClinicalTrials.gov were searched from inception until present day.

Results

We included 32 studies. Of those, 5 involved cell lines, 7 assessed tumour immunohistochemistry¹⁻⁷, 6 measured IDO gene transcription and 14 reported on clinical trials. The human cell lines studied commonly were SCC4, SCC15, and SCC25 in which IDO expression and activation by the Stimulator of Interferon Genes (STING) pathway played a central role. Retrospective immunohistochemistry studies of lower lip¹, oral cavity², tongue^{3,4}, tonsil⁴ and larynx⁵ found that relatively high IDO expression correlated with worse survival (Table 1). Gene transcription studies showed increased IDO in tumours that expressed PD-L1 and harboured human papillomavirus (HPV). Phase I/II clinical trials showed 1) objective responses (34%) and disease control rates (62%) for IDO1 inhibitor in combination with a PD-1 inhibitor, 2) consistent safety profile in combination versus monotherapy and 3) IDO gene expression as a predictive biomarker for response to PD-L1 therapy.

Conclusion

IDO is integral to TME immunity in HNSCC particularly in HPV positive tumours, modulating existing therapies and application in combinatorial immunotherapy. Retrospective studies have shown the presence of IDO in the TME and suggest a link to prognosis and prediction of HNSCC treatment outcome. However, the exact mechanism of IDO-driven immune modulation in the HNSCC TME remains unclear. We now require prospective longitudinal studies to track IDO activity and expression throughout HNSCC treatment, thence optimise IDO-based immunotherapy.

Reference (If applicable)

1. Kualess M.A., Wenzel J., Schmid-Wendtner M.-H., *et al.* (2011) *Histol. Histopathol.* **26**, 997–1006.
2. Laimer K., Troester B., Kloss F., *et al.* (2011) *Oral Oncol.* **47**, 352–7.
3. Seppälä M., Halme E., Tiilikainen L., *et al.* (2016) *Acta Otolaryngol.* **136**, 729–35.
4. Ferdinande L., Deron P., Rottiers I., *et al.* (2008) In *27th International congress of the International Academy of*

Pathology Histopathology pp. 212–213.

5. Ye J., Liu H., Hu Y., *et al.* (2013) *Virchows Arch.* **462**, 73–81.

6. Succaria F., Kvistborg P., Engle E.L., *et al.* (2018) *Cancer Res.* **78**, 4693–4693.

7. Venkata M. & Saha B. (2017) *Ann. Oncol.* **28**.

Table 1. Existing tumour immunohistochemistry studies of IDO in HNSCC

Author	Tumour site	Source & antibody	Cases	Method	Results
Ferdinande ⁴ , 2008 (Belgium)	Tonsil SCC (26), Tongue SCC (12)	Unspecified	38	Inflammatory infiltrate evaluated and scored (semi)quantitatively	73% of tonsil and 92% of tongue SCC showed IDO expression in tumour cells, focally at invasive front. No association was found with TNM stage.
Kuales ¹ , 2011 (Germany)	Lower lip SCC	Lesional biopsies, FFPE	47	Retrospective. Density of inflammatory infiltrate at the invasive front of each tumour was calculated	IDO expression correlated with moderate to intense inflammatory infiltrate along the border of invasive tumour cells where regulatory T-cells were also present.
Laimer ² , 2011 (Austria)	Oral cavity	FFPE Anti-IDO (AB9252)	88	Retrospective. Evaluation of IDO expression with survival time	IDO expression, staging, tumour grade 3 and adjuvant CRT were prognostic for poorer overall survival.
Seppälä ³ , 2016 (Finland)	Tongue and lymph nodes	FFPE Anti-IDO (MAB5412)	108	Retrospective. Light microscopic evaluation of IDO staining intensity	IDO expression in T2-T4 tumours and at the invasive front was associated with poor survival.
Succaria ⁶ , 2018 (USA)	HNSCC, unspecified	Archived HNSCC specimen	27	Retrospective. IDO expression by tumour cells and infiltrating immune cells	>500 IDO expressing cells/mm ² in 17/27 HNSCC specimens, IDO expressed by tumour and infiltrating immune cells in 12/27 (44%) cases.
Venkata ⁷ , 2017 (India)	HNSCC, unspecified	FFPE	50	Retrospective. Stained slides analysed manually and by digital algorithms	Increased expression of IDO in tumour cells correlated with FOXP3 regulatory T-cells.
Ye ⁵ , 2013 (China)	Larynx: glottic and subglottic	FFPE Anti-IDO (AB5968)	187	Retrospective. IDO staining intensity in the tissue and tumour infiltrating lymphocytes.	IDO expression was associated with regulatory T cell density. High IDO predicted worse survival.

Abbreviations: SCC = squamous cell carcinoma, FFPE = formalin-fixed paraffin-embedded, CRT = chemoradiotherapy.

Table 1 tumour ihc of ido in hnscc.png

The Management of Trismus: A Physiotherapist's Perspective

Poster

***Ms. Sam Bacon**¹*

1. Guy's and St Thomas' NHS Foundation Trust

Aim

Trismus is a common side effect in the treatment of patients with head and neck cancer. Incidence has been reported to be between 5% to 38% [Scott et al, 2017], with a recent study settling on 23.6% [van der Geer et al, 2018]. In the United Kingdom, patients with trismus are usually referred to a Speech and Language Therapist, who prescribes temporomandibular [TMJ] exercises, and a Therabite device if deemed necessary.

A physiotherapist's assessment and treatment of trismus differs to that of Speech Therapists. The aim of this presentation is to highlight these differences, and suggest the way in which physiotherapy may be a useful addition in the management of trismus in patients with head and neck cancer. It also identifies additional patient subgroups, and highlights those that are likely and unlikely to respond to physiotherapy intervention.

Method

An Audit was conducted to explore the incidence of trismus in head and neck cancer patients referred to CHANT Physiotherapy [Community Head and Neck Cancer team] between April 2017 and March 2018.

Physiotherapy assessment [which includes palpation of the temporomandibular joint and surrounding structures] identified mechanical dysfunction likely causing [or contributing towards] trismus. This resulted in additional treatment techniques, such as joint mobilisation and myofascial release, being performed in conjunction with exercise prescription. Resolution rates can help to determine which patients will likely benefit from physiotherapy intervention.

Results

A total of 36 patients referred to CHANT presented with trismus. Four were lost to follow-up. 23 had resolution of their symptoms, with mouth opening [MIO] greater than 30mm or visibly great enough to not warrant further treatment. 63.8% therefore had resolution of their symptoms following physiotherapy treatment.

Sub-groups identified on assessment: Intra-articular pathology, Disease-related, Contractures and adhesions, Radiation fibrosis syndrome, general muscular tension

Intra-articular pathology: 2 - TMJ dysfunction may have been pre-existing

Disease-related: 3 - tumour still present in TMJ region after treatment was completed

Radiation Fibrosis Syndrome: 27. Of those, 5 had visible cording present, and 7 had severe trismus, with MIO less than 20mm following physiotherapy intervention.

Significant adhesions and contractures within the temporomandibular region: 5 [All 5 had severe trismus and RFS]

Myofascial tension [surgical only]: 4

Therabites prescribed: 1

Conclusion

On assessment, different patient sub-groups were identified based on likely mechanical or physiological cause of trismus, rather than the traditional categories of treatment approach [surgical or oncological or both].

Patients presenting with adhesions and muscular contractures were least likely to improve with physiotherapy treatment. Those with general muscular tension or RFS [without significant contractures and adhesions] were most likely to respond to physiotherapy intervention.

Thorough palpation as a form of assessment, and myofascial release of soft tissue as a treatment technique, are useful additions that a physiotherapist can offer in the management of trismus in head and neck cancer patients. Cording has been identified in certain patients with RFS, but is not currently recorded in the literature or routinely identified in head and neck cancer patients. It is a symptom that is known to respond well to myofascial release.

Further research is needed.

Reference (If applicable)

van der Geer SJ, van Rijn PV, Kamstra JJ, et al. Prevalence and prediction of trismus in patients with head and neck cancer: A cross-sectional study. *Head & Neck*. 2019;41:64–71.

Scott, B., Butterworth, C., Lowe, D. and Rogers, S. (2008). Factors Associated with restricted mouth opening and its relationship to health-*Oral Oncology*. [Online] 44(5), pp.430-438

Stubblefield, M.D. Radiation Fibrosis Syndrome: Neuromuscular and Musculoskeletal Complications in Cancer Survivors. *American Academy of Physical Medicine and Rehabilitation*. 2011; Nov;3(11):1041-54

The neoplastic significance of thyroid incidentaloma on PET/CT: a UCLH experience

Poster

Dr. Oliver Sanders¹, Dr. Simon Wang¹, Ms. Jabin Thaj¹

1. University College London Hospital NHS Foundation Trust/

Aim

Background: There is currently no industry standard for the management of incidental thyroid findings on positron emission tomography/computed tomography. These findings can cause diagnostic dilemmas especially in the context of investigating or treating a pre-existing cancer. The purpose of this study is to establish the prevalence of malignancy in incidental fluorodeoxyglucose (FDG) uptake in the thyroid on PET/CT whilst investigating or staging other cancers.

Method

Methods: A retrospective cohort study reviewing the records of patients in whom unexpected thyroid (FDG) uptake (either diffuse or focal) was found whilst undergoing PET/CT at University College London Hospital NHS Trust between January 2011 and November 2014. Excluding patients with a history of head and neck cancer and biopsy proven lymphoma. The extent of investigation, final diagnosis and SUVmax (when available) was recorded. The findings were compared with those of similar studies performed at other head and neck cancer centres in the UK and abroad.

Results

Results: In the stated time period, 10,404 PET/CT scans were performed with 312 showing incidental thyroid uptake, 113 (36%) of which was focal in nature. 26 of these patients (23%) received tissue diagnoses of malignancy - 22 primary (10 Follicular, 11 Papillary, 1 Hurthle) and 4 metastatic. Diffuse uptake did not represent malignancy in those followed up but more often autoimmune or inflammatory aetiologies. Data from other centres showed significant variation from 19.1% in Guy's and St Thomas', London to 50% in Seoul, South Korea. Conclusion: This study finds that incidental focal uptake of FDG in the thyroid confers a 23% risk of malignancy which is most frequently represented by a primary thyroid cancer.

Conclusion

Conclusion: This study found a marginal but not significantly higher rate of cancer in focal incidentalomas when compared with Guy's and St Thomas' but showed significant differences with studies from mainland Europe and Asia. University college London hospital is the centre of the northeast London cancer network and provides PET services to the entire north and north east London. This is the first study to look at focal incidental PET thyroid uptake in UCLH and to our knowledge only the second study in the whole country. Based on this the authors recommend that the immediate referral for further cytological diagnosis be the mainstay of management following such findings and that the patients should be made aware of the 23% risk of malignancy.

The Rigid Endoscopy Trainer -Designing a pressure sensing oral cavity

Poster

Ms. Summy Bola¹

1. Oxford University Hospitals

Aim

Rigid oesophagoscopy is a widely used diagnostic and therapeutic tool in Head and Neck surgery. Major complications such as oesophageal perforation and gastrointestinal bleeding are well documented within the literature and can lead to significant morbidity. Oral cavity injury is not as well-recorded but can occur in up to 37%¹ of patients resulting in damage to the teeth or oral mucosa.

We describe a training tool where rigid oesophagoscopy can be performed on a manikin whilst providing direct feedback to the operator. The aims of the training tool were to:

1. Improve awareness of pressure application whilst performing the scope.
2. Demonstrate that repeated attempts by a new learner would result in less pressure application.

Method

The training set up involved a high accuracy thin film pressure force sensor (range 20g-10kg, cost £11.50). This was connected to a multimeter (Image 1) at 2K Ohms resistance. A calibration curve was created by testing different weights on the sensor to calculate pressure generated.

The pressure sensor was attached to a gum guard inserted on the upper teeth of a manikin and part of it rested on the upper palate. A rigid endoscopy was performed by the operator using a 30cm adult oesophagoscope and light lead (Image 2). The sensor detected the direct weight applied and the force resistance as the scope moved along the pad.

Operators were allowed a practice procedure before being recorded. Junior operators were defined as clinicians who had never performed the procedure. They were given 5 attempts without coaching to see if their pressure application could improve with pressure feedback.

Results

The training exercise was performed by 15 operators; 4 Consultants, 4 Registrars and 7 Senior House Officers. There was a correlation between the skill of the operator, in terms of seniority and the pressure applied to the upper teeth (Graph 1).

Of the junior operators, 6 out of 7 SHOs showed improvement after being given feedback regarding the pressures they were applying (average improvement of 105grams less pressure) and this was without direct coaching. 'SHO 1' did not improve significantly however this operator was already applying pressures similar to the skilled clinicians.

Conclusion

Damage to the oral cavity can lead to expensive dental work, oral bleeding and difficulty reinserting dentures. Alongside this, it is likely that applying more force at the proximal end of scope is related to pressure at the distal part which can lead to more serious complications.

Simulation is important for surgical training as it helps the trainee become familiar with a procedure without any risks to the patient. Although manikins have become more sophisticated over the years it is interesting that no oral or internal sensors have been developed.

This simple low cost training set up was a good demonstration of how real-time feedback can help a trainee adjust their own technique to apply less force on the upper teeth and oral cavity.

Reference (If applicable)

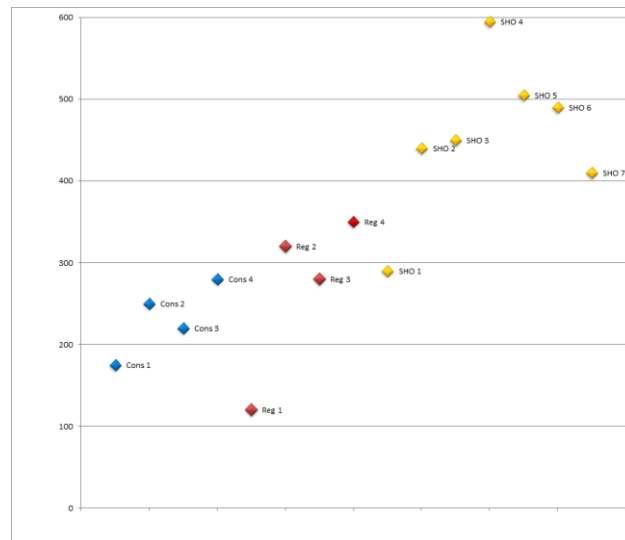
1. Hey, S.Y., Harrison, A. & MacKenzie, K. Oral trauma following rigid endoscopy and a novel approach to its prevention – prospective study of one hundred and thirteen patients. Clin Otolaryngol. 2014



Image 1.jpg



Image 2.jpg



Pressure grams applied to upper teeth in operators.png

The Role of Adjuvant Therapy in Locally Advanced, Node-negative Oral SCC with Mandible Invasion- The Newcastle Experience

Poster

Mr. Bara El-khayat¹, Mr. Ashish Magdum², Mr. Asim Bashir³, Mr. Daniel B Saleh³, Mr. Maniram Ragbir⁴, Mr. Matthew Kennedy³, Mr. James Adams², Mr. Omar Ahmed¹, Dr. Shahid Iqbal²

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Aim

The standard treatment for node-negative (N0) locally advanced (T4) SCC of oral mandible is surgical resection and reconstruction followed by adjuvant radiotherapy (RT) or chemoradiotherapy (CRT), but is adjuvant treatment necessary in all cases? We compare the outcomes of surgery alone vs surgery with adjuvant RT/CRT in our patient cohort

Method

We carried out a retrospective review of all cases of T4N0M0 (UICC TNM7) SCC of the oral cavity with mandibular invasion resected between Jan 2010 and Dec 2018 at our centre. Primary outcomes were overall survival (OS) and disease-free survival (DFS).

Results

35 patients (22m, 13 f, median age 62, range 35,85) underwent resection with cervical lymphadenectomy. Tumour sub-sites were the angle 11 (31%), body 14 (40%), and anterior mandible 10 (29%). The majority (33/35) of patients underwent resection and free fibula flap reconstruction. 2 flaps failed (6%). Most of the SCCs were primary tumours, but 5 patients (14%) had recurrent SCC with no previous adjuvant treatment. Excision was complete in 31 cases (89%) and incomplete in 4 (11%).

20 patients (57%) received no adjuvant treatment, 13 (37%) received adjuvant radiotherapy (RT) and 2 (6%) had post-op concurrent chemo-radiotherapy (CRT).

Median OS and DFS were 2.88 years for surgery alone group, 1.43 yrs for surgery + RT group and 2.02/1.94 yrs for surgery + CRT. Median OS and DFS were 2.25 years for all patients.

Conclusion

For completely excised node-negative oral SCC with mandible involvement (T4N0 disease) but with favourable clinical and histological features, surgical treatment alone can be a good option. When bony invasion is clinically suspected, a low threshold for segmental resection and free flap bony reconstruction may improve the likelihood of complete excision. Larger prospective trials are required to determine which T4N0 patients do not require adjuvant treatment.

The Submental Island Flap For Oropharyngeal Reconstruction: A Mid-Essex Experience Of 25 Cases

Poster

Mr. Khemanand Maharaj¹, Mr. Mark Singh², Mr. Jamal Siddiqi³, Mr. Ghaly Ghaly⁴

1. Norfolk and Norwich University Hospital, 2. Bristol Royal Infirmary, 3. Mid Essex Hospital Trust, 4. Ninewells Hospital

Aim

Martin et al⁽¹⁾ first described the Submental island flap 24 years ago. Since then advances in techniques expanded the indications and improved the flap characteristics making it a favourable reconstructive option for orofacial oncological defects. We present our experience with this flap particularly in the perioperative setting, and our complications and precautions adopted in its use.

Method

Between April 2017 to November 2017 we performed 25 submental island flaps for primary reconstruction of post tumour excision defects in the oral cavity. A retrospective review focused on assessing operating time, use of tracheostomy, post-operative inpatient stay, oropharyngeal function, and associated morbidities.

Results

The procedure was successful in all cases without any complete flap loss. Fifteen patients had tongue defects, 2 retromolar, 1 buccal, 2 mandible and 2 maxilla resection defects. Our average operating time was 250 minutes with an average post-operative stay of 11 days. Only 3 patients required a tracheostomy and 4 patients required post-operative ITU monitoring. The complications encountered were partial flap loss in four cases, one sialocele and one seroma.

Conclusion

The submental island flap has certainly shown its merit as an option for oral defect treatment because of its reliability, versatility, and relative ease of application. Furthermore, reduction in operating time, tracheostomy need and ITU admissions renders this flap a distinct advantage. This case series is the largest in the United Kingdom and we hope this humble flap has a place in the future as a standard for reconstruction of small to medium oral resection defects.

Reference (If applicable)

1. Martin, D., Pascal, J.F., Baudet, J. et al. The submental island flap: a new donor site. Anatomy and clinical applications as a free or pedicled flap. *Plast Reconstr Surg.* 1993; 92: 867–873

The Telford experience in the scope of an acellular dermal regenerative matrix material “Integra” in oral and maxillofacial surgery

Poster

Mr. Richard Pilkington¹, Mr. Connor Moore¹, Mr. Luke Western¹, Mr. Suraj Thomas¹, Mr. Sunil Bhatia¹

1. Princess Royal Hospital, Telford

Aim

The use of an acellular dermal regenerative matrix material (Integra, Integra Life Sciences, Plainsboro, NJ) needs to part of the head and neck reconstructive armamentarium. It is now part of the recognised reconstruction ladder.

The objective was to show the growing diversity of how this material can be used to promote healing in various head and neck defects where it has not been possible to use local flaps, free flaps or skin grafts.

Method

We present a 7 case series of how this material has been used in our unit in various aspects over the last 18 months. We report a 5 case series using (4 bilayer: 1 meshed) for full thickness scalp defects following oncological resection.

We describe a novel approach to minimise the donor site scarring from the donor site of a radial forearm free flap. A young male mid 30's, required maxilla resection with reconstruction with a left radial forearm free flap. He has Type 1 Fitzpatrick skin. He is prone to severe keloid scarring and was not keen to have a skin graft taken to cause further scarring.

Also used to reconstruct a floor of mouth defect following oncological resection and free flap reconstruction which was not possible at the time of surgery.

Results

We present the stages from the time of surgery and the timeline involved in the various procedures to show the stages involved in healing in the 7 case series.

Conclusion

Acellular dermal matrix provides an alternative reconstruction material where other reconstruction techniques such as local flaps/free flaps are compromised or will cause their own surgical morbidity. A recent review of the types of techniques to close the radial forearm free flap donor site were published¹. The use of an acellular dermal regenerative matrix material appears to be used relatively uncommonly. We feel from our own experience, that this material should have a part to play in all reconstructive head and neck units.

Reference (If applicable)

1. Pabst AM, Wermeister R, Steegmann J, Holzle F, Bartella A. Is there an ideal way to close the donor site of a radial forearm free flap? Br J Oral Maxillofac Surg 2018; 56:444-452

Tongue base mucosectomy for carcinoma of unknown primary using endoscopic electrocautery: rationale for wider implementation of a institutionally restricted technique.

Poster

Mr. Robert Hone¹, Mr. Cameron Davies-Husband²

1. Queen Victoria Hospital NHS Foundation Trust, 2. Royal Sussex Hospital, Brighton/Queen Victoria Hospital, East Grinstead

Aim

Cervical metastasis from an unknown primary site (CUP) invariably results in pan-mucosal irradiation if a primary tumour is not identified. Transoral robotic/laser-assisted mucosectomy are valid techniques to increase diagnostic rates but remain culturally restricted to centres where available. We describe a technique in which mucosectomy is performed via endoscopic electrocautery.

Method

Patients were prospectively recruited between May 2017 and October 2018. Inclusion stipulated biopsy-proven metastatic cervical squamous cell carcinoma, negative magnetic resonance imaging/PET-CT, in addition to examination under anaesthetic, tonsillectomy and "blind" tongue-base biopsies without tumour identification, prior to mucosectomy.

Results

Of ten patients, a mucosal primary was identified in five (50%), for which ipsilateral intensity-modulated radiotherapy was advocated in four and completion tongue base resection in the fifth. Dysplasia was demonstrated in two further patients, which provided information relevant to radiotherapy fields and post-treatment surveillance. No surgical complications were identified.

Conclusion

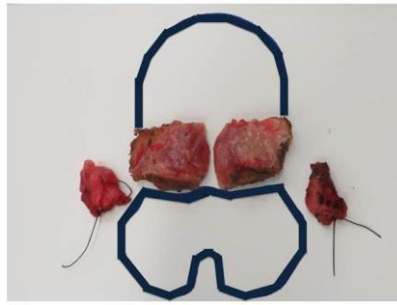
Tongue base mucosectomy using electrocautery and conventional tonsillectomy equipment is a safe, effective technique in identification of CUP, which expands the potential breadth of use, quickens prolonged diagnostic pathways and obviates the necessity for pan-mucosal irradiation.



Cup 1.jpg



Cup 2.jpg



Cup 3.jpg

Total glossolaryngopharyngectomy with digital pre-operative planning: concordance between imaging, patient anatomy and reconstruction

Poster

Mr. Robert Hone¹, Mr. Brian Bisase¹, Mr. Paul Norris¹, Mr. Cameron Davies-husband²

1. Queen Victoria Hospital NHS Foundation Trust, 2. Royal Sussex County Hospital, Brighton

Aim

Pre-operative planning for bony defects in head and neck surgery is well documented, but is not habitually implemented for soft tissue defects following head and neck resections. Total glosso-pharyngolaryngectomy is a controversial operation, which some clinicians believe falls into the realm of “functional inoperability”. Our aims were to elucidate the role of pre-operative planning using radiological parameters in the reconstruction of glossolaryngopharyngectomy defects, with a view to minimizing post-operative morbidity to this patient group.

Method

Patients were consecutively recruited through the Brighton and Sussex multidisciplinary meeting. Three patients were enrolled over a 12 month period. All patients had advanced, radio-recurrent squamous cell carcinomas of the tongue base staged as T4a N0 M0 and recommended for total glossolaryngopharyngectomy with anterolateral thigh free flap reconstruction. All patients underwent pre-operative magnetic resonance imaging (MRI) of the neck, whereby dedicated measurements were made in conjunction with a consultant head and neck radiologist. Flap measurements were extrapolated from these measurements, accordingly. The concordance between radiological planning and intraoperative anatomical defect was recorded.

Results

We found a high concordance between pre-operative radiological and intra-operative direct measurements using a pre-planning technique. Specifically, individualised flaps could be conceived from the planning stage using a chimeric design, implementing “spatulations” to accommodate for the lateral oropharyngeal component of the mucosal resection. All resection margins were clear for each patient. No patients developed oropharyngocutaneous fistula postoperatively. The average time to discharge was 10 days. Two of three patients have had their enteral feeding tube removed, while the third is awaiting its removal and all can maintain a purely oral diet.

Conclusion

We believe pre-operative radiological planning has a role in tailoring free flap design and predicting inset ergonomics for soft tissue defects, with potential for reduction in morbidity and improvement of functional outcomes.

Transoral endoscopic video-assisted lateral oropharyngeal resection: a reliable technique for early stage tonsil tumours

Poster

Ms. Elizabeth Kershaw¹, Mr. Jemy Jose¹

1. Castle Hill Hospital

Aim

Transoral resection of tonsil tumour is performed by a number of techniques, the popular ones being TransOral Robotic Surgery¹ (TORS), Transoral laser microsurgery² (TLM), and more recently TransOral endoscopic UltraSonic Surgery³ (TOUSS). The vast majority of resectable tumours are early stage tonsil tumours that might involve the superior constrictor muscle, adjacent limited base of tongue tissue and the arch of soft palate. These tumours require a lateral oropharyngeal resection with clear peripheral and deep margin.

Our aim is to demonstrate that the transoral video assisted endoscopic technique can be used to resect early tonsil tumours with clear margins, and thereby can be used in departments that do not have access to robots and lasers.

Method

Twenty patients who had tonsil tumours with size and extent that was appropriate for transoral resection was included. Transoral endoscopic video-assisted lateral oropharyngeal resection was performed using a Boyle Davis gag, a rigid nasal endoscope, and a hand-held monopolar diathermy device. Tumour was resected en bloc and a concomitant neck dissection was performed.

Results

In all 20 patients, it was possible to obtain R0 resection of mucosal margins, with only 1 patient requiring a second resection.

Conclusion

Our series has demonstrated that these tumours can be resected reliably and safely using the endoscopic technique. Often, there is an impression that advanced technology and techniques are necessary in order to offer these patients a choice of transoral surgery. It can result in patients being managed by non-surgical methods or being referred to a centre where such technology is available.

The transoral endoscopic video assisted lateral oropharyngeal resection for early T stage tumours is an effective technique for obtaining microscopically clear margins, and can be performed in a standard ENT operating theatre with instruments from standard tonsillectomy and endoscopic sinus surgery set up, using skills readily available to any head and neck surgeon. We encourage other ENT centres to perform transoral endoscopic video assisted lateral oropharyngeal resection, where appropriate, without relying on the need for a robot or laser.

Reference (If applicable)

1. Quon H et al. Transoral robotic surgery and a paradigm shift in the management of oropharyngeal squamous cell carcinoma. J Robot Surg. 2010;4(2):79-86
2. Williams CE et al. Transoral laser resection versus lip split mandibulotomy in the management of oropharyngeal squamous cell carcinoma: a case match study. Eur Arch Otorhinolaryngol. 2014;271(2):367-372
3. Fernández-Fernández MM, Montes-Jovellar L, Parente Arias PL, Ortega Del Alamo P. TransOral endoscopic UltraSonic Surgery (TOUSS): a preliminary report of a novel robotless alternative to TORS. Eur Arch Otorhinolaryngol. 2015;272(12):3785-91

Transoral robotic surgery (TORS) approach in the management of a rare benign parapharyngeal oncocytoma.

Poster

Dr. Megan Burns¹, Dr. Jason Fleming¹, Mr. Philip Touska¹, Mr. Asit Arora¹, Mrs. Ann Sandison¹

1. Guy's and St Thomas' NHS Foundation Trust

Aim

Parapharyngeal space lesions account for 0.5% of all head and neck tumours. Transoral robotic surgery (TORS) is a novel technique to approach this anatomical space but the risk to neurovascular structures necessitates appropriate case selection. Over 70 histological subtypes of parapharyngeal tumours are described and this may therefore present diagnostic difficulties.¹ In addition, the inaccessibility of the site often impedes a transcervical fine-needle aspiration (FNAC).

Method

We present the case of an incidental parapharyngeal tumour discovered in a patient with a history of Paget's disease who was undergoing thoracic spinal fusion.

Results

A 63 year old Ghanaian gentleman presented with thoracic and lumbar pain. Suspected lesions at vertebrae T6 to T10 on plain films were further investigated by MRI, PET and CT imaging. These imaging modalities revealed an incidental, well-defined right parapharyngeal space lesion, with fluoro-deoxyglucose (FDG) uptake and minimal posterolateral involvement of the deep parotid lobe. Clinical differential diagnoses included a neurogenic tumour, lymphoproliferative mass, or IgG4 related disease but low grade malignancy could not be excluded. Cross specialty MDT discussions determined the decision to proceed to a TORS approach for excision. The procedure was performed without complication, recovery was uneventful and the patient was discharged on full oral diet. Histological examination confirmed oncocytoma.

Conclusion

Oncocytoma is a rare benign neoplasm known to occur in parotid, submandibular and minor salivary glands. Very few cases occur in the parapharyngeal space where they may mimic malignancy.² Five other parapharyngeal oncocytomas are reported in the English literature but only one case is recorded arising in parapharyngeal space itself.²⁻⁶ TORS surgery in the head and neck is most often associated with excision of oropharyngeal neoplasms especially in the context of HPV-associated tumours but indications are expanding. Increasingly the use of the technique for a transoral approach to the parapharyngeal space is being recognised for benign or low grade malignant lesions with a favourable morbidity profile compared to traditional approaches.^{7,8} This case highlights the successful application of TORS to the diagnosis and management of a rare benign parapharyngeal lesion.

Reference (If applicable)

- Riffat F et al.(2014). A systematic review of 1143 parapharyngeal space tumors reported over 20 years. *Oral Oncol.* 50(5):421-30.
- Barrese, J.L., et al.(2009). Non-parotid parapharyngeal oncocytoma: A case report and literature review. *Head Neck.* 32(6): 800-5.
- Brandwein MS et al.(1991). Oncocytic tumors of major salivary glands. A study of 68 cases with follow of 44 patients. *Am J Surg Pathol* ; 15: 514–528.
- Carluccio, F. et al.(1996). Parapharyngeal oncocytoma of the parotid gland. *Acta Otorhinolaryngol Ital.* 16:57–61.

- Oliai, B.R. et al.(2005) "Parapharyngeal space" tumors:A cytopathological study of 24 cases on fine *Diagn Cytopathol.* 32:11–15.
- Widziszowska, A. et al.(2007). Parapharyngeal oncocytoma of the parotid gland: case report. *Otolaryngol Polska* ; 61:195–197.
- Chan, J.Y. et al.(2015). Transoral robotic surgery of the parapharyngeal space: a case series and systematic review. *Head Neck.* 37(2): 293-8.
- Maglione, M.G. et al.(2018) Transoral robotic surgery of parapharyngeal space tumours:A series of four cases. *Int J Oral Maxillofac Surg.*47(8):971-975.

Transoral robotic surgery (TORS) for Obstructive Sleep Apnoea (OSA); a preliminary experience at a tertiary centre

Poster

Mr. Henry Zhang¹, Mr. Khalid Ghufoor¹, Mr. Jahangir Ahmed¹

1. Barts Health and UCLH

Aim

The gold standard therapy for moderate to severe OSA remains CPAP. However, non-compliant patients benefit from surgical measures. The widely accepted method for assessing the level of obstruction in patients with OSA is using drug induced sleep endoscopy (Croft & Pringle, Kotecha). If the tongue base contributes significantly to the patient's OSA, TORS reduction/resection has been shown to be effective.

TORS of the tongue base has been described with various techniques. Vicini performs an inverted pyramid technique, Friedman describes a triangular resection, and Kotecha/Tolley use a thulium laser ablation method. We present our experience at Royal London Hospital so far; patient selection and assessment, surgical technique, post-operative care, and outcomes.

Method

This is a prospective audit of all TORS cases at Barts Health for patients with OSA, who have failed CPAP therapy. All patients underwent TORS. Outcomes measured included patient factors; demographics, post surgery pain score VAS, days to swallow, length of stay, pre and post operative sleep study parameters. Surgeon factors were also included including time of surgical procedure.

Results

A total of 11 patients underwent TORS for OSA at Barts Health from January to October 2018. All patients were found to have improved in the OSA after surgery based on sleep study parameters. Initial pain score was high for the majority of patients, but this was improved as clinical and nursing staff utilised the protocol of pain control post surgery. Length of stay ranged from 1-5 days, and all patients managed to swallow by day 2.

Conclusion

This is an audit showcasing the preliminary experience using TORS for OSA at our tertiary referral centre, building on work by previous surgeons. Initial results are promising in curing patients of their refractory disease.

Transoral Robotic Surgery (TORS) in the management of oropharyngeal cancer: Experience from the Royal Derby Hospital

Poster

Mr. Omar Breik¹, Mr. Sean Mortimore¹, Mr. David Laugharne¹

1. Royal Derby Hospital

Aim

Transoral robotic surgery (TORS) is an exciting modality of treatment for the management of head and neck cancers. This paper aims to present our experiences with TORS in a combined OMFS and ENT service at the Royal Derby Hospital. We present our protocol and changes that have been made to respond to challenges encountered when introducing TORS.

Method

Retrospective review of our cases treated at the Royal Derby Hospital from Jan 2015-January 2019. Data collected included patient demographics, diagnosis, indication for TORS, staging, procedures performed, length of admission, swallowing and oral intake, complications, margins, adjuvant treatment provided and follow up.

Results

61 patients underwent TORS head and neck procedures at RDH. 77% for malignant disease. Mean follow-up was 20.3 months (range 3-47months). 36% were for diagnosis of unknown primary, 62% for primary resection and 2% salvage. Among those performed for unknown primary, 50% confirmed primary tumour. Among the primary resection cases, 70% of cases were tonsillar primary. Positive margins were encountered in 25% of cases, all of which (apart from one) underwent a further re-excision with no malignancy identified. Overall, only 53.5% had adjuvant treatment for extracapsular spread or >N2b disease. 73% had adjuvant irradiation to neck only. Only 5 complications were encountered– 1 mortality, 1 tongue oedema requiring tracheostomy and 3 cases of post-operative bleeding. Swallowing outcomes were good for all patients within 3 months of treatment. There were no cases of locoregional recurrence, but 2 cases of distant metastasis in the follow up period.

Conclusion

Development of our management protocol has led to safe provision of TORS in our hospital with few complications and good oncologic outcomes. Complications have significantly reduced with improved experience with the procedure.

Further long term research is needed to cement the role of TORS as an alternative to morbid open access surgery, chemoradiotherapy, and improving management of salvage oropharyngeal cancers

Tube feeding practice during radical radiotherapy for head and neck malignancy in a London cancer centre

Poster

*Ms. Erin Suttie¹, Ms. Mary Mcclenaghan¹, Ms. Emma Gilbert¹, Mrs. Pippa Mather¹, Dr. Mary Lei¹,
Dr. Teresa Guerrero Urbano¹, Dr. Andriana Michaelidou¹*

1. Guy's and St Thomas' NHS Foundation Trust

Aim

Controversies remain regarding tube feeding (TF) routes and optimal timing for initiation of feeding during primary radiotherapy (+/- chemotherapy) for head and neck cancer (HNC). Advancements in radiotherapy (RT) such as the introduction of intensity-modulated RT as well as a changing HNC population, have changed the landscape further. The aim of this review was to identify trends in TF at a London cancer centre to support the development of a RT feeding pathway for HNC patients. This review looks at patients across all tumour stages undergoing radical primary RT treatment, with or without chemotherapy.

Method

Data was collected retrospectively for consecutively treated patients over a 2 year period (January 2016 – December 2017). All patients receiving primary radical RT (+/- chemotherapy) for a HNC malignancy (stage I-IV) were included. The review excluded patients undergoing post-operative RT, palliative RT or those offered primary RT who were unfit for surgery (suboptimal treatment). A total of 193 patients were identified. Data collected included: tube type (nasal, gastrostomy or no tube), timing of feed initiation, duration of feeding and reason for tube removal. For patients who did not have a tube sited, additional data was collected on whether TF had been recommended by the dietitian at any point during their treatment.

Results

100 patients (52%) required TF. TF was indicated for a further 10%, however was not initiated.

63 patients had nasal tubes, while 37 had gastrostomies. Table 1 shows tube type by site/stage.

Patients with gastrostomies had a higher incidence of TF prior to RT (19%) versus nasal tubes (2%), and had a longer duration of TF. The most common time for initiating feeding was week 3 of RT for gastrostomies versus week 5 for nasal tubes. Table 2 shows duration of TF by tube type.

Reason for tube removal: adequate oral intake (47%), dislodgement (22%), died/remained in situ (26%), patient decision against advice (5%). Of dislodgements, 73% were nasal tubes and 50% declined reinsertion despite suboptimal intake.

Conclusion

Despite paradigm shifts in HNC, TF remains as important as ever in maintaining or improving the nutritional status of patients. Our data suggests at least 61% of patients undergoing primary radical RT are indicated for TF. Further evaluation of timing and duration of feeding will help to inform a radiotherapy TF pathway including site and stage specific pre-treatment counselling for patients.

The current approach at this tertiary cancer centre favours a reactive nasogastric approach, however further analysis of the data may support earlier placement of gastrostomy for specific tumour sites and stage, based on length of TF.

Table 1: Tube type by tumour site and stage				
Tumour Site	Total	No Tube	Nasal	Gastrostomy
Oropharynx	100	39 (39%)	40 (40%)	21 (21%)
Stage I	1	1	0	0
Stage II	4	4	0	0
Stage III	5	2	3	0
Stage IVA	86	31	36	19
Stage IVB	4	1	1	2
Nasopharynx	14	9 (64%)	5 (36%)	0 (0%)
Stage I	4	3	1	0
Stage II	3	2	1	0
Stage III	3	2	1	0
Stage IVA	3	2	1	0
Stage IVB	1	0	1	0
Hypopharynx	20	3 (15%)	8 (40%)	9 (45%)
Stage I	1	0	1	0
Stage II	2	1	0	1
Stage III	5	1	1	3
Stage IVA	12	1	6	5
Stage IVB	0	0	0	0
Larynx	49	32 (65%)	10 (20%)	7 (14%)
Stage I	16	15	1	0
Stage II	10	8	2	0
Stage III	18	7	5	6
Stage IVA	5	2	2	1
Stage IVB	0	0	0	0
Nasal Cavity/Sinus	10	10 (100%)	0 (0%)	0 (0%)

Table 1.png

Table 2: Duration of tube feeding by tube type (all sites/stages)		
Duration of tube feeding	Nasal Tubes	Gastrostomies
0-3 months	59%	19%
3-12 months	31%	46%
>12 months	10%	35%

Table 2.png

UK Thyroid MDT: A National Survey of Services

Poster

Mr. Robert Hone¹, Mr. Jeremy Davis²

1. Queen Victoria Hospital NHS Foundation Trust, 2. Medway NHS Trust

Aim

The National Cancer Peer Review Programme has released guidance for Network Site Specific Groups (NSSG's) on head and neck cancer services including thyroid cancer. This document provides guidelines on thyroid multidisciplinary team (MDT) meetings. Our aim was to assess the current provision of thyroid services in the United Kingdom

Method

A freedom of information act questionnaire was sent to 175 NHS trusts across the UK. Information requested included MDT location, frequency, its association with the head and neck MDT, core membership, surgeons' subspecialty, their association with the MDT, the number of procedures performed per annum and their involvement with the National Audit by British Association of Endocrine and Thyroid Surgeons (BAETS).

Results

152 trusts responded with 138 complete questionnaires. There were 297 surgeons in our cohort who undertake thyroid surgery of which 65% are otolaryngologists. Surgeons perform an average of 35 thyroid procedures per annum and 60% contribute to BAETS. Information was returned for 45 MDT's. 98% discuss all high risk pre-operative patients with 100% discussing confirmed cancer, however only 69% discuss all the intermediate risk group pre-operatively with 7% not discussing any routinely. MDT's are predominantly standalone thyroid meetings (62%) and most are held weekly (60%). There were significant variations in MDT core membership.

Conclusion

Variations in services are understandable however there should be compliance with guidelines on core membership and broad alignment between different MDT's with clearer guidance on thyroid MDT frequency. The BAETS audit is compulsory for surgeons undertaking regular thyroid surgery and should be audited locally by individual MDT's as part of their annual review.

Using Experience-Based Co-Design (EBCD) to enhance pre-treatment dysphagia services for patients with head and neck cancer (HNC) being treated with chemoradiation.

Poster

Mrs. Grainne Brady¹, Prof. Chris Nutting¹, Dr. Justin Roe¹

1. The Royal Marsden NHS Foundation Trust

Aim

In our experience, the purpose of pre-treatment speech-language therapy (SLT) consultations may not be well understood by patients and may be deprioritised. Recent literature has highlighted that head and neck cancer (HNC) patients have varying information needs prior to starting treatment (Brockbank et al 2015). In addition, studies continue to explore the benefits of prophylactic swallowing exercise prescriptions (Perry et al 2017) with adherence being a frequently cited challenge in clinical trials (Patterson et al 2016). The aim of this study was to review and improve the SLT pre-treatment pathway for HNC patients undergoing chemoradiotherapy using Experience-Based Co-Design (EBCD) methodology (Robert et al 2015).

Method

Using EBCD methodology, patients and staff members were recruited to take part in in-depth, one to one interviews. Staff interviews were audio recorded and analysed. Patient interviews were video recorded, analysed and edited down to a single, 30 minute video. Patient and staff events were undertaken thereafter. At the patient event, the video recording was shown and an emotional mapping exercise was undertaken. Patient priorities were agreed and recorded. At the staff event key themes from the interviews were discussed and priority areas for change were identified. The project culminated in a joint patient and staff event to agree areas for change and develop task and finish groups. Please see figure 1 for EBCD process.

Results

Seven patients and seven staff members participated in the project. Patients had undergone radical (chemo)radiotherapy for head and neck cancer. Staff members included a radiation oncologist, two clinical nurse specialists, two head and neck dietitians and two speech-language pathologists. Both patients and staff reported that the pre-treatment clinic is a positive experience however highlighted a number of areas for improvement. See table 1 for themes generated from interview data for both patients and staff. Patients and staff worked together at the joint event to agree on priority areas for change and task and finish co-design groups were initiated. See table 2 for agreed areas for change. These changes are currently ongoing at our institution.

Conclusion

We have worked in partnership with patients and staff to ensure that we can deliver pre-treatment dysphagia services in a co-designed and co-produced format. Through the use of EBCD rich insights have been gained into the barriers and facilitators to a positive patient and staff experience. This project will ensure our service is accessible and meets our patients' individual and varied needs.

Reference (If applicable)

Brockbank, S., Miller, N., Owen, S. and Patterson, J.M., 2015. Pretreatment information on dysphagia: exploring the views of head and neck cancer patients. *Journal of pain and symptom management*, 49(1), pp.89-97.

Patterson, J.M., Brady, G.C. and Roe, J.W., 2016. Research into the prevention and rehabilitation of dysphagia in head and neck cancer: a UK perspective. *Current opinion in otolaryngology & head and neck surgery*, 24(3),

pp.208-214.

Perry, A.R. and Cotton, S.M., 2017. Swallowing Exercises to Prevent Dysphagia Post-Treatment in People Treated for Advanced Stage Head and Neck Cancer; Addressing the Research Shortfalls. *ClinOncol*, 2, p.1324.

Robert, G., Cornwell, J., Locock, L., Purushotham, A., Sturmey, G. and Gager, M., 2015. Patients and staff as code-signers of healthcare services. *Bmj*, 350, p.g7714.

Point of Care Foundation 2018. EBCD toolkit. Available at https://www.pointofcarefoundation.org.uk/resource/experience-based-co-design-ebcd-toolkit/?gclid=EAIaIQobChMivZy-4Z783wIVEETTCh3qmwSYEAAYASAAEgIz7PD_BwE Accessed: 21.1.19.



Table 1: Interview themes

Staff interview themes	Patient interview themes
Concern about patient burden	Professionalism and team working
Flexible appointments	Flexible appointments
Rationale for SLT appointment	Rationale for SLT appointment
SLT branding	SLT branding
Joint appointments with MDT members	Joint appointments with MDT members
Forms of information provision	Forms of information provision
Consistency/ MDT shared information	Consistency/ MDT shared information
Exercises important	Exercises important

Figure 1.png

Table 1.jpg

Table 2: Agreed co-design/ co-production areas

Co-design tasks/ areas for improvement
1. Revised information methods/ content, branded for patient/ relatives
2. Patient experience video for patients starting treatment
3. Information on timelines on onset of timelines and recovery
4. Buddy system for patient support
5. Flexibility of appointments
6. Seamless transfer of care between institutions
7. SLT rebranding

Table 2.jpg

Vismodegib for locally advanced basal cell carcinoma – a case supporting prescription before scalpel.

Poster

Mr. Peter Glen¹, Dr. David Farrugia², Mr. Jerry Farrier², Dr. Paul Craig²

1. Gloucestershire Royal Hospital, 2. Gloucester Royal Hospital

Aim

Cutaneous basal cell carcinoma (BCC) is the most common malignancy within the human population typically affecting the head and neck region.

The Hedgehog (Hh) signalling pathway, is an evolutionarily conserved pathway of signal transmission from the cell membrane to the nucleus that is critical for normal embryonic development[2]. In adults, the Hh pathway is mostly inactive, but can be activated when called upon, for example in wound healing. The loss of regulation in the signalling pathway is associated with the development of BCC.

Most BCC's are amenable to simple local therapies. However, advanced tumours have traditionally required ablative and disfiguring surgical procedures. We report a case of a locally advanced BCC completely treated by the Hh signalling pathway inhibitor Vismodegib, negating the need for orbital exenteration.

The aim of this case report is to highlight the scope of novel medical therapies over traditional surgical options.

Method

A 71 year old lady presented with a 20 year history of a slowly enlarging mass to the right eye. Past medical history included previous myocardial infarction and stage 3b chronic kidney disease. She was a non-smoker and non-drinker.

Clinical examination showed a 5x4cm ulcerated lesion to the right eyebrow. The globe was displaced inferiorly and eye movements were restricted in upper and lateral gaze. Diplopia was associated with right lateral gaze. Histopathology confirmed clinical suspicions of BCC. Computed tomography (CT) confirmed an ulcerated skin lesion causing irregular erosion of the outer cortex of the skull vault. The inferior margin of the tumour was seen to encroach into the eye displacing the globe downwards and laterally.

The patient did not want ablative surgery and following MDT decision, oral Vismodegib was recommended with the aim of downsizing the tumour prior to surgical resection.

Results

The patient was commenced on Vismodegib immunotherapy 150mg orally, once daily in 28 day cycles. She had a good response with clinical regression being seen after the first cycle, and therefore proceeded to consecutive cycles. An interval CT after the third cycle confirmed a significant reduction in tumour size and no evidence of ulcerated skin.

The patient tolerated the treatment well but reported grade 1 fatigue during the sixth cycle. A second interval CT at this time demonstrated further tumour regression with unchanged appearances of the skull vault.

Grade 1 adverse reactions were reported at cycle nine mainly in the form of muscle cramps and loss of taste. Clinically the tumour had resolved but the skin was circumscribing and scarred. Five mapping biopsies taken at this time did not show any evidence of residual tumour. She currently remains in remission on a tailored long term Vismodegib drug regimen.

Conclusion

Locally advanced BCC's of the head and neck have traditionally required ablative surgical procedures or radiotherapy. In cases where critical organs may be affected by the primary radiotherapy field, other therapies

should be considered. Vismodegib is a first-in-class, oral, selective Hedgehog pathway inhibitor, which has been significantly proven to downsize tumour in 43% and prolong median progression-free survival durations of 9.5 months (IQR 7.2 – 12.8) in patients with locally advanced BCC[2,3].

Clinical trials are ongoing but an interim analysis in the SafeTy Events in VIsmodEgib (STEVE) study shows promising results. However, Vismodegib is a daily tablet with considerable cost implications (£6,285.00[4] per 28 day cycle). Furthermore recent NICE guidance does not recommend Vismodegib for advanced or metastatic BCC's not amenable to surgery or radiotherapy, and recommend best supportive care in these cases.[5]

Nevertheless, this case clearly demonstrates the possibilities of targeted immunotherapy and a potential paradigm shift in treatment.

Reference (If applicable)

Skoda A, Simovic D, Karin V, Kardum V, Vranic S, Serman L. The role of the Hedgehog signaling pathway in cancer: a comprehensive review. *Bosn J Basic Med Sci.* 2018; 18(1): 8-20.

1. LoRusso PM, Rudin CM, Reddy JC, et al: Phase I trial of hedgehog pathway inhibitor GDC-0449 in patients with refractory, locally-advanced or metastatic solid tumors. *Clin Cancer Res.* 2011; 17: pp. 2502-2511.
2. Sekulic A, Migden MR, Oro AE, et al: Efficacy and safety of vismodegib in advanced basal-cell carcinoma. *N Engl J Med.* 2012; 366: pp. 2171-2179.
3. Joint Formulary Committee. *British National Formulary.* 72 ed. London: BMJ Group and Pharmaceutical Press; 2017.
4. National Institute for Health and Care Excellence. Vismodegib for treating basal cell carcinoma; technology appraisal guidance. Nov 2017. Available at: <https://www.nice.org.uk/guidance/ta489/resources/vismodegib-for-treating-basal-cell-carcinoma-pdf-82605034887109> [Accessed 02/01/2019].

Voice outcomes after transoral laser excision of T1b glottic cancers

Poster

Ms. Elizabeth Kershaw¹, Mr. Jemy Jose¹

1. Castle Hill Hospital

Aim

Transoral laser resection is the preferred mode of treatment for early glottic tumours. However, in T1b glottic cancers, since part of both cords need to be removed there is still preference in sending these patients for radiotherapy in many centres. There is a paucity of information in the literature specifically looking at oncological and voice outcomes in T1b patients. Oncological outcomes of T1b SCC treated with transoral laser microsurgery are shown to be at least equivalent to radiation¹.

Method

Over a 10 year period, 20 patients had T1bN0M0 glottic squamous cell carcinoma treated by transoral laser resection. The patients were sent a modified Voice Handicap Index (VHI) questionnaire and asked to complete it anonymously. They were 6 VHI questions and a separate set of questions regarding whether they would have this treatment again.

Results

19 of the 20 patients agreed that they would have the procedure again. 45% of patients had normal or mild problems in using the telephone, whilst 55% felt they did not have to strain to produce a voice. Of the 11 patients who were in a job, 8 did not find that their voice interfered with their work. The major problem these patients reported was in speaking loudly, where only 35% had none or mild problems.

Conclusion

In patients with T1b tumours, transoral laser resection can still be offered as a treatment choice after fully informing the patients about the realistic expectations of voice quality.

Reference (If applicable)

1. Treatment of T1b glottic SCC: laser vs. radiation—a Canadian multicenter study. Taylor SM et al. Otolaryngol Head Neck Surg. 2013 Mar 19;42:22

YouTube™ as a source of information for patients undergoing laryngectomy

Poster

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1. University Hospital Southampton NHS Foundation Trust, 2. Sheffield Teaching Hospitals NHS Foundation Trust, 3. University of Leicester, 4. University of Sheffield

Aim

Laryngeal cancer is diagnosed in over 150,000 patients worldwide each year. Total laryngectomy and the formation of an end tracheal stoma is often required in patients with advanced disease but has life-altering consequences for patients. Resources on the internet are commonly accessed by patients as a source of healthcare information. This supplements information provided by medical professionals and contributes to decision-making. One such resource is YouTube™, the most popular video-hosting website. Concern exists, however, regarding its unregulated nature and the ability of patients to discern reliability of the information presented. The aims of this study were to assess the thematic content of the most viewed videos on YouTube™ concerning laryngectomy for laryngeal cancer and to evaluate user response to these videos.

Method

A search of YouTube™ was performed using pre-defined search terms and data extracted from videos with >100 views. Baseline demographic data, including upload source, number of views, likes, dislikes and comments, were collected to characterise video popularity. The content of the first ten comments for each video was also analysed. User response was compared between upload source using Kruskal-Wallis testing. Inductive thematic analysis of video content was performed. A purposive sample of videos was transcribed and interrogated to generate emergent themes until data saturation was reached. Overarching themes and subthemes were compiled collaboratively between authors.

Results

A total of 96 videos were identified, 16 uploaded by patients and relatives, 24 by individual healthcare professionals and 56 by professional healthcare institutions. There were 1,214,503 views across all videos. There were no significant differences in the number of views, likes or dislikes between upload sources. Three overarching themes were identified, namely description of the perioperative journey, description of life after laryngectomy and educational information aimed at healthcare professionals. Seventeen subthemes were identified including descriptions of the pre-, intra- and post-operative periods and the effect of a stoma on communication, breathing and feeding. After miscellaneous and irrelevant comments had been removed, those remaining were most frequently characterised as offering praise.

Conclusion

YouTube™ has been shown to be a popular platform for sharing information about laryngectomy with all upload sources demonstrating a positive response from users. There is a lack of data concerning the quality of this information, however, and future work should focus on assessing this. Trusted institutions could make use of this medium to disseminate high quality information to their patients, and to the wider public.

Please note the work published in this booklet has been submitted by the individual authors and therefore Aesculap Academia cannot accept any responsibility for the content.

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