

**BRITISH ASSOCIATION OF HEAD & NECK ONCOLOGISTS**

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# **BAHNO Annual Scientific Meeting**

*Royal College of Physicians, London*

*Friday 24<sup>th</sup> April 2014*

***PROGRAMME***

***ABSTRACTS***

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## Scientific Meeting

Royal College of Physicians, London

Friday 24th April 2015

### *'Outcomes and Data in Head and Neck Surgery'*

- |               |  |
|---------------|--|
| 08.00 - 08.45 | Registration, Coffee, Trade Display, Poster display  |
| 08.45 - 08.50 | Welcome by the President   |
| 08.50 - 09.00 | DAHNO Update   |
| 09.00 - 09.20 | 'Surgery, Transparency and the NHS' – Prof Ben Bridgewater   |
| 09.20 - 10.20 | Free papers – Session one  |
| 10.20 - 10.40 | NCRI Update – Prof Hisham Mehanna  |
| 10.40 - 11.00 | Coffee, Trade Display, Poster display  |
| 11.00 - 11.05 | Introduction to the Blair Hesketh Lecture<br><i>President of the British Association of Head and Neck Oncologists</i>  |
| 11.05 - 11.50 | BAHNO Blair Hesketh Lecture<br><br>Professor Vincent Gregoire – "The Optimal Management of Recurrent Cancer of the Head and Neck"  |
| 12.00 - 12.45 | Case based Panel discussion: <i>Management of Recurrence in Head and Neck</i><br><br><i>Chair – Prof Vincent Gregoire</i><br><i>Panellists – Prof Hisham Mehanna, Ms Sarah Orr Dr Victor Pace, Dr Mehmet Sen</i>   |
| 12.45 - 13.30 | Lunch, Trade Display, Poster display   |
| 13.30 - 14.00 | AGM  |
| 14.00 - 15.15 | Free papers - Session Two  |
| 15.15 - 15.45 | Tea, Trade Display, Poster display   |
| 15.45 - 17.00 | Debate:-<br><i>'This house believes that publication of clinician level outcome data is of proven benefit in improving the quality of patient care in Head and Neck Cancer'</i><br><br><i>For: Proposed names</i><br><i>Mr Ian Martin</i><br><i>Prof Tony Narula</i><br><br><i>Against: Proposed names</i><br><i>Ms Anita Hazari</i><br><i>Mr David Chadwick</i> |
| 17.00         | Closing remarks by the President of BAHNO  |

## **ORAL PRESENTATIONS**

### **Session one:**

#### **Chair persons: Bernie Foran, Jim McCaul**

**09:20 Cytological Presentation of Thyroid Carcinoma – The impact of MDT Centralization**

*Ricard Simo, Iain Nixon, Jean-Pierre Jeannon, Karan Kapoor, Ash Chandra, Muffadal Moonin, Edward Odell, Rose Ngu*

**09:30 Trans-oral robotic surgery for head and neck cancer: the first UK experience**

*Mark Puvanendran, Jai Manickavasagam, Ben Cosway, David Meikle, Vinidh Paleri*

**09:40 The Scottish Audit of Head and Neck Cancer – 5 and 12-year survival**

*Catriona Douglas, Shirley-Anne Savage, Kate Ingarfield, David I Conway, Alex D McMahon, Kenneth Mackenzie*

**09:50 Sentinel lymph node biopsy for head and neck melanoma**

*Daniel Saleh, Waqas Din, Jonathan Dunne, Tomas O'Neill, Paul Stanley, Paolo Matteucci, Sparks*

**10:00 Early experience with the Low Level Laser Therapy (LLLT) in the Management of Oral Mucositis in Head and Neck Cancer Patients.**

*Michael Nugent, Gill Watson, Richard Welbury*

**10:10 Neck dissection in primary parotid carcinoma**

*Anand Goomany, Sanjai Sood*

## **Session two:**

### **Chair persons: Cyrus Kerawala, Sat Parmar**

**14:00** A Multicentre study determining the prognostic value of lymph node ratio in advanced laryngeal cancer

*Claudia Nogueira, S. Kaushal, M Puruvendran, R. Vijayan, S. Mortimore, J. Sharp, V Paleri, M De*

**14:10** Comparison of CTCAE version 3 and 4 in assessing oral mucositis for oral cavity and oropharyngeal carcinoma:

*Mitchell Hickman, James Good, Paul Sanghera, Andrew Hartley*

**14:20** Title: RegenVOX: phase I/II clinical trial of stem-cell based tissue engineered laryngeal reconstruction

*Hayley Herbert, Martin Birchall, Mark Lowdell, Carla Cavalho, Chris Mason*

**14:30** A Decade of Head and Neck Surgery in Ghana. What can it teach us ?

*David Howard*

**14:40** Head & Neck Cancer Reporting: How representative is it?

*Ekpemi Irune, Reza Nouraei, Chris Bem, Alasdair Mace, Peter Clarke*

**14:50** A stratified national analysis of the outcome of major head and neck cancer surgery

*Reza Nouraei, Peter Clarke, Steve Middleton, Khalid Ghufoor, Alasdair Mace, Martin Birchall, Navid Jallali, Paul Aylin, Ara Darzi*

**15:00** Targeting the insulin-like growth factor receptor in head and neck cancer

*Oliver Dale, Ketan Shah, Stuart Winter, Valentine Macaulay*

## 09:20 Cytological Presentation of Thyroid Carcinoma – The impact of MDT Centralization

Ricard Simo, Iain Nixon, Jean-Pierre Jeannon, Karan Kapoor, Ash Chandra, Muffadal Moonin, Edward Odell, Rose Ngu

**Introduction:** For many years, a significant number of thyroid carcinomas were diagnosed retrospectively on histopathology specimens or required staged procedures due to unsatisfactory cytological diagnosis. The introduction of ultrasound guided FNAC has reduced the number of staged procedures but numbers remain high. The aim of this study is to compare two retrospective cohorts of patients diagnosed of thyroid cancer before and after the centralization of the thyroid multidisciplinary team (MDT) and assess its impact.

**Methods:** A retrospective review of 187 consecutive patients with the primary diagnosis of thyroid cancer were collected and analyzed. The first cohort of 83 patients were diagnosed from 2001 to 2007 and the second with 104 patients from 2008 to 2014. The cytological classification from the BTA was used. Patients referred from other units with the established diagnosis of thyroid cancer and patients with recurrent disease were excluded.

**Results:** In the first cohort the number of Thy 1 was 11 (13%) and in the second 1 (1%) and this difference is significant ( $p=0.001$ ). The overall distribution of THY categories was significantly different between the first and second cohort, (THY 2, 1% versus 5%, THY3 31% versus 26%, THY4 13% versus 12%, THY5 41% versus 57%,  $p=0.004$ )

**Conclusions:** With the establishment of a central Thyroid MDT and a single dedicated team performing and reviewing USS guided FNACs, the number of thyroid cancer primary up front diagnoses has significantly increased and the number of non-diagnostic samples has significantly decreased.

## **09:30 Trans-oral robotic surgery for head and neck cancer: the first UK experience**

*Mark Puvanendran, Jai Manickavasagam, Ben Cosway, David Meikle, Vinidh Paleri*

### **Introduction**

*Trans-Oral Robotic Surgery (TORS) is a relatively new procedure. We report on the results from one of the first centres in the country to offer TORS in a multidisciplinary setting. The advantages of TORS include excellent 3-dimensional vision and enhanced access to the oropharynx, including the tongue base. Smaller studies suggest that TORS provides excellent survival rates and functional outcomes relative to other organ preservation approaches.*

### **Methods**

*Prospective cohort study of 50 patients undergoing TORS from March 2013. Outcomes considered; mortality, duration of surgery, length of stay, surgical margins, and functional outcomes.*

### **Results**

*The 50 patients ranged in age from 35-78 years (mean 63), 16 female and 34 male. Histology was composed of; squamous cell carcinoma (44) (23 HPV +ve), other malignant(4) and benign(2).*

*Tumour sites consisted of oropharynx(37), supraglottis(9) and hypopharynx(3); patients underwent lateral oropharyngectomy(16), tongue base resection(14), supraglottic laryngectomy(9), posterior pharyngeal wall resection(3) and diagnostic mucosectomy(7).*

*This series comprised of T1 to T4 radio-recurrent cases with nodal status ranging from N0 to N2C. The mean set-up time was 18(+/- 8)minutes and operating time was 160(+/-8)minutes, including neck dissections.*

*No major intraoperative complications were observed; one procedure was abandoned due to poor access, another immunosuppressed patient developed a fatal pneumonia. Mean hospital stay was 9.7(+/-12.9)days. Clear margins were attained in 87% of cases, 7 patients received further treatment, due to a combination of robotic margins and extra capsular spread.*

### **Conclusions**

*TORS is a valuable addition to the armamentarium of the head and neck surgeon for carefully selected tumours.*

## **09:40 The Scottish Audit of Head and Neck Cancer – 5 and 12-year survival**

*Catriona Douglas, Shirley-Anne Savage, Kate Ingarfield, David I Conway, Alex D McMahon, Kenneth Mackenzie*

### *Introduction*

*Long term outcomes for head and neck cancer patients are largely unknown. The aim of this paper was to report 5 and 12 year survival from a national clinical cohort of patients with head and neck cancer*

### *Methods*

*The Scottish Audit of Head and Neck Cancer was carried out between September 1999 and August 2001. During this two-year period data were recorded prospectively on all new head and neck cancer patients diagnosed in Scotland (n=1910 incident cases, quality assurance was carried out on 10% of the data by ISD Scotland and was found to be accurate). In September 2013, this cohort was linked to national mortality record data and survival was computed. Preliminary Kaplan Meier survival analysis was carried out using SPSS.*

### *Results*

*The preliminary data shows that the 5-year and 12-year all cause survival was 44.7% and 25.1% respectively. The 5-year and 12-year cancer specific survival was 50.5% and 36.3% respectively. The 5-year and 12-year head and neck specific survival was 56.8% and 49.6% respectively.*

### *Conclusions*

*This preliminary data provide unique long-term information on the survival of head and neck cancer patients. This is the first report of a cohort this size with survival data over 12 years. Further analysis will focus on patient, tumour (subsite) and treatment factors associated with long-term survival.*

## **09:50 Sentinel lymph node biopsy for head and neck melanoma**

*Daniel Saleh, Waqas Din, Jonathan Dunne, Tomas O'Neill, Paul Stanley, Paolo Matteucci, Sparks*

### **Introduction and aims**

*Sentinel node biopsy (SNB) for head and neck melanoma remains a controversial practice. Variable lymphatic drainage, difficulty in harvest and sentinel nodes (SN) mapped to the parotid gland are said to pose specific challenges for accuracy. We sought to appraise our experience in relation to this.*

### **Material and Methods**

*Consecutive cases of head and neck melanoma between 2000-2010 were analysed from our prospectively maintained database.*

### **Results**

*Ninety-two patients had HN SNB; 89 SNBs mapped to head and neck nodes, 18 (20%) of whom had positive HN SNB. Eight elected to have selective completion node dissection (CLND). Positive SNB was significantly associated with recurrence ( $p=0.009$ ). None in the CLND group follow-up recurred regionally but did have local and distant recurrence.*

*In the positive SNB observation group 1/10 recurred regionally and had CLND.*

*In the SNB negative group 13 (14%) recurred, three were regional, giving a false omission rate of 4.4%. One patients required a radical neck dissection.*

*Parotid SNBs were seen in 26% (24/92). No facial nerve injury, salivary leak or vascular injury was reported.*

### **Conclusion**

*Our experience shows HN SNB is reliable compared to other nodal basins. The false omission rate correlates with large series for all basins, suggesting accuracy. The parotid gland doesn't compromise accuracy at the cost of morbidity and has comparable outcomes to non-parotid sites. Although a small sub-group, selective CLND seemed to provide regional disease control.*



## **10:00 Early experience with the Low Level Laser Therapy (LLLT) in the Management of Oral Mucositis in Head and Neck Cancer Patients.**

*Michael Nugent, Gill Watson, Richard Welbury*

### *Introduction*

*Oral Mucositis is a common, debilitating complication of chemoradiotherapy (CRT) or radiotherapy (RT) for head and neck cancer. Many patients struggle with maintaining oral intake, require tube feeding and some require admission. Most recent Multinational Association of Supportive Care In Cancer (MASCC) guidelines suggest the use of LLLT in the management of this complication. However, LLLT has yet to find popularity in the UK. The Sunderland Head and Neck MDT began its LLLT service in September 2014, and we present our early findings.*

### *Materials and Methods*

*Patients were treated using the Diobeam 830 laser, using the manufacturers protocol. Using a proforma, we recorded patients age, diagnosis and treatment. Mucositis was graded on the WHO system. Pain was assessed using a visual analogue scale. The total energy dose delivered at each session was recorded. We also recorded some patient comments and feedback.*

### *Results*

*Sixteen patients were included. Mean age 60yrs. Mean mucositis score was 2.6. Mean pretreatment pain score was 67. Mean post treatment pain score was 20. A number of patients reported being able to eat shortly after LLLT, having been unable to do so before.*

### *Conclusions*

*Patient reported pain scores were significantly reduced following LLLT. Mucositis appeared to resolve more rapidly than would be expected. Our initial experience with LLLT is encouraging and consistent with other reports in the literature. In future we hope to provide prophylactic LLLT, as this is also well described. We believe that this therapy warrants further investigation.*

## 10:10 Neck dissection in primary parotid carcinoma

Anand Goomany, Sanjai Sood

**Introduction:** Malignant parotid disease is relatively rare and challenging to manage due to the diverse histological and biological behaviour of these tumours. The combination of these two factors has led to difficulties in establishing evidence based treatment, especially with respect to the clinically N0 neck and the necessity for elective lymph node dissection. This systematic review examines the role of elective neck dissection in primary parotid carcinoma in the clinically N0 neck.

**Method:** A systematic review of articles identified via searching PubMed, MEDLINE and EMBASE between 1950 and 2015. Inclusion criteria comprised case series of adults (over 16 years of age) with greater than 10 cases of malignant parotid tumours including details of staging and treatment. No language restrictions were placed on the search. Two reviewers independently screened the abstracts for relevance and their suitability for inclusion. The reference section of relevant articles was reviewed to further identify any relevant studies.

**Results:** In total 21 studies were included in the review. All studies were retrospective case series between 1967 and 2014. Of eligible populations, 1702 patients were clinically N0. Of these, 998 underwent elective lymph node dissection. Three hundred and fourteen (31.5%) patients had occult lymph node metastases.

**Conclusion:** There is a high incidence of occult lymph node metastases in clinically N0 patients. Therefore, routine elective neck dissection should be performed in all patients with primary carcinoma of the parotid gland.

## **14:00 A Multicentre study determining the prognostic value of lymph node ratio in advanced laryngeal cancer**

*Claudia Nogueira, S. Kaushal, M Puruvendran, R. Vijayan, S. Mortimore, J. Sharp, V Paleri, M De*

### *Introduction*

*Laryngeal cancer is the second most common malignant tumour of the head and neck. Many prognostic factors have been linked to the survival rate of these patients. The objective of this retrospective study was to determine the prognostic value of lymph node ratio (LNR) in predicting disease-specific survival (DSS).*

### *Methods*

*A multicentre (Royal Derby and Freeman Hospital) retrospective study was performed. The medical records of 122 consecutive patients with advanced (T3/T4) laryngeal SCC treated with primary laryngectomy and neck dissection followed by radiotherapy between 1994 and 2014 were included. The Kaplan-Meier method was used to estimate 5 year DSS. The prognostic value of the lymph node ratio, defined as the ratio of the number of metastatic lymph nodes over the total number of resected lymph nodes, was assessed.*

### *Results*

*The overall 5 year survival rate using the Kaplan-Meier method was 40.3% for glottic cancer and 33.2% for supraglottic cancer. The 5-year survival rate significantly differed by LNR ( $\leq 0.1$ , 44%;  $>0.1$  15%; Log-rank  $p$  value  $< 0.001$  for glottic cancer;  $\leq 0.1$ , 38%;  $>0.1$ , 20%; Log-rank  $p$  value  $< 0.001$  for supraglottic cancer).*

### *Conclusions*

*Lymph node ratio is a significant prognostic factor for the survival of advanced laryngeal cancer patients and can serve a complimentary role to the TNM classification.*

## **14:10 Comparison of CTCAE version 3 and 4 in assessing oral mucositis for oral cavity and oropharyngeal carcinoma:**

*Mitchell Hickman, James Good, Paul Sanghera, Andrew Hartley*

### **Introduction:**

*CTCAE version 3 is an observation based grading system for oral mucositis whereas version 4 is based on function and intervention. Although version 4 has been widely adopted in clinical trials there is limited data on its correlation with version 3 from which considerable radiobiological data has been derived and with which many radiation oncologists are more familiar.*

### **Methods:**

*Oral mucosal reactions of patients undergoing chemoradiation or radiation alone for oral or oropharyngeal cancer were graded by three radiation oncologists in weekly on treatment and post treatment clinics. CTCAE version 3 and 4 mucositis grading and patient factors were recorded prospectively.*

### **Results:**

*120 measurements were recorded for 20 patients. Grading from version 3 and version 4 were equal in 61 measurements. In the 59 measurements where version 3 and version 4 were not equal, discrepancies were seen in: Week 0-4 = 23/50 (46%); Week 5-8 = 21/47 (45%); > week 8 = 15/23 (65%) ( $p=0.23$ ); patients receiving cisplatin = 20/46 (43%) or cetuximab = 10/11 (91%) ( $p=0.005$ ); patients > 70 years = 10/18 (56%) or < 50 years = 5/13 (38%) ( $p=0.08$ ).*

### **Conclusions:**

*Statistically significant discrepancies were seen when patients receiving cisplatin were compared with those receiving cetuximab and a trend towards significance was seen when patients under 50 were compared to those over 70. Further data will be presented at the meeting but these initial results suggest that functional/interventional based grading systems should be used with care in studies using cetuximab or in older patients.*

**14:20 Title: RegenVOX: phase I/II clinical trial of stem-cell based tissue engineered laryngeal reconstruction**

*Hayley Herbert, Martin Birchall, Mark Lowdell, Carla Cavalho, Chris Mason*

*IntroductionBackground: There are no satisfactory conventional solutions for patients with end-stage laryngeal stenosis, which can result from trauma or after cancer resection. This has profound impacts on quality of life, especially swallowing, breathing and talking.*

*Methods: Based on our 'first-in-human' successes with tracheal implants<sup>1,2</sup>, we developed an autologous stem cell and biologic scaffold based partial laryngeal implant to correct severe structural disorders.*

*Results: In preclinical studies, this was biocompatible in rats and safe and effective in pigs (human cells and scaffolds in immunosuppressed animals). We have developed robust processes for production of cells, scaffold, bioreactor and implant within our Good Manufacturing Practice (GMP) licensed cell therapy facility. Based on this work, we are recruiting to an MRC-funded phase I/IIa (safety and potential efficacy) clinical trial of customised stem cell based laryngeal implants in ten patients with severe laryngeal stenosis who have exhausted conventional therapeutic options, and with two years' follow-up.*

*Conclusions: The data leading up to the trial and the trial design itself will be presented. The results of this trial will provide the world's first clinical data on the safety and efficacy of this novel approach to head and neck reconstruction.*

## **14:30 A Decade of Head and Neck Surgery in Ghana.What can it teach us ?**

*David Howard*

### *Introduction.*

*This presentation will cover more than a decade of teaching and operating at the Korle-Bu hospital in Accra ,Ghana in the ENT,Max-Fax,Plastics and Neurosurgical Depts.*

### *Methods and Results*

*Brief details of the range and type of surgical procedures(in infants,children and adults),the progression of teaching,the establishment of a skills laboratory,and the progression of multidisciplinary working will be presented.Relevant to the overall theme of the 2015 BAHNO conference will be the presentation of follow up and outcomes of the patients.*

### *Conclusions*

*Our daily working as surgeons in the British NHS system and Private Practice can involve us in a hectic schedule which seems to make the important data gathering of outcome measures a considerable burden. Until recently follow-up of patients in Africa and many so-called "underdeveloped" countries was almost impossible.The mobile phone has changed that.Can we learn about data gathering from our colleagues in West Africa?*

## **14:40 Head & Neck Cancer Reporting: How representative is it?**

*Ekpemi Irune, Reza Nouraei, Chris Bem, Alasdair Mace, Peter Clarke*

### *Introduction:*

*Reporting clinical information and outcomes in Head and Neck Cancer (HNC) is executed using the National Head and Neck Cancer Comparative Audit otherwise known as DAHNO. We evaluate the robustness of this tool to deliver this sensitive information to the public on behalf of two NHS organisations.*

### *Methods:*

*We reviewed the HNC Multidisciplinary team outcomes of 100 patients between 2013 and 2014 each in Unit A and B. We evaluated the presence and accuracy of key clinical items by comparing DAHNO submission to clinical documentation. This included primary tumour site, WHO Performance Status, ACE-27 morbidity index and procedure code.*

### *Results:*

*In Unit A, Performance Status was unreported in 24 % of patients. There was a complete absence of ACE-27 morbidity scores in all 100 patients. Primary tumour site was reported inaccurately in 4 % of patients (4/100). The findings in the 100 patients of Unit B are also described.*

### *Conclusion:*

*There is an assumption on the part of the public that DAHNO reported data is exact. We have demonstrated that this is not necessarily the case. Current software, administrative processes and applications native to most MDTs duplicate data that already exists at best and can be inaccurate at worst. Some of this data is pertinent to contextualising outcomes, permitting case mix analysis and also inform resource allocation to HNC Units. The authors suggest a more integrated strategy, utilizing and upgrading already existing frameworks that allows relevant data to be independently, consistently and accurately reported.*

## **14:50 A stratified national analysis of the outcome of major head and neck cancer surgery**

*Reza Nouraei, Peter Clarke, Steve Middleton, Khalid Ghufoor, Alasdair Mace, Martin Birchall, Navid Jallali, Paul Aylin, Ara Darzi*

**Objectives:** *To undertake a national outcomes analysis of major head and neck cancer surgery in order to identify risk-factors for complications, mortality, and potential outcomes stratification metrics.*

**Methods:** *Surgical activity was extracted from Hospital Episode Statistics (HES) using a previously-validated informatics algorithm. Cancer sites, morbidities, deprivation, and details of surgery and complications were extracted. Logistic regression was used to identify independent risk-factors for complications and mortality.*

**Results:** *There were 17,623 major head and neck procedures between 2003 and 2013. Mean age was 63 and most cancers occurred between 55-64 (n=6042). The larynx (n=4591) and tongue (n=3334) were the commonest primary sites and hypertension (n=4467) and smoking (n=3308) were the commonest morbidities. Severe morbidities existed in 1961 patients. The commonest procedure was laryngectomy (n=4217), followed by mandibulectomy (n=3659) and oral glossectomy (n=3608). There were 13211 neck dissections, 8339 tracheostomies, and 11841 flap-based reconstructions. In-hospital mortality occurred in 609 patients (3.5%) and its independent risk-factors were age, morbidity, emergency major surgery, neck dissection, abdominal complications, major acute cardiovascular events, pneumonia and other respiratory complications, acute renal failure, sepsis, skin complications, haemorrhage, iatrogenic complications, and reconstructive failure. Occurrence of 2 of the "7+3" complications in the same patients increased mortality rate by >10-fold.*

**Conclusions:** *Death following head and neck surgery is associated with fixed risk-factors like age and morbidity burden, but also modifiable risks like emergency major surgery and specific medical and surgical complications like pneumonia and reconstructive failure. These findings contribute to a possible methodology for quality-assurance of surgical care.*



## 15:00 Targeting the insulin-like growth factor receptor in head and neck cancer

*Oliver Dale, Ketan Shah, Stuart Winter, Valentine Macaulay*

### *Background:*

*The insulin-like growth factor type 1 receptor (IGF-1R) plays an important role in cancer biology. IGF ligands bind to IGF-1R to induce cellular proliferation, promote cell survival and suppress apoptosis. High levels of IGF-1R have been reported in several types of cancer and are associated with reduced long-term survival.*

### *Methods:*

*IGF-1R expression in a tissue microarray containing cores from 357 HNSCCs was determined by immunohistochemistry. A panel of HNSCC cell lines was characterized by western blotting. Clonogenic assays were used to measure cell survival following treatment with the IGF-1R inhibitor BMS-754807. Pearson correlation analysis was performed to assess for correlations between protein expression and cell line phenotype. Associations were tested in an isogenic cell line model; HNSCC cells were transfected with mutant HRAS and the effect on sensitivity to IGF-1R inhibition determined.*

### *Results:*

*IGF-1R expression in HNSCC tissue was associated with adverse survival and HPV negative status ( $p < 0.001$ ). BMS-754807 caused a dose-dependent reduction in ligand-induced*

## **POSTER PRESENTATIONS:**

### **P1 Smoking cessation in head and neck cancer patients: a qualitative evaluation**

*Ameera Abdelrahim, June Jones, Janet Dunn, Hisham Mehanna*

### **P2 Updated global interim analysis and UK case studies from the international, open-label, multicentre STEVIE study of the hedgehog (Hh) pathway inhibitor vismodegib in patients with advanced basal cell carcinoma (BCC)**

*Sarah Jones, Jean-Jacques Grob, Brigitte Dréno, Thomas Jouary, Laurent Mortier, Paolo A. Ascierto, Nicole Basset-Seguin, Johan Hansson, Ruth Plummer, Axel Hauschild*

### **P6 Osteoradionecrosis – A preventable problem?**

*Nabeela Ahmed, Rahul Jayaram, Rabin KC Singh, Vinod Patel, Luke Cascarini, Mark McGurk*

### **P7 Quality of life (QoL) and patient reported outcome measures (PROMS) in radiologically N0 (rN0) necks treated by Sentinel Node Biopsy (SNB) or Elective Neck Dissection (END)**

*Nabeela Ahmed, Clare Schilling, Fran Ridout, Iain Hutchinson, Mark McGurk*

### **P8 Reconstruction of Pharyngo-laryngectomy defects using Antero-lateral Thigh Free Flap.**

*Safina Ali, Andrew Moore, Jean Pierre Jeannon, Richard Oakley, William Townley, Peter Roblin, Ricard Simo*

### **P9 Attitudes of health care providers towards online information about head and neck cancer.**

*Frans Banki, Aidan Searle, Steve Thomas, Andrea Waylen*

### **P10 Recalcitrant Radiotherapy induced Orocutaneous Fistula – The Role of Octreotide.**

*Thomas Barry, Raj Mamidela, John Hanratty, J G Smith*

### **P11 The Many Faces of Sarcoma; A Review of 10 Representative Cases Posing Diagnostic Challenges**

*Natasha Berridge, Leandros Vassilou, Luke Williams, Kostis Tzanidakis, Colin Liew, Nicholas Kalavrezos*

### **P12 A Surgical Experience of Head and Neck Sarcomas**

*William Breakey, Timothy P Crowley, Richard H Milner, Maniram Ragbir*

### **P13 Thromboembolic Deterrent Stockings (TEDSs): Prescribing is not enough**

*Ayesha Chaudry, Muammar Abu-Serriah*

**P14 Survival following Oral Squamous Cell Cancer surgery. What are the complications and can we avoid them?**

*Soudeh Chegini, Isabel Sassoon, Mark McGurk*

**P15 Trends in the treatment of Oral Squamous Cell Carcinoma 1992-2012.**

*Soudeh Chegini, Isabel Sassoon, Mark McGurk*

**P16 Title A retrospective analysis of outcomes for buccal subsite squamous cell carcinomas from a single centre.**

*Emma Critchley, Peter Gordon, Martin Paley*

**P18 Successful localisation of recurrent thyroid cancer in re-operative neck surgery using intra-operative ultrasonography**

*Cameron Davies-Husband, Edwina Akerele, Prasad Kothari*

**P19 Is PET/CT useful in establishing the necessity for neck dissection in patients with node-positive oropharyngeal cancer following radical chemoradiotherapy?**

*Cameron Davies-Husband, Liam Masterson, Ramez Nassif, Tom Roques*

**P21 Audit of entry of patient nutritional data into the Data for Head and Neck Oncology database**

*Marcia Dring, Christine Baldwin, Pippa Lowe, Rachael Donnelly*

**P22 Definitive Hypofractionated Radiotherapy (RT) For Early (T1-2) Glottic Carcinoma: A Single Center Experience**

*Mehmet Sen, Robin Prestwich, Mark Teo, Chris Fosker, Ekin Ermis*

**P23 Facilitating Surgical Research in the NHS: Can we train surgeons on Good Clinical Practice?**

*Kayleigh Gilbert, Gareth Hayes, James McCaul*

**P24 Head & Neck MDT: Improvement Through Implementation of a Patient-entry Checklist**

*Samantha Goh, Richard Cobb, Raj Lakhani, Peter Williamson*

**P25 Are patients using prophylactic feeds**

*Yvonne Goodison, Jannell Marshall*

**P26 Survival analysis of Radically treated Locally Advanced Head and Neck (H&N) Cancer patients at University Hospital Southampton**

*Lauren Gorf, Ramkumar Shanmugasundaram, Chris Baughan*

**P27 Inferior access laryngoplasty (IAL): Initial experience and review of patient perception and functional outcome.**

*Robert Grounds, Sandeep Berry, Huw Williams*

**P28 Investigation into Tumour Depth of Invasion of pT1 Squamous Cell Carcinoma of the Oral Tongue and the Prevalence Occult Neck Metastases.**

*Claire Harrington, Muammar Abu-Serriah, Philip Ameerally, Carolyn Eaton*

**P29 An Analysis of the Incidence and Factors Predictive of Inadvertent Parathyroidectomy during Thyroid Surgery**

*Robert Hone, Anna Kaleva, Andrew Hoey, Theofano Tikka, Alistair Balfour, Myles Black, Iain Nixon*

**P30 Pharyngocutaneous fistulas following total laryngectomy; A review of evidence on salivary bypass tubes**

*Robert Hone, Iain Nixon*

**P31 Factors Associated with Delays in Head and Neck Cancer Treatment: A Case Control Study.**

*Jonathan Hughes, Robert Nash, Ann Sandison, Simon Stewart, Peter Clarke, Alasdair Mace*

**P32 Head and Neck Cancer Multidisciplinary Team Meeting Quality Improvement: The Impact of a New Patient Information Delivery Tool.**

*Jonathan Hughes, Tayana Soukup, Alasdair Mace, Peter Clarke, Ann Sandison, Nick Sevdalis*

**P33 Dental screening in head and neck oncology patients - A review of our experience in Musgrove Park Hospital Trust.**

*Mervyn Huston, James Ingham, Benjamin Collard, Matthew Jerreat, Graham Merrick, Petra Jankowska, Samirkumar Amin*

**P34 Free-styled perforator flaps based on the external carotid system for Head & Neck reconstructions**

*Ruben Kannan, M Ahmad*

**P35 Parotid Surgery in Belfast: A Review of Pathology, Management and Outcomes**

*Andrew Kelly, John Bradley, Ben Kelly, Brendan Hanna*

**P36 The Two week wait head and neck clinic: do our patients know why they are coming?**

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*Gemma Ridley, Vinidh Paleri, Mark Puvanendran*

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*Puneet Tailor, Maryam Jan, Samir Yelnoorkar, Helen Cocks*

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*Steve Thomas, Tom Walker, Shivaun Fleming, Andy Pring, Julia Verne*

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*Steve Thomas, Tom Walker, Tim Jones, Vero Poirier, Julia Verne*

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*Kim To, Ali Qureishi, Sean Mortimore, Mriganka De*

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*Harry Tustin, Laura Elleanor Jackson, Alexander Hugh Wheatley*

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*Navin Vig, Ishrat Rahim, Matt Keenan, Rishi Bhandari, Simon Whitley*

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*Natalie Watson, Beverley Hunt, Rachel Bell, Mark Tyrrell, Imran Ahmad, Richard Oakley*

**P76 The role of topical Mitomycin C as an adjunct to endoscopic laser division of anterior glottic webs**

*Giri Wijayasingam, Sophie Wilkinson, George Garas, Shaun Mortimore, Mriganka De*

**P78 The implementation of an enhanced recovery programme for patients undergoing laryngectomy**

*Gemma Wilson, Mihaela Nistor, Nigel Beasley*

**P79 The end of life environment of patients dying from cancer of the thyroid gland in England from 2003 – 2012**

*M Wilson*

**P80 Nodal positivity in Parotid Carcinoma.**

*Anika Kaura, Robert Kennedy, Safina Ali, Ricard Simo, Jean-Pierre Jeannon, Mark McGurk, Karim Hussain, Andrew Lyons, Edward Odell, Richard Oakley*

## **P1 Smoking cessation in head and neck cancer patients: a qualitative evaluation**

*Ameera Abdelrahim, June Jones, Janet Dunn, Hisham Mehanna*

### *Introduction*

*Smoking is a major risk factor in head and neck cancer and patients who continue to smoke after diagnosis have poorer treatment outcomes and higher recurrence rates. There is little in the published literature on the view of patients with head and neck cancer as to why they successfully quit smoking or fail to do so. The aim of this study was to provide a structured qualitative assessment of this and inform the set-up of future cessation support.*

### *Methods*

*Patients from Phase 1 & 2 of the QUITs study were invited to participate in Phase 3 of the study. 11 patients consented and semi-structured interviews were conducted. The interview schedule covered reasons for starting smoking, previous quit attempts, support accessed, support provided in secondary care at diagnosis and opinion on the pilot cessation scheme. Thematic analysis was conducted and QSR NVivo 10 software was used to organise codes and to assist in determining overall themes. Numerous nodes were developed and supporting data extracts organised accordingly.*

### *Results*

*Two overarching themes were identified and these were classed as 'Intrinsic influences' and 'Extrinsic influences'. Each containing two themes 'smoking 'perils'' and 'to quit or not to quit' for the former and 'social motivators' and 'healthcare factors' for the later alongside numerous corresponding sub-themes.*

### *Conclusion*

*The results highlight multifactorial deficiencies in the current cessation support available to this group of patients. Smoking should be viewed as a chronically relapsing condition and adequate long term support, patient education and encouragement should be provided.*



## **P2 Updated global interim analysis and UK case studies from the international, open-label, multicentre STEVIE study of the hedgehog (Hh) pathway inhibitor vismodegib in patients with advanced basal cell carcinoma (BCC)**

*Sarah Jones, Jean-Jacques Grob, Brigitte Dréno, Thomas Jouary, Laurent Mortier, Paolo A. Ascierto, Nicole Basset-Seguin, Johan Hansson, Ruth Plummer, Axel Hauschild*

### *Introduction.*

*Aberrant Hh signalling is the key driver in BCC pathogenesis. Vismodegib, a first-in-class Hh pathway inhibitor, is licensed in the UK to treat patients with aBCC inappropriate for surgery or radiotherapy. STEVIE is an ongoing global study focusing on vismodegib safety in patients with aBCC. We present details from selected UK patients alongside key global interim data from the STEVIE study (data cutoff: 6 November 2013).*

### *Methods.*

*Patients with locally advanced (la) or metastatic (m) BCC received vismodegib 150 mg QD until progressive disease, unacceptable toxicity or withdrawal. The primary objective is safety (CTCAE v4.0); efficacy is a secondary endpoint. Results. Global interim analysis included 501 aBCC patients with  $\geq 12$  months follow-up. Median treatment duration was 8.3 months. Common treatment-emergent adverse events (TEAEs) were muscle spasms (63%), alopecia (61%), dysgeusia (54%), weight decrease (32%), asthenia (28%), decreased appetite (25%), ageusia (22%), diarrhoea (17%), fatigue (16%) and nausea (16%). Serious TEAEs occurred in 21% of patients; 7% were considered related to vismodegib. Treatment was discontinued for TEAEs in 37% of patients. Overall response rate in patients with measurable disease (RECIST 1.1) was 67% (laBCC; n=302/453) and 38% (mBCC; n=11/29); median durations of response were 23 and 10 months, respectively. Safety and efficacy outcomes from UK patients will be presented.*

### *Conclusions.*

*This interim analysis of STEVIE confirms the previously observed safety profile and efficacy of vismodegib in a large aBCC patient population. These data further support vismodegib for the treatment of aBCC.*

## **P6 Osteoradionecrosis – A preventable problem?**

*Nabeela Ahmed, Rahul Jayaram, Rabin KC Singh, Vinod Patel, Luke Cascarini, Mark McGurk*

*Osteoradionecrosis is a significant and debilitating condition which can present a number of ways with management ranging from medical therapy to surgery requiring vascularised flap reconstruction in extensive cases. Such procedures are complex with a high complication rate, poor healing, and prolonged hospital stay. Despite our advances and improvement in the management of head and neck cancer, we have yet to make advances in preventing and managing patients suffering from this condition. We review all the cases currently having medical management of ORN at Guy's and St Thomas Head and Neck Unit, and propose a more aggressive approach to its management.*

### *Method:*

*Retrospective notes review of all patients treated with medical therapy for ORN. Patients were identified from pharmacy dispensing records and their notes were obtained. Data was collected retrospectively and entered onto a data collection proforma.*

### *Results:*

*65 patients are currently using Vitamin E and pentoxifylline within our unit. The majority of patients are prescribed medical therapy to treat ORN after symptoms have started.*

### *Conclusion:*

*Having identified the risk factors ORN in this cohort, we suggest an earlier more prophylactic role be adopted for the use of systemic vitamin E and pentoxifylline in order to prevent the establishment and progression of this destructive process. Clearly this is a change and variation from the more prophylactic role of antibiotics in extractions for prevention and the use of vitamin E and pentoxifylline once ORN is established. This is a challenging condition to manage and we would welcome debate on this matter.*

**P7 Quality of life (QoL) and patient reported outcome measures (PROMS) in radiologically N0 (rN0) necks treated by Sentinel Node Biopsy (SNB) or Elective Neck Dissection (END)**

*Nabeela Ahmed, Clare Schilling, Fran Ridout, Iain Hutchinson, Mark McGurk*

*Introduction: Debate persists about the best management of the rN0 neck in early stage oral cancer. Traditionally END is performed where there is judged >20% risk of occult metastasis. SNB offers an alternative surgical method to stage the neck whereby clearance of the cervical lymph nodes is only required when metastasis is proven pathologically (SNB+). It is expected that reducing the magnitude of surgery will improve long-term quality of life, however this is yet to be proven in a prospective RCT. Data presented here will inform future research in this area.*

*Methods: A two-centre retrospective analysis of rN0 patients treated by END or SNB (SNB alone or SNB+END if positive result) using COMET recommended patient reported outcome measure (Neck Dissection Impairment Index - NDII). QoL scales such as EQ-5D, EORTC QLQ-C30/H&N35 and self-reported shoulder scale were additionally investigated.*

*Results: 50 SNB (64%T1, 68% SNB negative, 14% adjuvant therapy) and 19 END patients (63.2% T1, 73.7% pN0, 15.8% adjuvant therapy) completed questionnaires. Average time since treatment was 47 months in the SNB and 30 in END group. Mean NDII was 88.35+/- 21.6 in the SNB group, and 77.3+/- 24.0 after END (p=0.003). NDII was unaffected by the length of time since treatment. QoL assessment showed more variability in the group over time.*

*Conclusions: Data suggests that SNB offers a better side effect profile than END. The NDII is a simple tool, and acceptable to patients which is sensitive enough to detect changes even some years after treatment.*

## **P8 Reconstruction of Pharyngo-laryngectomy defects using Antero-lateral Thigh Free Flap.**

SAFINA ALI, ANDREW MOORE, JEAN PIERRE JEANNON, RICHARD OAKLEY, WILLIAM TOWNLEY, PETER ROBLIN, RICARD SIMO

### **INTRODUCTION**

*The antero-lateral thigh (ALT) flap has been increasingly used in the management of defects in head and neck cancer cases. Our aim was to assess the effectiveness of this flap.*

### **METHODS**

*A retrospective review of all patients undergoing ALT reconstruction following total laryngectomy + partial pharyngectomy or total pharyngo-laryngectomy from 2006-2014. We collected:*

- *Patient Demographics*
- *Extent of surgery plus defect*
- *Type of flap (tube or patch)*
- *Failure, fistula and stricture rates*
- *Voice restoration*
- *Donor site complications*

### **RESULTS**

*Eighteen patients were identified. Ten (56%) of these patients were salvage cases. Seven patients underwent post-operative chemo/radiotherapy. Eight patients underwent total pharyngo-laryngectomies and therefore had tubed flap and 10 underwent partial resections and the ALT was used as an augmentation pharyngoplasty. The overall flap failure rate was 13%. The overall fistula rate was 28%, (33% in patch repairs and 22% in tubed flaps). All of these were managed conservatively. The overall stricture rate was 29% (17% in the patch and 44% in the tubed flaps), all these patients improved with dilatation. Only 2 patients remain PEG dependent. 10 patients have had secondary puncture, and voice well, with one other using a Servox.*

### **CONCLUSIONS**

*ALT free flap represents a reliable reconstructive option for patients undergoing extensive pharyngo-laryngeal surgery. It can be used successfully in primary and salvage surgery and has excellent donor site morbidity. When used as an augmentation pharyngoplasty to cover partial defects, it appears to offer better functional outcomes than as a tubed flap.*

## **P9 Attitudes of health care providers towards online information about head and neck cancer.**

*Frans Banki, Aidan Searle, Steve Thomas, Andrea Waylen*

### *Introduction:*

*The number of head and neck cancer patients using the internet to seek information about their condition is rising (1). However, only a small number of health care professionals (HCPs) treating these patients 'prescribe' online information. Understanding reasons for referring or not referring head and neck cancer patients to websites is important because it can improve the provision of relevant and timely information (2).*

### *Methods:*

*A qualitative study was conducted using semi-structured interviews based on a topic guide. Topics included patients' informational needs and reasons for referral or non-referral to online information. Nine HCPs treating head and neck cancer patients were interviewed and audio recordings were transcribed verbatim. Interviews with HCPs were analysed using a grounded theory approach to identify emerging themes.*

### *Results:*

*Five key themes emerged from the interviews; 'Truth', 'Misinformation', 'Patient education', 'Patient – Clinician relationship, and 'Internet as resource'. Data pertaining to these themes suggests that HCPs do not refer head and neck cancer patients to online information as a matter of course because they are unaware of suitable websites. The perspective of HCPs is that head and neck cancer websites provide information about survival and treatment but not about what it is like to live with this condition daily.*

### *Conclusions:*

*HCPs who treat patients with head and neck cancer do not make full use of the internet as a source of patient information. Identifying and continuing to develop suitable websites may help to improve information provision and patient support.*

## **P10 Recalcitrant Radiotherapy induced Orocutaneous Fistula – The Role of Octreotide.**

*Thomas Barry, Raj Mamidela, John Hanratty, J G Smith*

### *Introduction*

*Octreotide is a long acting synthetic analogue of somatostatin. It reduces secretions from gastrointestinal, biliary tract and pancreas and also reduces splanchnic blood flow. Because of this, Octreotide is used in the treatment of secretory diarrhoea, peptide secreting tumours, portal hypertension and oesophageal variceal bleeding.*

*Interestingly Octreotide has been used in the medical management of intestinal fistulas, however its use in the management of orocutaneous fistula is sparse. It is believed that Octreotide could act by decreasing salivary output and has been shown to reduce radiation fibrosis thus promoting wound healing.*

*Using this limited information we used Octreotide to successfully manage a recalcitrant orocutaneous fistula secondary to previous radiotherapy.*

### *Case*

*A 58 year old gentleman presented with recurrent squamous cell carcinoma (SCC) of tongue and tonsillar fossae, treated with resection and radial forearm free flap reconstruction. This was on a background of previous oropharyngeal SCC, managed with resection and adjuvant chemo-radiotherapy.*

*An orocutaneous fistula developed eight days postoperatively with the free flap / mucosal interface demonstrating an area of dehiscence secondary to radiotherapy induced poor wound healing. The patient was commenced on local measures with regular Bismuth Iodine Paraffin Paste packs and Hyoscine but discontinued after 1 month with no improvement. At this stage treatment with Octreotide was commenced. An initial regimen of 100micrograms subcutaneously for 3 days coincided with a decrease in secretions so was continued for a further three days until fistula closure.*

### *Conclusion*

*Octreotide has been successfully used to close a chronic orocutaneous fistula complicated by poor wound healing secondary to previous radiotherapy.*

## **P11 The Many Faces of Sarcoma; A Review of 10 Representative Cases Posing Diagnostic Challenges**

*Natasha Berridge, Leandros Vassilou, Luke Williams, Kostis Tzanidakis, Colin Liew, Nicholas Kalavrezos*

### *Introduction*

*Sarcomas of the Head & Neck region are relatively rare, and represent 1-2% of all malignancies occurring in the United Kingdom. Over the years, there has been tremendous progress in diagnostic techniques and treatment. However, a significant proportion of our Head & Neck sarcomas are frequently misdiagnosed initially, thereby potentially adversely impacting on long-term survival and quality of life.*

### *Methods*

*We highlight 10 representative cases of Head & Neck Sarcoma definitively surgically treated at UCLH, who were initially misdiagnosed as benign disease of odontogenic origin. Patient details, referral route, previous treatment, tumour characteristics and surgical treatment are collated. A descriptive review is presented of time delay in diagnosis, histopathology, staging, definitive treatment and consequent affect on prognosis.*

### *Results*

*Today, surgery remains as the primary treatment option for most cases of Head & Neck Sarcoma. The 10 cases that we reviewed were all misdiagnosed as either longstanding odontogenic infection or benign bony lesions and received inappropriate treatment initiated by primary care practitioners. All of our patients presented with advanced local disease as a direct consequence of their delay in treatment, necessitating more aggressive surgery and/or adjuvant therapy.*

### *Conclusions*

*We demonstrate the paramount importance of early diagnosis for all healthcare professionals and highlight pitfalls in management as a direct consequence of misdiagnosis of Head & Neck Sarcoma. We strongly believe that a heightened awareness of the 'varied' presentations of Head & Neck Sarcoma is imperative for an early accurate diagnosis and successful definitive surgical, thereby improving long term survival outcome.*

## **P12 A Surgical Experience of Head and Neck Sarcomas**

*William Breakey, Timothy P Crowley, Richard H Milner, Maniram Ragbir*

### **Introduction**

*Sarcomas occurring in the head and neck are rare and present a difficult surgical challenge. We review our experience of managing these tumours as plastic surgeons working within a bone and soft tissue tumour MDT.*

### **Methods**

*Data on all patients with sarcoma of the head or neck managed surgically (2004-2014) was reviewed. Demographics, surgical details and outcomes were analysed.*

### **Results**

*Forty nine patients underwent surgery for sarcoma of the head or neck. The mean age at presentation was 53.1 years (range 0.5-92). There were 37 male and 12 female patients. The scalp (n=12) and face (n=18) were the most common sites followed by the deep tissue of the head (n=12) and the neck (n=7). Histological diagnosis was varied. Leiomyosarcoma (n=6), angiosarcoma (n=9), synovial sarcoma (n=4), sarcoma of no specific type (n=5) and rhabdomyosarcoma (n=5) were the most frequently seen tumours. All were treated by wide excision. Excision margins were histologically complete in the majority (n=43). Reconstruction was undertaken as follows: direct closure (n=12), local flap +/- skin graft (n=12), free tissue transfer (n=21), pedicled flap +/- skin graft (n=3), skin graft (n=1). Twelve patients received adjuvant chemotherapy and fifteen patients received adjuvant radiotherapy. Ten patients developed local recurrence and nine patients developed metastasis. Eleven patients died of their disease; mean survival 17 months (range 8-28).*

### **Conclusion**

*Head and neck sarcomas are rare and challenging to manage. Successful outcomes can be achieved by early, aggressive resection and appropriate reconstruction within the specialist MDT setting.*



## **P13 Thromboembolic Deterrent Stockings (TEDSs): Prescribing is not enough**

*Ayesha Chaudry, Muammar Abu-Serriah*

### *Introduction*

*Thromboembolic Deterrent Stockings (TEDSs) are clinically proven to be effective in reducing the risk of hospital patients developing venous thromboembolism (VTE). Although every patient at risk should wear them, not everyone is compliant in doing so.*

### *Aim*

*To assess patients' attitude to wearing TEDSs and its impact on compliance.*

### *Methods*

*All surgical patients prescribed TEDSs on two surgical wards at Manchester Royal Infirmary were interviewed twice daily on two days of each week, for a period of three weeks. Standardised focal questions were used to assess surgical patients' attitude to wearing TEDSs and the effect of this on compliance.*

### *Results*

*A total of 127 patients met the selection criteria with a 3:2 male: female ratio. Patients found TEDSs uncomfortable and unsightly. Patients' own ideas and the confusion about 'patient choice' were identified. Lack of education and discomfort were among the main reasons for lack of compliance. This seemed to have a significant impact, as only 35% of those prescribed TEDSs were fully compliant with them. Men were twice more likely to refuse TEDSs compared to women.*

### *Conclusion*

*There is a need for increased patient and nursing staff awareness regarding the benefits of TEDSs. Clarity about patient's choice is also required. Accurate sizing and colour variety may reduce discomfort and make TEDSs more appealing. This may alter patients' attitudes and subsequently enhance compliance with its potential clinical benefits.*

**P14 Survival following Oral Squamous Cell Cancer surgery. What are the complications and can we avoid them?**

*Soudeh Chegini, Isabel Sassoon, Mark McGurk*

*Introduction:*

*The study investigated the incidence and characteristics of complications that occurred following the surgical treatment of oral cancer in one surgeon's experience over a 20y period (1992-2002).*

*Methods:*

*Data was collected from prospectively completed departmental and hospital databases.*

*Results:*

*Data was collected from 363 patients, 136 female : 227male, average age at diagnosis was 60 (range 21- 92 years). Cancer at diagnosis was staged 1 (23%), 2 (23%), 3 (25%), 4 (29%). Disease Free Survival(DFS) at 3 years was 77% (stage1 88.5%, stage2 82.3%, stage3 75.6%, stage4 62%) at 5 years was 75% (stage1 84.5%, stage2 80%, stage3 73.3%, stage4 62%). Post-operative complications are associated with a statistically significant decrease in DFS ( $p<0.001$ ).*

*44% of patients had a recorded complication (Clavien-Dindo classification grade 4=15, grade 2&3= 78, grade 1=68). 9 patients (2%) died within 30days of surgery. The most common Grade 4 complication is chest infection (10%). The most common surgery specific complication is wound infection and breakdown (15%). A complication was more common amongst patients of male gender, poor performance status, cardiovascular disease and long operation duration.*

*Conclusions:*

*These outcomes favorably compare to the DAHNO oral cancer survival (61.4% at 3years) and HESS data on Head and Neck Cancer (36% complication incidence, 3% in-hospital death).*

## **P15 Trends in the treatment of Oral Squamous Cell Carcinoma 1992-2012.**

*Soudeh Chegini, Isabel Sassoon, Mark McGurk*

### *Introduction:*

*The study investigated the trends in disease and patient profile at diagnosis, treatment and outcomes in oral squamous cell cancer in one surgeon's experience over a 20 year period.*

### *Methods:*

*Data was collected from prospectively completed departmental and hospital databases. This study included 363 patients diagnosed between 1992 and November 2012. This database included demographics, treatment undertaken and outcomes.*

### *Results:*

*Data was collected from 363 patients. We present the trends in age and gender profile. In recent years there has been a significant increase in stage 1 disease at diagnosis (20% 1992-1996 to 62% 2006-2011) and a decrease in late stage disease at diagnosis. Mean post-operative length of stay in hospital decreased over time (20 days 1993 to <5 days 2010). Complication rate and type reflected the grade of surgery and did not vary significantly over time. Length of operation for stage 1-3 disease decreased over time but stayed the same for stage 4.*

### *Conclusions:*

*To our knowledge this is the only study examining SCC treatment over such a long period. The results show a decrease in operation duration and decrease in hospital length of stay over 20 years. This may show improvement in cancer treatments over the years, improved surgeon experience and changes in NHS admission and discharge policies. The diagnosis stage migration is towards earlier cancer diagnosis, which may reflect the increased awareness of cancer and importance of early diagnosis.*

**P16 Title A retrospective analysis of outcomes for buccal subsite squamous cell carcinomas from a single centre.**

*Emma Critchley, Peter Gordon, Martin Paley*

*Introduction*

*There is published evidence supporting the assertion that buccal subsite SCC is a more aggressive disease entity when compared with other oral subsites. This work analysed the outcomes for patients referred with a buccal SCC relative to the stage of disease, tumour biology and modality of treatment.*

*Methods*

*This was a retrospective analysis of all patients presented to a regional head and neck MDT from 2005 to 2013, with a buccal subsite SCC.*

*Results*

*We identified 28 patients who had a new buccal SCC diagnosis. There were 13 male and 15 female, with ages ranging from 36 to 94 and a mean of 69.5. Disease stage distribution was; 14 Stage I, 2 Stage II and 11 Stage IV. Three patients were offered treatment with palliative intent. Of the 25 in the curative intent group; one patient was treated with chemoradiotherapy, the rest with surgery, and of these, seven had further adjuvant therapy. For the curative intent group the mean follow up was 59 months and at final follow up; 15 patients were alive with no evidence of disease, 8 had died of the disease and 2 had died of other causes.*

*Conclusion*

*This patient series did not show buccal subsite to be more aggressive, with 60% overall survival. Forty percent of patients were stage IV at presentation, despite this, two of this group are still alive with no evidence of disease. However two patients who were treated with clear margins for stage I disease eventually died of the disease.*

## **P18 Successful localisation of recurrent thyroid cancer in re-operative neck surgery using intra-operative ultrasonography**

*Cameron Davies-Husband, Edwina Akerele, Prasad Kothari*

### *Introduction*

*Differentiated thyroid carcinoma is the most common endocrine malignancy. Cervical metastases occur in up to fifty per cent of cases. High-resolution ultrasonography (USG) is a sensitive imaging method used to detect occult lymph node metastases. The authors aim to describe their experience of localising recurrent tumours with intraoperative USG.*

### *Methods*

*Five consecutive patients with previously-treated well-differentiated thyroid cancer underwent neck exploration for histologically confirmed, recurrent, non-palpable nodal disease. Nodes were excised with the assistance of a consultant radiologist performing USG intraoperatively.*

### *Results*

*Using US-guided localisation, all cases were successful in retrieving the target tumour, with no inadvertent nerve injuries; 6 tumours were obtained from the 5 patients: tumours were excised from level 4 (n=3), level 6 (n=2) and from within the substance of the sternothyroid muscle itself (n=1).*

### *Conclusions*

*Intraoperative USG is useful in efficiently directing the surgeon to the foci of thyroid cancer recurrence irrespective of subcutaneous fibrosis, with arguable reduction in sampling error, operative time and morbidity. Further study on this technique is needed to elucidate its role in the management of recurrent/residual disease.*

## **P19 Is PET/CT useful in establishing the necessity for neck dissection in patients with node-positive oropharyngeal cancer following radical chemoradiotherapy?**

*Cameron Davies-Husband, Liam Masterson, Ramez Nassif, Tom Roques*

### *Introduction*

*Traditionally, patients treated with chemoradiotherapy for node-positive oropharyngeal squamous cell carcinoma (N+ OPSCC) have undergone a planned neck dissection (ND) after treatment. This study assessed neck control in patients with N+ OPSCC treated with sequential chemoradiotherapy (SCRT) and the incidence of neck recurrence when neck dissection was withheld in those with negative post-treatment fluorine-18 fluorodeoxyglucose positron emission tomography (FDG PET).*

### *Methods*

*From 2005 to 2014, 194 patients with N+ OPSCC treated with radical intent SCRT underwent post-treatment clinical assessment by PET/CT at three months. A complete response (CR) was defined as no evidence of disease on clinical examination and post-treatment PET/CT. ND was reserved for patients with < CR on PET/CT, clinical examination, or other imaging.*

### *Results*

*The mean follow-up was 41.9 months; 165 patients (85.1%) had clinical/radiographic CRs, and underwent observation (regional control 96.2%; 5 year survival 93.6%) Seven observed patients experiencing neck recurrence had initial staging of N1 (n = 3), N2b (n = 2) and N2c (n = 2). Four of seven were successfully salvaged. There was no association between N stage and recurrence.*

### *Conclusion*

*Patients achieving CRs based on clinical and PET/CT assessment after chemoradiation have a high probability of regional control, with a 3.8% regional failure rate. Safely observing such individuals without planned ND is justifiable.*

## **P21 Audit of entry of patient nutritional data into the Data for Head and Neck Oncology database**

*Marcia Dring, Christine Baldwin, Pippa Lowe, Rachael Donnelly*

### **Introduction**

*Data for Head and Neck Oncology (DAHNO) is the national audit database for management of head and neck (H&N) cancers. In 2012 the nutrition data fields were simplified from nine to four. Despite this reduction, completion remains at approximately 53%. The purpose of this audit was to examine reasons for low completion rates and to, identify barriers to data entry.*

### **Methods**

*All registered H&N cancer dietitians in England and Wales were contacted to determine eligibility. An electronic survey was devised, piloted and distributed, consisting of 26 questions, divided into 3 sections: Knowledge and understanding, Multidisciplinary Teams and Demographics and Occupational Information. Data were collected in a 2 week period, November – December 2014.*

### **Results**

*79 hospitals were surveyed in England and Wales and 42 responses were received. 93% of dietitians knew of DAHNO and that it contained questions on nutrition with 37% responsible for data entry. 26% knew the number of nutrition questions, with 11.9% correctly recalling all 4 of them. Shortage of time and inadequate administrative support were the main barriers to data entry. Most hospitals had either one or two whole time equivalent H&N dietitians. There was willingness to collect future nutrition data, with only 7.1% opposed to this.*

### **Conclusion**

*The results highlighted an awareness of and willingness to complete nutrition data for the DAHNO database but unfamiliarity with the actual questions. A more robust method of data collection for the planned replacement national audit tool should take into consideration the factors identified as barriers to completion.*

## **P22 Definitive Hypofractionated Radiotherapy (RT) For Early (T1-2) Glottic Carcinoma: A Single Center Experience**

*Mehmet Sen, Robin Prestwich, Mark Teo, Chris Fosker, Ekin Ermis*

### **Introduction:**

*The aim is to report our 10-year experience of definitive RT with a hypofractionated schedule of 55Gy in 20 fractions (2.75Gy per fraction).*

### **Methods:**

*Patients treated between 2004-13 with radical RT were retrospectively identified from RT databases and electronic patient notes. Inclusion criteria were: biopsy proven T1 or T2 disease, intended definitive RT with a prescribed dose of 55Gy in 20 fractions. RT was delivered with 6MV photons with either a lateral opposed pair or anterior wedged pair technique.*

### **Results:**

*132 patients were identified. The median age was 65. Median follow up was 72.1 months (range 7.2-124). There were 53 (40%), 19 (14%) and 60 (46%) of patients with T1a, T1b and T2 disease respectively. A complete clinical response to RT was documented in 96% of patients. The 2 and 5 years overall survival rates were 91.4% and 78.8% respectively. The 2 and 5 years disease free survival (DFS) rates were 89.3% and 83.0% respectively. A total of 21/132 (16%) patients experienced disease recurrence; 13/21 patients were successfully salvaged surgically, included laser surgery (n=2), total laryngectomy ± neck dissection (n=13) and neck dissection (n=3).*

*Documented acute toxicity included RTOG grade 3 skin toxicity in 9 (7%) patients, grade 3 mucositis in 13 (10%) patients. Documented late toxicity included post-cricoid stenosis in one patient managed with dilatations, anterior glottic webbing in one patient.*

### **Conclusions:**

*Hypofractionated RT for early stage glottic cancer provides good local control with the preservation of normal structure and the function of the larynx, with acceptable toxicity.*



## **P23 Facilitating Surgical Research in the NHS: Can we train surgeons on Good Clinical Practice?**

*Kayleigh Gilbert, Gareth Hayes, James McCaul*

### **Introduction**

*Surgical trials are complex to design, implement and analyse. They are unique because of the size and scope of the multi-disciplinary teams that work across surgical research. Applying the regulations of Good Clinical Practice (GCP) to surgical studies can be exciting and frustrating in equal measure. Frustrating in that, some Surgeons believe the GCP guidelines are overly bureaucratic for their specialised care, exciting because there are obvious components of GCP that would benefit surgical trials. To maximise on the opportunity to make GCP more relevant to surgeons, a pioneering short course was developed, tailored to the audience.*

### **Methods**

*In order facilitate speedy surgical trial set-up the course was designed to be innovative and easily accessible. The content focused on consent, documentation and delegation.*

*The following interactive activities were implemented to teach and ignite debate;*

- *Workshops brainstorming how to comply with consent regulations*
- *Exercises about data collection and integrity*
- *Sharing best practice about obligations and responsibilities*

### **Results**

- *Delegates enthused by course, >150 surgeons trained to date*
- *Workshops lead to proactive and much needed debates*
- *Facilitated opening of new sites to surgical trials*
- *Increased awareness of benefits of research, to patients and Trusts*
- *Assists in embedding research into everyday practice*

### **Conclusion**

*This course is an effective and accessible way of raising awareness of management relating to surgical trials. It allows for promotion of research whilst providing opportunity to facilitate the set-up of trials across Trusts. The course is finding a unique niche in the GCP world of regulation versus relevance.*

## **P24 Head & Neck MDT: Improvement Through Implementation of a Patient-entry Checklist**

*Samantha Goh, Richard Cobb, Raj Lakhani, Peter Williamson*

### *Introduction:*

*Due to the frequent rotation of junior trainees through tertiary Head and Neck Units, the quality of MDT entries are variable, especially during changeover time.*

### *Aim:*

*Improve quality and consistency of patient-entry documentation for MDT discussion*

### *Method:*

*A checklist for MDT documentation was produced to ensure essential information was included in patient-entries. A closed-loop audit against this checklist was carried out between April and May 2014; 2 weeks pre- and post-implementation. A third cycle audit was performed in September 2014 to review the quality of entries after the next change-over of junior staff.*

### *Results:*

*144 patient-entries were audited. Initial audit revealed that documentation was weak in the domains of past-medical history (63%), smoking-history (54%), alcohol-history (35%), social issues (15%) and WHO-performance status (17%). Results improved after implementation of the checklist. 100% documentation was achieved in domains of presenting complaint, primary site, histology, radiology, staging and treatment. Improvements were seen in the previously weak areas and there was further improvement in the 3<sup>rd</sup>-cycle audit.*

### *Conclusion:*

*The MDT checklist is a concise way of ensuring good quality of MDT patient-entries. Improvement was seen almost all domains and this was sustained despite the change-over of trainees. This enhances efficiency of MDT meetings and gives patients the best quality of care. It also guides junior trainees who may have little experience in regional MDT meetings.*

## **P25 Are patients using prophylactic feeds**

*Yvonne Goodison, Jannell Marshall*

**Introduction/Aims:** *The evidence for prophylactically placed enteral tubes in head and neck cancer patients is mixed. This audit was to assess whether the first delivery of feed is used by patients with prophylactically placed enteral feeding tubes. Association between feed usage and nutritional status was examined as well as any cost from wastage.*

**Materials/Methods:** *Nineteen patients, referred to the community over 6 months, were selected from the electronic patient database. Audit tools were designed for the 2 stages of retrospective data collection - a data collection sheet and questionnaires. Stage 1 data included; contact details, body mass index (BMI) at referral, type of feed, type of tube inserted and referral date. Stage 2 data included information about the supply, usage and costs of feeds. Two patients were excluded at stage 2. Feed usage was calculated and expressed in percentages and mean (n=17). Change in BMI was calculated compared with feed usage. Cost incurred through unused feed was calculated.*

**Results/Statistics:** *59% of patients were meeting the 90% standard; with an average feed usage of 74%. The primary reasons for feed wastage involved patients still managing oral intake, and patients experiencing gastrointestinal problems after using. Feed supplied was more than the amount prescribed in 82% of patients. There was no clear pattern observed between feed usage and change in BMI. There were financial cost implications as a result of wastage.*

**Conclusions/Clinical Relevance:** *A considerable proportion of patients were not meeting the set standard. Discussions with feed companies indicated.*

## **P26 Survival analysis of Radically treated Locally Advanced Head and Neck (H&N) Cancer patients at University Hospital Southampton**

*Lauren Gorf, Ramkumar Shanmugasundaram, Chris Baughan*

### *Introduction:*

*The standard of care in H&N patients is radical chemoradiation (CRT) or combined modality with surgery and post operative radiotherapy. We analysed survival outcomes for patients treated during 2010/2011.*

### *Methods:*

*117 patients with locally advanced tumours were identified using electronic patient records.*

### *Results:*

*117 Stage III/IV patients were identified with average age 64.2 years and male to female ratio 3.6:1. 81% of patients had severe co-morbidities. WHO performance status 0, 1, 2 were 52%, 30% and 6% respectively (12% undocumented). 70 patients (60%) were still alive at median follow up 36 months.*

*Group 1(Combined modality): 45 patients (40%) had primary surgery. 37 patients (82%) had adjuvant radiotherapy and 8 patients (18%) had adjuvant CRT.*

*Group 2(Primary RT): 72 patients (60%) underwent primary RT/CRT; 31 patients had RT, 37 patients had CRT, and 4 patients had RT with cetuximab. 15 patients (21%) had induction chemotherapy.*

*39 patients had residual/recurrence post-treatment with average days to recurrence 155 days. Of these, 10 patients had primary CRT, 1 patient had RT with cetuximab, 9 patients had primary RT, 10 patients had adjuvant RT/CRT. 9 patients had residual/progressive disease after treatment.*

*22 recurrences were 'in field' recurrences, 6 patients developed metastases and 2 patients had local and distant metastases. Median survival was 500 days.*

*5 patients suffered osteoradionecrosis, 5 patients had swallowing problems, 2 patients had G3 xerostomia and 2 patients had G3 fibrosis.*

### *Conclusion:*

*At UHS, overall survival was 60% at 3 years compared with 2 year survival 63% in Bhide et al.*

## **P27 Inferior access laryngoplasty (IAL): Initial experience and review of patient perception and functional outcome.**

*Robert Grounds, Sandeep Berry, Huw Williams*

### **Introduction:**

*Type 1 thyroplasty is a common procedure performed for patients with unilateral vocal cord palsy. Initially described by Isshiki et al (1974), a window is created in the thyroid cartilage and vocal fold position augmented, often with Gore-Tex<sup>TM</sup> ribbon. Randal Morton et al (2008) described an inferior access laryngoplasty (IAL) avoiding a thyroid cartilage window resulting in reduced surgical dissection and potentially reduced operating times. To our knowledge there have been no further reports of this approach in the literature.*

### **Methods:**

*We report our experience of this evolving technique on 12 patients undergoing IAL and provide a series of intra-operative photographs taken by the trust medical illustration department (the first photographic series of the procedure to date). Retrospective post-operative evaluation of the procedure was performed using voice handicap index (VHI) scores as well as patient satisfaction surveys returned anonymously by post.*

### **Results:**

*IAL was performed safely in 12 patients. Complications included 4 patients undergoing revision IAL to gain further voice improvement and 1 patient who suffered Gore-Tex extrusion. All 7 patients who attended follow-up or responded to our survey noted improvement in voice, corroborated by VHI improvement. 3 patients did not reply to our survey or data was not available from follow-up and 2 patients died from other causes (not related to IAL).*

### **Conclusions:**

*Our experience demonstrates IAL to be a safe and effective procedure. A direct randomised trial between Isshiki techniques and IAL should now be conducted to identify whether IAL offers reduced complication rates and operative duration.*

## **P28 Investigation into Tumour Depth of Invasion of pT1 Squamous Cell Carcinoma of the Oral Tongue and the Prevalence Occult Neck Metastases.**

*Claire Harrington, Muammar Abu-Serriah, Philip Ameerally, Carolyn Eaton*

### **Introduction:**

*Squamous cell carcinomas (SCCs) of the oral cavity are associated with a risk to spread to cervical lymph nodes. Tumour depth of invasion (TDI) is considered as one of the predictors of pathologically detected neck metastases (PDNM). The relationship between TDI of pT1 SCC of the oral tongue and PDNM is still unknown.*

### **Aims:**

*To determine the prevalence of pT1 SCC of the oral tongue in Northampton patient population. To assess the incidence of PDNM in pT1 SCC of the oral tongue. To investigate the association between TDI and PDNM for patients with pT1 SCC of the oral tongue.*

### **Methods:**

*Retrospective data was collected for 50 patients with pT1 SCC of the oral tongue treated at Northampton General Hospital. For each patient parameters that were assessed were; TDI, neurovascular invasion, pattern of invasion, presence of PDNM, follow up period and mortality were recorded.*

### **Results:**

*There were 50 patients that met the criteria and were included in this study. The average TDI in patients that had PDNM was 3.9mm. In patients with PDNM the TDI ranged from 1.3mm to 23.2mm. Incidence of PDNM in this patient population was 14% of which there was a 50% mortality rate. There was an average of 5.9 year follow up period with subsequent discharge and no reported recurrence from these patients after discharge.*

### **Conclusion:**

*TDI is not reliable or accurate and cannot be used as predictor of PDNM in patients with pT1 SCC of the tongue.*

## **P29 An Analysis of the Incidence and Factors Predictive of Inadvertent Parathyroidectomy during Thyroid Surgery**

*Robert Hone, Anna Kaleva, Andrew Hoey, Theofano Tikka, Alistair Balfour, Myles Black, Iain Nixon*

### **Introduction**

*Although incidental parathyroidectomy (IP) is known to occur during thyroid surgery, few groups have studied its occurrence therefore the rate and factors associated with IP are poorly understood. The aim of this study was to report the rate of and factors associated with IP on patients who underwent thyroidectomy.*

### **Methods**

*Surgical and histopathological data for 266 patients following thyroid surgery were analysed. Variables including FNAC result, age, sex, thyroid weight, concurrent neck dissection (CND), type of thyroidectomy (hemi or total) and the presence of cancer and parathyroid tissue within the histological specimen were recorded. Univariate analysis using the chi squared or Kruskal Wallis test and multivariate binary logistical regression was performed to identify factors associated with increased rates of IP.*

### **Results**

*On histology, 41 patients had parathyroid tissue detected, giving a rate of IP of 15%. Univariate analysis revealed the presence of cancer in the specimen and CND were both predictive of increased IP (12% versus 24%,  $p=0.03$  and 13% versus 38%,  $p<0.01$  respectively). Rates of parathyroidectomy in hemithyroidectomy compared to total thyroidectomy on univariate analysis were of borderline significance (9% versus 22%,  $p=0.05$ ). On multivariate analysis, only CND was significant and is associated with a 4 fold increase in IP ( $p=0.0008$ , 95%CI 1.8-9.8)*

### **Conclusion**

*In this first UK study to date to analyse factors associated with IP following thyroid surgery using multivariate analysis we confirmed that the rate of IP is 15%, thyroidectomy alone carries a 13% risk and that CND is an independent predictor of IP.*

## **P30 Pharyngocutaneous fistulas following total laryngectomy; A review of evidence on salivary bypass tubes**

*Robert Hone, Iain Nixon*

### **Introduction**

*Pharyngocutaneous fistulas (PCF) are a common, expensive and morbid complication following total laryngectomy. The use of salivary bypass tubes (SBT) to prevent PCF following surgery is increasing but studies are limited. Our aim was to review current literature looking at SBT on PCF.*

### **Methods**

*A literature review was performed using an online database search of pubmed and medline. A search of key words "Fistula", "larynx", "saliva", "bypass", "tube" resulted in a list of publications. Abstract and titles were reviewed to ascertain relevant publications.*

### **Results**

*All studies are limited due to small sample size, variation in the surgery performed, reconstruction, tumour size and stage. Studies investigating incidence of PCT are retrospective and no high level evidence has been produced. Most studies are uncontrolled and single centre which are not representative of the population. Some studies have directly compared two uncontrolled groups using free flap reconstruction and SBT but recommend large multicentre trials and on analysis were unclear which intervention helps prevent PCTs.*

### **Conclusion**

*The role for SBT needs further clarification. Due to the rarity of laryngectomy to get significant numbers a national project would be required. We propose a national audit of salivary bypass tubes and the occurrence of PCT through Data for Head and Neck Oncology (DAHNO) or a retrospective case series using a collaborative to provide significant numbers for comparison. If a significant decrease in PCT is observed with SBT this will impact on heavily on cost, morbidity and patient quality of life.*



## **P31 Factors Associated with Delays in Head and Neck Cancer Treatment: A Case Control Study.**

*Jonathan Hughes, Robert Nash, Ann Sandison, Simon Stewart, Peter Clarke, Alasdair Mace*

### *Introduction:*

*Delay in head and neck cancer diagnosis and treatment leads to increased patient anxiety, lost opportunities for less invasive treatment, and increased morbidity and mortality due to disease progression and requirement for more aggressive treatments. The Cancer Reform Strategy (2007) set a 62-day target from primary care suspected cancer referral to initiation of treatment. We analysed those patients whose treatment had been delayed beyond this target to identify causative factors.*

### *Methods:*

*50 subjects with a confirmed diagnosis of head and neck squamous cell carcinoma were identified who breached the 62-day treatment target, and compared with 50 subjects who were treated within the target in a tertiary referral head and neck cancer centre. Each subject was assessed for a number of putative delay-causing factors including age, comorbidities, tumour site and stage, treatment plan, and referring hospital/clinician.*

### *Results:*

*Significant factors associated with treatment delays included if the subject was initially assessed outside the “hub” cancer centre, in a feeding “spoke” hospital ( $p < 0.001$ ), and whether the subject was initially seen by a non-multidisciplinary team (MDT) core member ( $p < 0.001$ ).*

### *Discussion:*

*With many head and neck cancer networks operating “hub” and “spoke” models of service provision, it is important to identify and mitigate delays in the patient journey that may result from this pathway. We have identified that initial patient assessment by a non-MDT member in a “spoke” hospital as a significant factor in causing 62-day target breaches. This may be obviated by MDT members evaluating suspected cancer patients in “spoke” hospitals.*

## **P32 Head and Neck Cancer Multidisciplinary Team Meeting Quality Improvement: The Impact of a New Patient Information Delivery Tool.**

*Jonathan Hughes, Tayana Soukup, Alasdair Mace, Peter Clarke, Ann Sandison, Nick Sevdalis*

### *Introduction:*

*The Multidisciplinary Team (MDT) meeting has become well-established as central to the delivery of cancer care in the UK. However best practice for the delivery of patient information in these meetings, allowing subsequent discussion of management options, has yet to be determined.*

### *Methods:*

*Using a validated observational tool, 12 Head and Neck cancer MDT meetings were assessed in a tertiary cancer centre, before and after a MDT performance analysis feedback lecture and introduction of a MDT patient information presentation template (Microsoft PowerPoint - based). The observational tool scored patient information delivery and contributions from surgeons, oncologists, radiologists, pathologists and allied health professionals. Scores were recorded independently by two observers trained in using this tool. Mann-Whitney testing was used to analyse the effects of the intervention (lecture and presentation template) on various aspects of MDT performance.*

### *Results:*

*213 and 223 patients were discussed pre- and post-intervention respectively. Good inter-observer agreement was recorded for all observations (reliability co-efficient > 0.61). Following the intervention, overall quality of patient information presented improved significantly ( $p < 0.001$ ). Reduced patient management discussion was also observed ( $p < 0.001$ ). The average case discussion time was not prolonged with use of the template.*

### *Conclusions:*

*The use of a standardised visual patient information delivery tool can improve dissemination of patient information in the Head and Neck cancer MDT meeting and streamline patient management discussion, without prolonging the duration of the meeting.*

**P33 Dental screening in head and neck oncology patients - A review of our experience in Musgrove Park Hospital Trust.**

*Mervyn Huston, James Ingham, Benjamin Collard, Matthew Jerreat, Graham Merrick, Petra Jankowska, Samirkumar Amin*

*Aims:*

*To review the undertaking of preoperative dental screening in head and neck oncology patients prior to their radiotherapy treatment.*

*Methods;*

*We retrospectively reviewed 125 case notes of oncology patients who were discussed at the Head and neck cancer, multidisciplinary team meeting. These patients were discussed at meetings between February 2013 and December 2013. No patients were excluded from the study and our results were tabulated on an excel spreadsheet.*

*Results:*

*125 patients were discussed at the Head and neck multidisciplinary meeting within the set time period. We categorised these patients as to their original diagnosis, treatment modality, and speciality overseeing their care. The notes of these patients were analysed to assess completion of a pre-radiotherapy dental screen, dental treatment provided, time period between dental treatment and radiotherapy. All post-operative complications were documented.*

*Conclusion:*

*Morbidity can be associated with the use of radiotherapy for oncology management, specifically in the oral cavity. The risk of post- radiotherapy complications can be reduced by the removal of potential causes of infection and completion of dental treatment before the commencement of oncology management. We strive in our practice to ensure all oncology patients have appropriate and timely dental screening.*

## **P34 Free-styled perforator flaps based on the external carotid system for Head & Neck reconstructions**

*Ruben Kannan, M Ahmad*

### ***Introduction:***

*In the case of moderate to large defects in the head & neck region, loco-regional and free flaps have often formed the mainstay of reconstruction. Now, with the advent of microvascular know-how, the additional dimension of perforator flaps have been added to the fore.*

### ***Methods:***

*In a retrospective review of practice over three years' (2012 to 2014), over 30 perforator flaps were raised on the vessels of the external carotid system such as the facial, submental, lateral nasal, superior labial, angular, superficial temporal, transverse facial, zygomatico-orbital, superior thyroid and transverse facial vessels.*

*All defects were post-oncologic and were for surface malignancies. The size of the defects' varied from 3 x 3 cms to 10 x 8 cms in all areas of the face.*

### ***Results:***

*All flaps survived with three cases of distal tip necrosis (n=3); two lateral nasal artery perforator (LNAP) propeller flaps and one supraplatysmal submental artery perforator (SP-SMAP) flap and one case (n=1) of partial flap necrosis in a transverse cervical artery perforator (TCAP) flap. All of these complications occurred with the use of propeller flaps with perforator diameters of 1mm or less.*

### ***Conclusion:***

*Free-styling perforator flap in the head & neck region is feasible but requires close adherence to the principles of perforator flap surgery including the need for delay procedures in select cases.*

## **P35 Parotid Surgery in Belfast: A Review of Pathology, Management and Outcomes**

*Andrew Kelly, John Bradley, Ben Kelly, Brendan Hanna*

### *Introduction*

*Parotid surgery encompasses a number of common surgical procedures for the Head and Neck surgeon. Parotid tumours present us with a wide range of benign and malignant pathologies. The aim of our study was to review parotid surgery in the Belfast Health and Social Care Trust over the last five years.*

### *Methods*

*We retrospectively reviewed 91 patients who had parotid surgery performed. We recorded preoperative investigations, clinicopathological parameters, surgical technique, perioperative morbidity and mortality.*

### *Results*

*91 patients were reviewed with an age range between 20 - 90 and median age of 59. M:F ratio was 1.28 : 1. 75% of surgery was for benign disease. The most common benign tumour was pleomorphic adenoma (48%). FNA or core biopsy was performed in 97% of cases with an accuracy of 91%, comparing well with other published literature. Postoperative complications included infection (2%), seroma (11%), ear numbness (7%), haematoma (8%) and fistula (1%). 22% displayed a grade of facial weakness postoperatively. 9% had lasting weakness at most recent follow-up. There was no reported mortality.*

### *Conclusion*

*In keeping with published literature, pleomorphic adenoma was the most common pathology. Our perioperative morbidity and mortality compared well with other data.*

### **P36 The Two week wait head and neck clinic: do our patients know why they are coming?**

*Kim To, Aman Khanna, Stacey Oliver-Singleton, John Glore, Jerry Sharp, Sean Mortimore, Mriganka De*

#### *Introduction*

*Cancer outcomes in England are lower than the best outcomes in Europe. The 2-Week-Wait pathway (2WW) was introduced to Head & Neck (H&N) services in the United Kingdom by the Department of Health in 2000 using document HSC 2000/013. Anecdotally, patients in H&N clinics can appear unaware of having been referred as having a suspected cancer and occasionally become distressed at learning this. We examined the information provided to patients referred through this expedited pathway.*

#### *Methods*

*Data was collected prospectively. Questionnaires were provided to patients arriving for their first appointment at our Head & Neck clinic over a three-month period in 2012.*

#### *Results*

*There were 97 fully-completed questionnaires. 77/100 (79.4%) stated that their General Practitioner (GP) had informed them that their referral was urgent; however, only 54/97 (55.6%) were told that the urgency was for suspected cancer. Of the remainder, 27/43 (62.7%) would have liked the GP to inform them of the suspected cancer. 69/97 (71.1%) were referred with two visits to their GP; 10/97 (10.3%) waited more than three visits.*

#### *Conclusions*

*Almost half of patients referred on 2WW were not told of a suspected cancer diagnosis by their GP. 62.7% of these would have preferred to know. More thorough discussion at time of referral could reduce patient anxiety and hence streamline their passage through ENT services. Most patients are referred within three visits to their GP.*

**P37 Transoral laser resection of early oral squamous cell carcinoma and oral premalignant lesions: complications and morbidity over 11 years**

*Ojas Prince Krishnan, Clifton Wan, Jessica Johnson, Theo Boye, Michael Ho*

*Introduction:*

*Transoral laser resection (TOLR) is widely used in the treatment for early oral squamous cell carcinoma (OSCC) and oral premalignant lesions (OPML). Although common, pain and swelling are usually well tolerated but occasionally complications such as delayed haemorrhage may require readmission or even surgical intervention. This study was carried out to evaluate the readmission rates, returns to theatre, complications and recurrence rates of TOLR for OSCC and OPML*

*Methods:*

*Retrospective study of all consecutive TOLR of OSCC and OPML carried out by the Maxillofacial Unit, Bradford Teaching Hospitals from 2003-2014. Demographic, surgical, histopathological and clinical outcome data were accessed from the hospital computerised database, and case notes.*

*Results:*

*Two hundred and fifty seven (257) patients underwent TOLR for intra oral lesions over the 11-year period. Pilot data of cases performed between March 2013 to November 2014 showed 55 patients (25 OSCC and 30 OPML). The median length of stay was 1 day (range 0-9 days). The readmission rate was 27% (14). 46% (6) of this was due to post-operative bleeding. The return to theatre rate was 20% (11). Of the patients who required surgical re-intervention, these were mainly due to either post-operative bleeding or for further excision.*

*Conclusion:*

*Whilst TOLR has shown to be effective in the surgical management of OSCC and OPML, it seems to have a significant complication rate. The outcomes of this study provide a basis for precision in informed consent and would aid in the management of the patient's as well as commissioning bodies' expectation of the quality of care.*

## **P38 The role of Pentoxifylline-Tocopherol-Clodronate (PENTOCLO) in Osteoradionecrosis (ORN) of the Mandible**

*Raghav Kulkarni, James Cymerman, Kayleigh Gilbert, Andrew Pick, Michael Ho, David Sutton, James McCaul*

### *Introduction*

*Four hypotheses have been proposed for the pathogenesis of ORN and the most recent is the Fibroatrophic theory.*

*The synergistic use of Pentoxifylline and Tocopherol are proposed to act as antifibrotic agents, facilitating conversion of myofibroblasts back to fibroblasts and affecting TNF $\alpha$  and TGF $\beta$ -1 signalling pathways consequently improving bone healing. Clodronate, a first generation non-nitrogenous bisphosphonate, has shown positive results when used in combination with Pentoxifylline and Tocopherol.*

*This study analyses the progress of patients placed on Pentoxifylline and Tocopherol and patients where the third agent was added (PENTOCLO regime) for ORN.*

### *Methods*

*Patients diagnosed with ORN and treated with Pentoxifylline, Tocopherol and Clodronate over the past five years were selected. Case notes and imaging were rigorously reviewed. Patients were graded according to the Notani classification at presentation and any additional intervention or change in clinical status recorded as treatment progressed.*

### *Results*

*To date 31 patients with ORN of the mandible have commenced this therapy. Three could not tolerate therapy. Seven (23%) patients are on PENTOCLO with no adverse events to date. Seven patients treated with Tocopherol and Pentoxifylline alone have undergone ORN resolution. Four of these also had surgical debridement. Three patients had HBO as part of management. Of patients treated with PENTOCLO four have already shown signs of improvement.*

### *Conclusion*

*Tocopherol and Pentoxifylline is associated with reduction of ORN stage and the introduction of PENTOCLO in more severe cases of ORN may be beneficial. Further analysis in a pilot, feasibility randomized controlled trial is indicated.*



## **P39 Enhanced Recovery After Surgery (ERAS): A systematic review in head and neck cancer surgery**

*Raghav Kulkarni, James Cymerman, Catherine Moss, Kayleigh Gilbert, Irene Kreiss, Jeremy McMahon, James McCaul*

### *Introduction*

*Enhanced recovery after surgery (ERAS) programs are being developed to reduce morbidity and mortality in patients undergoing major surgery. The aims of ERAS are to optimize the patient before and during major surgery and in the post-operative phase and so reduce morbidity and mortality. Implementation of these programs in the fields of colorectal, vascular and thoracic surgery is proving to be successful in reducing morbidity and mortality.*

*The aim of our systematic review is to evaluate the existing body of evidence regarding ERAS in major head and neck cancer surgery.*

### *Methods*

*A literature search on MEDLINE, Ovid, PubMed and Cochrane library Database on Enhanced recovery after head and neck cancer surgery published in English language between 1980 to 2014 was performed. Title and abstract search revealed 114 papers for further analysis. We used the PRISMA statement for the clear reporting of our systematic review.*

### *Results*

*The literature on enhanced recovery in major head and neck surgery is very limited at the present time. We present the current literature evidence supporting measures intended to reduce morbidity and mortality in major head and neck surgery.*

### *Conclusion*

*Further studies of high quality are required to establish a basis for ERAS in head and neck cancer surgery. This will lead to an enhanced recovery program encompassing all three phases of the patient journey reducing patient morbidity and mortality.*

## **P41 Randomised Pilot Study of Therabite versus Wooden spatula in the Amelioration of Trismus in Head and Neck Cancer Patients**

*Rana Lee, Nick Slevin*

*Mouth cancer patients attending a reference group in our hospital concurred that restricted mouth opening had the greatest impact on reducing their QOL.*

*With up to 86% of patients receiving radiation for mouth cancer developing some degree of limitation in jaw opening (trismus) this is a key problem impacting on nutritional intake, dental hygiene and all aspects of QOL*

*This is a feasibility study as there are major uncertainties around compliance with exercise programme, tolerability during radiotherapy and its associated mucositis and lack of clarity on which levels of mouth opening improvement impact on quality of life.*

*The primary aim is to evaluate the feasibility of conducting a randomised controlled trial comparing Therabite® (1) versus wooden spatulas (standard care) in patients with stage 3 and 4 oral and oropharyngeal cancer.*

*Secondary aims are (i) assess whether Therabite or wooden Spatula intervention improves patients' QOL using validated QOL questionnaires (ii) whether intervention can reduce the level of post-treatment clinical management/health care utilisation required by mouth cancer patients.*

*Patients & Settings: Patients with stage 3 and 4 oral and oropharyngeal cancer managed either by primary (chemo)radiotherapy or surgery followed by radiotherapy will be recruited. It will be carried out in five leading Head & Neck cancer centres in the UK*

*From our previous work (Lee et al., 2011) we have demonstrated a high prevalence of trismus in this cohort of H&N cancer patients and shown the necessity of intervention to improve maximum mouth opening and hence improve quality of life for these patients. Results to follow in 2015*

## **P42 Geographic and demographic variation in human papillomavirus associated oropharyngeal squamous cell carcinoma: an initial report.**

*Mary Lei, Joao Galante, Selvam Thavaraj, Teresa Guerrero Urbano*

### **Introduction**

*Human papillomavirus (HPV)-associated oropharyngeal squamous cell carcinoma (OpSCC) is a recognised subtype of head and neck cancer with distinct clinical and biological features. Worldwide geographic variation in HPV-associated OpSCC has been reported but relative distribution within a single catchment area is unknown. London has a resident population of 8.17 million (2011 census data), of whom 1.66 million live in South-East London (SEL). This study reports geographic and demographic variation in relation to HPV status in patients diagnosed with OpSCC in SEL.*

### **Method**

*258 patients presenting with OpSCC from 2010 to 2014 were identified retrospectively from a pathology database. HPV status, age, gender, smoking and alcohol history were recorded for patients living within SEL (comprising the boroughs of Lambeth, Southwark, Lewisham, Greenwich, Bexley and Bromley).*

### **Results**

*HPV status was available for 206 patients, 159 of whom lived in SEL. Overall, 102/159 (64.2%) cases were HPV-positive, with individual borough HPV-positivity ranging from 11/23 (47.8%, Southwark) to 18/25 (72.0%, Bexley). Smoking and alcohol history varied widely between boroughs. Of the HPV-positive patients, the proportion of current smokers ranged from 4/18 (22.2%, Bexley) to 8/15 (53.3%, Lambeth). Mean HPV-positivity for Inner London (Lambeth/Southwark/Lewisham/Greenwich) and Greater London (Bromley/Bexley) was 59.0% and 71.2%, respectively.*

### **Conclusions**

*Our preliminary data indicate there is a wide variation of HPV status, smoking and alcohol history in OpSCC patients within a single catchment area when compared by borough. Further work is necessary to determine if this observation is associated with socioeconomic or other risk factors which may influence commissioning of services or preventative strategies.*

## **P45 An in-depth analysis of written patient information in head and neck surgical oncology: are patients being kept in the dark?**

*Barry Main, Frans Banki, Steve Thomas, Jane Blazeby*

### **Introduction**

*Provision of accessible, high-quality information is a prerequisite for patient-centred healthcare. Without it, people cannot participate fully in decision-making or be informed adequately to consent to treatment. Written information in the form of patient information leaflets (PILs) is commonly used to supplement consultations but there are concerns about their quality and accuracy. The literature lacks an in-depth review of PILs provided in head and neck surgery*

### **Methods**

*PILs from hospitals performing surgery for oral/oropharyngeal cancer were obtained and analysed using a thematic framework. Themes were applied to each PIL to allow examination of both content and accuracy. The validated DISCERN tool was used to rate the overall quality.*

### **Results**

*24 PILs from hospitals in England were included in the analysis. The majority (88%) included a description of the operation. There were inaccuracies and inconsistencies in the way important complications like free flap failure and chyle leak were described. One PIL contained information about survival or risk of disease recurrence. Because of a lack of a clear evidence base for included information, the overall DISCERN score was poor.*

### **Conclusions**

*This study has highlighted major deficiencies in the information contained in PILs about surgery for oral/oropharyngeal cancer. It is recommended that PILs for cancer surgery are standardised and contain evidence-based information relevant to key stakeholders*

## **P46 Reporting outcomes of definitive treatments for oral and oropharyngeal cancer: a systematic review**

*Barry Main, Angus McNair, Matthew Beasley, Steve Thomas, Jane Blazeby*

### **Introduction**

*In head and neck oncology, important questions continue to emerge about the relative effectiveness of different treatments. Randomised controlled trials (RCTs) remain the gold standard for evaluating new treatments but data synthesis is often limited by inconsistencies in outcome measurement, definition, and reporting. This systematic review aimed to collate and critique the standards and definitions of outcome reporting in RCTs of definitive treatments for oral/oropharyngeal cancer.*

### **Methods**

*Systematic, sensitive literature searches identified RCTs of potentially curative treatments. Outcomes were listed verbatim and categorised into broad outcome domains. Each outcome was examined for a definition. The definitions applied to individual outcomes were compared between studies. All included Validated instruments were used to assess for reporting quality and risk of bias.*

### **Results**

*From 8219 abstracts, 22 RCTs including 8239 participants were included. The primary outcome was overall survival in 4 studies, and surrogate end-points for survival in 10. Critical appraisal revealed inconsistencies in outcome definition and measurement. Patient-reported outcomes were reported in only 4 studies.*

### **Conclusions**

*A core outcome set of agreed clinical and patient-reported outcomes should be developed that would allow improved reporting of trial results and facilitate more accurate cross-comparison and synthesis of results.*

## **P48 Dental Assessment Of Head And Neck Patients Prior To Radiotherapy.**

*Charlotte J McIntyre, John Lee Y Allen, Alasdair D Mace, Peter M Clarke*

### **Introduction:**

*Radiotherapy to the head and neck can lead to complications that can significantly reduce the patient's quality of life. These complications include: infection, mucositis, xerostomia, dental caries, and osteoradionecrosis. Osteoradionecrosis, has an incidence of up to 22%, and affects the mandible more commonly than other bones in the head and neck. To reduce this risk, unhealthy teeth should be extracted prior to starting radiotherapy, however, this should not delay treatment. British Association of Head & Neck Oncologists (BAHNO) guidelines state that 'all patients should be assessed by a suitably qualified dental practitioner before and after their main treatment'.*

### **Methods:**

*We performed a literature review of the complications following radiotherapy to the head and neck. In order to assess our compliance with the BAHNO guidelines we carried out a retrospective audit of our dental referral rate of head and neck patients undergoing radiotherapy as part of their treatment.*

### **Results:**

*Between January 2014 and April 2014 there were 43 head and neck patients referred for radiotherapy. 33% had a documented referral to our oral surgeon for a dental assessment. Following the results of our first audit we developed a novel strategy for improving the referral rate in our department and we present our re-audit findings.*

### **Conclusions:**

*All patients who will be undergoing radiotherapy as part of their treatment require dental referral as early as possible. If complicated dental extractions are required, the aim should be to provide this during surgery in order to reduce the need for a further general anaesthetic.*

## **P49 Is quality expensive? - The phased introduction of an enhanced recovery programme for Head and Neck Oncology.**

*Andrew Moore, Safina Ali, Emma Gilbert, Rachael Donnelly, Nicola Easton, Claire Twinn, Elizabeth Hunt, Ricard Simo, Jean-Pierre Jeannon, Richard Oakley*

### *Introduction*

*Extrapolation of Enhanced Recovery Programmes (ERP) to the oncological setting is a Department of Health initiative aimed at improving oncological as well as traditional surgical outcomes. The phased introduction of straightforward and deliverable work-streams has the potential to impact outcomes throughout development and implementation of the project.*

### *Methods*

*The patient pathway from referral to discharge was evaluated by a multidisciplinary team (MDT). Multiple work-streams with the potential to improve patient outcomes were identified. Each work-stream was delegated to an appropriate MDT group and overseen by a steering committee.*

### *Results*

*86% of two-week pathway patients agreed to access smoking cessation services. The same-day admission work-stream created a saving of 300 bed days per year. 99.3% of patients received pre-operative carbohydrate-loading; well tolerated in 96.4%. LIDCO directed fluid management resulted in 50% less fluid being given to patients intra-operatively. Bespoke care pathways reduced median length of stay in days (pre-ERP:post-ERP); total-thyroidectomy 3:2, hemithyroidectomy 2:1, total-parotidectomy 9:1 and superficial-parotidectomy 3:1 days. An integrated surgical and oncological surveillance programme has resulted in two less appointments being required.*

### *Conclusion*

*Enhanced recovery programmes vary depending on the institution and department in which they are implemented; all share the common goals of better patient outcomes, reduced utilisation of resources, increased patient throughput and financial savings. The programme may be constructed from many individual components which do not need to be introduced simultaneously. We have shown that a phased introduction can pay early dividends*

## **P50 A closed loop audit of flexible nasendoscopy findings by junior doctors in the ENT department**

*Ravi Naik, Richard Cobb, Michael Lee*

### **Introduction**

*Junior doctors often perform flexible nasendoscopy (FNE), which forms a crucial part of the complete ENT examination in order to fully assess the upper aerodigestive tract. At present, there are no national guidelines for standard documentation of FNE findings.*

### **Method**

*First cycle: We retrospectively reviewed the documentation of FNE findings by junior doctors in the SOS clinic and ward referrals using a standardised proforma over two months.*

*Standard: The results were analysed and compared to 'best practice' guidelines from senior clinicians and established ENT literature.*

*Intervention: A 'checklist' sticker was produced and placed in clinic prompting users to document findings on key anatomical structures encouraging both thorough examination and comprehensive documentation.*

*Second cycle: We retrospectively reviewed the documentation of FNE findings by junior doctors using a standardised proforma over a two-month period to assess for improvement in practice.*

### **Results**

*The first cycle audit reviewed 20 entries following FNE. The most commonly documented findings included the appearances of the naso-pharynx, epiglottis and vocal cord movement. However, findings regarding the fossa of Rosenmüller/Eustachian tube orifice, aryepiglottic fold and vestibular fold were poorly documented. The second cycle revealed marked improvements in all aspects of documentation.*

### **Conclusion**

*The practical skill of FNE is poorly taught at medical school with significant variation in the quality of junior doctors recording findings, leading to the undesirable repeated FNE. The use of a simple sticker has led to improvement in the quality of recorded findings. We feel that the stickers have encouraged thorough examination and comprehensive documentation.*



**P51 A closed loop audit: Impact of granulocyte-colony stimulating factor (G-CSF) agent on per-treatment related morbidity for patients undergoing chemoradiation (CRT) for head and neck cancer (HNC)**

*Mehran Nasralla, Mary Lei*

*Introduction:*

*In a previous audit we evaluated the effects of pegylated G-CSF (PEG) and non-pegylated standard G-CSF (sG-CSF) during CRT. The choice of G-CSF agent was associated with statistically significant differences in neutrophil count, neutropaenic episodes and incidence of hospital admission, with more favourable outcomes in patients receiving PEG. PEG was no longer available on the trust formulary, thus as a result of these conclusions, local practice was changed towards 8-day regimens of sG-CSF. A re-audit was performed for the patients treated between 10/01/2014 and 04/04/2014 to determine the impact of longer 8-day regimen of sG-CSF compared to 5-day regimens.*

*Results:*

*Median neutrophil counts analysed using 2-sample t-test. Rates of neutropaenia and hospital admission compared by Chi-squared analysis. Median neutrophils counts were typically higher in the 8-day sG-CSF regimen compared to the 5-day regimen. We found statistically significant differences the nadir neutrophil counts during concomitant chemoradiotherapy in patient receiving only concomitant chemoradiotherapy (CRT). A similar trend was observed in patients receiving both induction and CRT (IC+CRT), though this did not reach statistical significance, values were higher in patients receiving 8-day regimens of sG-CSF.*

*Conclusions:*

*We can conclude that the choice of either 5-day or 8-day regimens of s-GCSF is associated with statistically significant differences in the median neutrophil count, but not with the incidence of neutropaenia or hospital admission. These results are in keeping with a dose-response relationship between sG-CSF and treating myelosuppression following cytotoxic chemotherapy.*

## **P52 Smoking cessation services; an audit of referrals within a Maxillofacial unit**

*Fiona Noble, Fiona Wright, James Morrison*

### *Introduction*

*A significant number of patients attending the regional maxillofacial unit are smokers.*

*Smoking is a risk factor for many diseases including head and neck squamous cell carcinoma. Smoking reduces the healing potential of tissues after surgery which may lead to increased complications. It is known that brief interventions and sustained support can lead to increased success in smoking cessation. Despite the provision of a cessation service within NHS Lothian, there was a perception that it was not being accessed by medical staff on behalf of patients. An audit of referral to the smoking cessation service was carried out and action taken to improve the interaction with the smoking cessation team.*

### *Method*

*An initial audit was carried out within the Maxillofacial unit to assess the number of patients being referred to the smoking cessation team.*

*The Maxillofacial team were then given an introductory talk by the smoking cessation nurse with training in smoking cessation advice and the referral pathway. A further prospective audit cycle was undertaken.*

### *Results*

*The initial audit revealed a poor referral rate from the maxillofacial unit to the smoking cessation service. After delivery of targeted education and training, there was an improvement in the number of referrals.*

### *Conclusions*

*Smoking cessation services increase the successful and sustained cessation of smoking. This helps to deliver a significant public health improvement. Smoking is a significant risk factor in head and neck SCC and all healthcare professionals should offer patients advice and help in the cessation of their tobacco habit.*

## **P56 Tubed Medial Sural Artery Perforator (MSAP) flap for pharyngeal reconstruction.**

*Michael Nugent, James Moor, Mhairi Little, Andrew Bartram*

### *Introduction*

*In Sunderland the tubed anterolateral thigh (ALT) flap is our most commonly used flap for pharyngeal reconstruction. Whilst we have had good results with this, it can be bulky and closure of the skin over the neopharynx can be problematic in the post radiotherapy setting. We report a case of a 62 year old patient undergoing a salvage pharyngectomy with a significantly narrowed and scarred neck. We felt that a thinner flap would be a better option in this case. We have been using the MSAP flap as a replacement for the radial forearm flap (RAFFF) for oral cavity reconstruction and felt it would be a good choice in this case. As far as we are aware there are no other reports of tubed MSAP being used for pharyngeal reconstruction.*

### *Results*

*A 9x7cm flap was raised from the patients left calf on two perforators. The flap was 9mm thick, allowing primary closure of the neck. A small area of neck skin was included in the resection, this area was grafted using the unused corners of the flap. Barium swallow 3 weeks post-operatively confirmed the absence of leakage.*

### *Discussion*

*The benefits of the tubed MSAP flap are that it has a decent length pedicle and is significantly thinner than the thigh flap, allowing easier closure of the neck. The donor site does need to be grafted when a flap this size is harvested, but anecdotally this is better tolerated than a forearm donor site.*

## **P58 The role of surgical drains in the post-operative management of radial forearm free-flap donor sites**

*Ravinder Pabla, Priya Gaind, Mahesh Kumar, Bhavin Visavadia, Michael Gilhooly, Michael Amin, James McCaul*

### *Introduction*

*Head and neck resection defects are commonly reconstructed with radial forearm free-flaps (RFF). It has*

*been routine practice in our unit to site vacuum drains during donor site closure. Perceived indications are prevention of haematoma, reduced infection risk and to improve wound healing.*

*The aims of this study were:*

- Search for guidance on the utility of surgical drains*
- Review the literature for evidence of clinical benefit for post-operative drains*
- Assess the efficacy of drains at the RFF harvest site*

### *Methods*

*Pubmed literature search and combined retrospective/prospective review of clinical records of 30 consecutive patients undergoing RFF harvest during the period December 2012 to December 2014.*

### *Results*

*We were unable to find definitive guidelines on the use of surgical drains in head and neck surgery. There is a body of evidence against the routine use of surgical drains in general, orthopaedic and thyroid surgery.*

*Our sample consisted of 20 men and 10 women with a mean age of 55.5-years. 87% had 0mls and 10% had between 5-15mls drainage on the first post-operative day. There was one outlying result of 50mls output at post-operative day 3 - this is believed to be a recording error. 77% of drains were removed at day 1. There were no immediate or early post-operative complications.*

### *Conclusions*

*Routine placement of a surgical drain in RFF donor sites is unnecessary with limited evidence of clinical benefit. A change to clinical practice has been agreed and a re-audit commenced to close the audit loop.*

## **P59 Globus Pharyngeus is prevalent in hemithyroidectomy; surgery does not alleviate symptoms**

*Nicola Pargeter, Huw Griffiths, Nikos Efstathiou*

### *Introduction*

*Globus pharyngeus is reported in 30% patients undergoing total thyroidectomy but is thought to resolve post-operatively and be less prevalent in hemithyroidectomy, though this area has not been widely researched. Method 50 patients undergoing hemithyroidectomy completed the Glasgow Edinburgh Throat Scale at 3 weeks pre and post-operatively along with qualitative inquiry to establish main symptoms. Exclusions: recurrent laryngeal nerve damage; previous neck surgery; previous history of voice/swallowing difficulties.*

### *Results*

*Globus symptoms were demonstrated pre and post-operatively (mean scores 2.27 and 2.47 respectively, norm is  $\leq 2$ ), with higher post-operative symptoms in the elderly (66+ years) and significantly higher ( $p= 0.024$ ) pre-operative symptoms of 'throat closing off' at younger age (25-45 years). 50%+ participants graded symptoms  $\geq 4$  on 'feeling something stuck in the throat' and quality of life questions. Qualitative feedback centred on: symptoms; need for advice/support; unmet expectations of surgery.*

### *Conclusion*

*Globus features are more prevalent than previously reported, occurring in 50%+ of thyroid patients, even in less extensive surgery. Symptoms do not resolve post-operatively with resulting focus on throat sensation and impact on quality of life. Expectations of surgery are not wholly met and patients want additional support/advice. Further quantitative and qualitative inquiry with a larger population over a longer timescale is indicated to investigate these issues.*

## **P60 Survival Outcomes of Salvage Laryngectomy for Recurrent Laryngeal and Hypopharyngeal Carcinoma following Primary radio/chemoradiotherapy**

*Mark Puvanendran, Jai Manickavasagam, Hannah Kwong, Vinidh Paleri*

### **Introduction**

*A significant subset of patients who initially undergo radio / chemoradiotherapy for laryngeal/ hypopharyngeal squamous cell carcinoma (SCC) will have recurrent disease. The mainstay of treatment for this population is salvage surgery. In this study, the survival outcomes of patients undergoing salvage laryngectomy for post radio/chemoradiotherapy SCC recurrent disease were analysed.*

### **Aim**

*To determine the rate of salvage laryngectomy after failure of radiation or chemoradiation over 10-year course and to evaluate the overall and disease specific survival rates for patients requiring salvage total laryngectomy.*

### **Methods**

*A retrospective review was carried out on all patients undergoing salvage laryngectomy at the Freeman Hospital, Newcastle, a tertiary referral unit. All patients initially presented with T3 or T4 laryngeal SCC and underwent salvage laryngectomy between 2000 and 2013.*

### **Results**

*Seventy seven patients underwent salvage laryngectomy in the 13 years under consideration, Sixty-eight were males and nine were females. Primary sites encompassed, Larynx(50), hypopharynx(22) and other(5). The indications for laryngectomy were; laryngeal dysfunction(6) and disease recurrence(71). Staging at presentation of recurrence were, rT4 (34), rT3 (6) and rT2 (6). The staging for 22 patients with recurrent disease could not be retrieved.*

### **Conclusions**

*The 2, 3, and 5 year survival rates for patients who received salvage surgery following primary radio / chemoradiotherapy treatment were 64%, 57% and 46 % respectively. The disease specific survival at 2 and 5 years was 59% and 52% respectively.*

## **P61 Prevalence of frailty in Head and Neck Cancer patients in the North of England.**

*Gemma Ridley, Vinidh Paleri, Mark Puvanendran*

### **Background**

*An ageing UK population and advances in medical care are seeing increasing numbers of comorbid and elderly patients undergoing surgical procedures. Frailty is an emerging concept in the oncologic literature, but has been used as a proxy measure for comorbidity in geriatric patients. Although no standard definition has been agreed, several models and indexes exist to measure frailty.*

### **Aims**

*To establish prevalence of frailty and identify co-existing co-morbidities in patients presenting with head and neck cancer.*

### **Methodology**

*A retrospective notes assessment of consecutive patients seen at the multidisciplinary clinic over a 4-week period. Patient notes were studied to calculate frailty risk scores using the Clinical Frailty Scale (CFS)<sup>7</sup>. Comorbidity was abstracted using the Adult Comorbidity Evaluation 27 index and graded. All disease processes contributing to comorbidity and were recorded. Correlation between frailty and comorbidity scores were analysed.*

### **Results**

*We identified 15 new patients and 40 patients on follow up. The CFS identified 22% of patients to be frail at the time of diagnosis. ACE 27 grading moderately correlated with the increasing CFS scale.*

### **Conclusions**

*Frailty is prevalent in one-fifth of patients diagnosed with head and neck cancer. Further research is needed for a consensus of definition of frailty.*

## **P62 Accuracy of Clinical Coding in free tissue transfer head and neck oncology surgery: Are we getting any better?**

*Sharmista Roy, Massimo Maranzano, Tim Blackburn, Muammar Abu-Serriah*

### **Introduction**

*Clinical coding is a method which records various investigatory and interventional procedures in medicine. Due to the evolving nature of medicine, the classification systems that are used for this is constantly revised. The OPCS Classification of Interventions and Procedures Version 4.7 April 2014, maintained by the Health and Social Care Information Centre is the current reference system being used within the NHS.*

*Clinical coding is crucial for correct hospital pay and governs hospital performance. It is also important for planning and provision of services.*

### **Aims**

- *To test the accuracy of clinical coding of free tissue transfer head and neck surgery (HNS) procedures*
- *Assess improvements in quality of coding comparing findings to those previously reported in our unit.*

### **Methods**

*A review of operative notes of all patients who underwent free tissue transfer HNS at Manchester Royal Infirmary between 1 December 2013 and 1 December 2014 will be carried out. Accuracy of allocating the correct code and its financial implications will be assessed with the business analytics and clinical coding teams.*

### **Results**

*Approximately 70 free tissue transfer procedures were assessed. Significant inaccuracies were noted particularly in the coding of microvascular anastomosis, dental extractions, and mandibular resection. Coding process analysis has identified various contributory factors to coding inaccuracies.*

### **Conclusions**

*Coding inaccuracy is a long-standing challenge and little seems to have changed since our first report on this 5 years ago. Factors contributing to this will be detailed along with recommendations for improvement.*



## **P63 Reconstruction of orbital exenteration defects**

*Daniel Saleh, Josue Alexis, Sarah Emmett, Samuel Yang, David Theile, Benedict Panizza, James Emmett*

### **Introduction**

*Orbital exenteration was classified as resection that included en-bloc excision of the peri-orbital and orbital contents or radical where combinations of adjacent structures were included. Our experience is primarily with aggressive or recurrent cutaneous malignancy. We sought to appraise our unit experience for this heterogeneous group of patients.*

### **Methods**

*A retrospective review of consecutive cases performed between 2003-2014 was performed. Standard data sets were collected. Major complications were defined as those requiring general anaesthetic during the same admission. Latent reconstructive failure was also scrutinised. We devised a classification including skeletal excision, open sinuses and/or nasal cavity to try stratify reconstruction of radical cases.*

### **Results**

*A total of 70 patients with a mean age 66 years had orbital exenteration. Sixty accurate data sets were available for 61 exenterations. Mean follow-up was 2.5 years (range 2 – 7 years). The majority (64% n=39) were for squamous cell carcinoma (SCC), 59% (n=23) of these had large nerve perineural invasion (PNI). The majority of cases (66%) were radical exenterations. Eleven (18%) had major complications, these did not correlate with ASA grade. More patients that had free flap reconstructions had adjuvant radiotherapy. Latent reconstructive problems were seen in 6% (n=4) of patients.*

### **Discussion**

*Oncological treatment has improved to offer good local control and cure rates of aggressive disease in this region. Radical exenteration poses additional reconstructive considerations as exemplified by our classification system. The improved treatment of aggressive cutaneous malignancy, such as PNI, means the improved prognosis ideally requires a lasting reconstruction.*

## **P65 PARAGANGLIOMA: THE CHALLENGES OF PERIOPERATIVE MANAGEMENT**

*Eamon Shamil, Liam Brennan, Piyush Jani*

### **Introduction**

*A paraganglioma is a tumour that contains chief cells derived from neural crest cells. All paraganglia have the capability of producing biologically active amines. 4% of head and neck paragangliomas secrete catecholamines, the majority secreting norepinephrine.*

### **Methods**

*We discuss the multidisciplinary peri- and intra-operative management of catecholamine secreting paragangliomas from recent experience of two cases as well as literature review.*

### **Results**

*Preoperative management started several weeks prior to the operation, when an endocrinologist initiated phenoxybenzamine (an irreversible non-competitive alpha-receptor blocker) and then propranolol (beta-blocker)*

*Intraoperatively, a hypertensive crisis occurred each time the mass was handled. There was a lag time from tumour handling to rise in blood pressure by approximately 1-2 minutes. During episodes of acute rise in blood pressure, the surgeons would pause, while the anaesthetist titrated sodium nitroprusside (vasodilates by releasing nitric oxide). An esmolol infusion was also available to provide rapid onset and offset of beta-blockade (half life 11 mins). It would take 1-2 minutes for the blood pressure to fall to acceptable parameters before the surgeons would resume.*

*Postoperatively the patient was observed in a higher dependency unit for 24 hours. Oral antihypertensive agents were discontinued as the patient became normotensive.*

### **Conclusions**

*Catecholamine-secreting paragangliomas in the head and neck are rare tumours that require multidisciplinary perioperative management to reduce the risk of serious morbidity or mortality and offer potential curative treatment. Close and regular communication between surgeons and anaesthetists during times of tumour manipulation allow for acute hypertensive crises to be better predicted and managed.*

## **P66 Calf Perforator Flaps: the Go-to-Option for Oral Cavity Reconstruction**

*Rabin Singh KC, N Pease, A Davies, L Cascarini, W A Townley*

### **Introduction**

*Calf perforator flaps are emerging as a popular choice in H&N reconstruction due to their favourable donor site morbidity. There are multiple source vessels in this region – the medial sural artery (MSAP) flap is the most commonly used. We document our clinical experience using calf perforator flaps in oral cavity reconstruction. In addition, we performed a cadaveric dissection study to determine predictability of perforator topography.*

### **Method**

*We prospectively collected data on calf perforator flaps over 1 year. In parallel, 20 calves from 10 cadavers were dissected. The position of the perforators was recorded in relation to fixed landmarks (vertical – intermuscular septum, horizontal – most proximal point on the fibula).*

### **Results**

*8 flaps (7 MSAP, 1 SAP flap) were performed (4 floor of mouth, 3 tongue, 1 buccal mucosa). Mean flap size was 9 x 5cm. The mean flap harvest time was 73 minutes. Seven of 8 donor sites were closed primarily. All flaps survived. One patient developed an early oro-cutaneous fistula, which healed spontaneously. All patients resumed a normal diet.*

*In the cadaveric study, musculocutaneous perforators from the MSA vessels were found in 19 of 20 cases (mean 2.3± / limb). Perforator location ranged from 20 to 170mm inferior to the fibular head and 0 to 45mm medial to the septum. Septocutaneous perforators from the sural artery system were present in 10% limbs (2 of 20).*

### **Conclusion**

*Our study suggests that the vascular anatomy of the medial calf is predictable, yielding perforator flaps that are ideal for intra-oral reconstruction.*

**P67 A comparison of the diagnostic accuracy of freehand fine needle aspiration cytology and ultrasound guided fine needle aspiration cytology: a methodical analysis and nationwide survey.**

*Cheka R. Spencer*

**Introduction:**

*Fine Needle Aspiration Cytology (FNAC)'s use in salivary gland neoplasia is still controversial. FNAC is operator dependent and influenced by disease prevalence and clinical expertise. It is useful in distinguishing oral cavity squamous cell carcinoma from oral leukoplakia and in diagnosing malignancy in bony tumours and tumour-like lesions. This study was conducted to 1) elucidate the comparison between freehand and ultrasound guided FNAC and 2) determine current national practice.*

**Methods:**

*A systematic review of the diagnostic accuracy (sensitivity, specificity, positive predictive value, negative predictive value) of freehand FNAC and ultrasound guided FNAC of salivary gland neoplasia. The databases searched were Pubmed, EMBASE and MEDline. A national survey of current practice in Head and Neck departments was also conducted.*

**Results:**

*There is a wide variety in diagnostic accuracy of both freehand and ultrasound guided FNAC. The former is more highly operator dependent and also dependent on context. Freehand FNAC is becoming superfluous in favour of ultrasound-guided FNAC.*

**Conclusion:**

*This study demonstrates that FNAC in general is a safe, reliable and accurate diagnostic tool with good diagnostic accuracy in the management of salivary gland neoplasia. Misdiagnoses do infrequently occur due to the complexity and overlap of various salivary gland lesions. It should be considered a reliable and accurate diagnostic tool in the assessment of many head and neck lesions ranging from salivary glands to mucosal and bony disease. Freehand FNAC can be as accurate as ultrasound guided FNAC.*

## **P68 Comparison of treatment outcomes of head & neck cancer patients referred within and outside the two-week wait pathway (2WW)**

*Puneet Tailor, Maryam Jan, Samir Yelnoorkar, Helen Cocks*

### **AIMS**

*Evaluate the differences in patient pathway and survival for head and neck cancer patients referred either on 2WW or other pathway.*

### **METHODS**

*Retrospective cohort study of the head and neck cancer patients taken from the Somerset cancer database referred to Sunderland Head and Neck Unit from January to December 2010. Patients were followed up for 5 years. Thyroid and parotid lesions were excluded.*

### **RESULTS**

*Ninety four patients were referred in 2010 with diagnosis of head and neck cancers, 66 via 2WW and 28 others, with a mean age 64 and 70 years respectively. Proportions of AJCC stage I-IV were similar in each group. There was no significant difference between groups for time from first referral to diagnosis or treatment. Initial survival via 2WW was better for the first 12-months but then equivalent at 2-years follow up (shown by Kaplan-Meier plot). Survivors were predominantly patients with oropharyngeal primary lesions, and patients with hypopharyngeal tumours had poorest survival.*

### **CONCLUSIONS**

*In 2010 2/3 of patients were referred on the 2WW pathway however 1/3 still presented outside the pathway. The groups had similar demographics and tumour stage. Despite differences in referral pathway there was no significant difference in continuing treatment pathway and overall survival.*

### **REFERENCES**

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## **P69 Factors Affecting Quality of End of Life Care in Head and Neck Cancer in England 2003-2012**

*Steve Thomas, Tom Walker, Shivaun Fleming, Andy Pring, Julia Verne*

### *Introduction*

*Patients dying from head & neck cancer have disease and treatment related issues that require multidisciplinary involvement until the end of their lives that can impact place of death. Place of death is used as a proxy for patient perceived quality of care, with death in home, care home or hospice being considered preferable compared to death in hospital.*

### *Methods*

*Incidence data is collected from UK Cancer Information Service. Key data items used for this analysis (place of death, place of residence, date of birth, sex and cause of death) were obtained from Office for National Statistics mortality files derived from death certificates (2003-2012). Deprivation figures are based on indices of deprivation 2010 (ID 2010) income deprivation scores aggregated from Lower Super Output Areas.*

### *Results*

*Head and neck cancers account for 0.6% of all deaths. One in five male and one in six female patients die within a year of diagnosis, 10% will die within six months of diagnosis. More males die, and die younger. The most common place of death for all age bands is hospital (43%, all ages) Cancer site and Socioeconomic deprivation also influences place of death. Large variations exist in place of death by clinical network: hospital deaths; London (50%) to South East Coast (38%).*

### *Conclusions*

*We highlight the high level of need for patients dying from head and neck cancers because of their young age and deprivation. We show how tumour site, age, gender, socioeconomic deprivation and geographical area of residence impacts on the place of death.*

## **P70 Treatment and Cost of Head & Neck Non Melanoma Skin Cancers (NMSC) in England in 2011.**

*Steve Thomas, Tom Walker, Tim Jones, Vero Poirier, Julia Verne*

### *Introduction*

*The incidence of NMSC has increased by over 30% in the last decade. They are the most common cancer in England accounting for a quarter of all recorded malignancies. We have examined the management of head and neck NMSC in England by age, gender, deprivation, treating specialty, cost and whether treated as an inpatient or daycase.*

### *Methods*

*In patient and day cases English hospital admission relating to a primary diagnosis of head and neck NMSC (ICD10-C440-C444) were extracted from inpatient hospital episode statistics. Healthcare resource group (HRG) codes associated with each hospital admission were linked to payment by Results tariffs.*

### *Results*

*The day case management of NMSC has risen by 169% whilst inpatient management has decreased. The majority of cases are in males over 60 years old (54%). 30% of NMSC treated was in the two most deprived quintiles. The day case vs inpatient admission rates vary across England. Dermatology and plastic surgeons each treat 35% of patients. 15% is treated by Oral & Maxillofacial Surgery. There is a range in the cost of treatment for day case (£639.57 – 1018.74) and inpatient( £1107.26 - £2943.74). This varies by specialty. There is variation in the number of operation by latitude also.*

### *Conclusions*

*Head & Neck NMSC is major burden on the health services. Older males, from less deprived background are most frequently affected by these conditions. There is marked geographical variation in the specialty that manages this condition. There is marked inter-specialty variation in the cost of treated NMSC..*

## **P71 Surgical Organ Preservation in Early Laryngeal Cancer**

*Kim To, Ali Qureishi, Sean Mortimore, Mriganka De*

### **Introduction:**

*Transoral laser microsurgery (TLM) is an effective form of treatment for patients with early laryngeal cancer. Despite this radiotherapy remains the predominant treatment option in some units in the UK. Our aim was to investigate the oncologic and survival outcomes of primary TLM in early laryngeal cancer.*

### **Methods:**

*Retrospective analysis of patients undergoing primary TLM between June 2000 to October 2013 at a single institution. The median follow-up time was 33 months.*

### **Results:**

*There were a total of 147 patients; 134 (91%) had glottic and 13 (9%) had supraglottic cancer. Primary TLM was performed exclusively in 131 (89%) patients and 16 (11%) patients received post-op (chemo)radiotherapy, neck dissection or both. The rate of second-look surgery was 58%. In glottic cancer, the 2-year local control was 100% and 97% in carcinoma in situ (Tis) and early stage (T1, T2) disease respectively. The 2-year disease-specific survival was 100% in Tis and 97% in early stage disease. In early stage supraglottic cancer, the 2-year local control was 100% and disease-specific survival was 91%. The rate of salvage laryngectomy was 5.4%. The most common complication was anterior glottic web in 3% of patients.*

### **Conclusion:**

*In carefully selected patients with early laryngeal cancer, primary TLM with or without adjunctive therapy can be organ preserving and has comparable oncologic and survival outcomes to radiotherapy.*



## **P72 Assessment of neck lumps in a dedicated clinic increases speed and accuracy of diagnosis**

*Harry Tustin, Laura Eleanor Jackson, Alexander Hugh Wheatley*

### **Introduction**

*In our Trust, neck lumps have traditionally been assessed by clinical examination and freehand FNA, with referral for ultrasound guided sampling in difficult cases. A recently introduced neck lump clinic provides clinical, radiological and cytological assessment as a one-stop service. This study aimed to determine whether this clinic increases the speed and accuracy of obtaining a cytological diagnosis.*

### **Methods**

*Data was collected for FNAs taken over two six month periods: one before and one after the dedicated neck lump clinic was introduced. Adequacy of cytology samples and consistency with surgical specimen histology were assessed and compared.*

### **Results**

*202 FNAs taken before introduction of the dedicated clinic were analysed. Of these, 66% had adequate cellularity. 96 patients from this cohort had surgery, in 43% of these cases the cytology findings were representative of the histology.*

*Of the 92 FNAs analysed that were taken in the dedicated lump clinic, 73% were adequate. 50 patients from this cohort had surgery, in 80% of these cases the cytology findings were representative of the histology.*

### **Conclusions**

*Our dedicated lump clinic providing ultrasound guided FNA and in house microscopy of samples (allowing aspiration to be repeated in clinic if necessary) has significantly improved the accuracy of FNA sampling and speed of preoperative neck lump assessment.*

### **P73 Oral Submucous Fibrosis in the UK: Causes, Impact and Progression**

*Navin Vig, Ishrat Rahim, Matt Keenan, Rishi Bhandari, Simon Whitley*

*Oral submucous fibrosis (OSMF) is a debilitating and potentially malignant condition. Caused by smokeless tobacco (ST) and areca nut (itself carcinogenic) usage, predominantly by South Asians, little is known about its impact in the UK, or ST usage. This prompted NICE to recommend research into it (PH39, 09/2012), its causes and progression. Malignant transformation rates of 2.5-30% are reported. In an attempt to address these questions, patients with OSMF were identified and related factors investigated.*

*Retrospectively, electronic records at the Royal London Hospital identified those with histopathological confirmation of OSMF (n=108) between 2003 and 2013. Letters/notes were used to extract data including demographics, ST/areca usage, mouth opening (MO), and malignant transformation rates.*

*Nearly all patients were South Asian (97.1%; 51% Bangladeshi) and just over a half were female (51.5%). Ages ranged from 9-83 (mean 54y); 12% were under 30. The majority stated ST +/- areca nut usage (97.2%, n=105). 27% had severe trismus at presentation (MO <20mm) and a large minority (45.4%) had at least mild dysplasia at first biopsy. Overall cessation rates were 4%. Management was mainly conservative; interventions (laser treatment, n=6; intralesional steroids, n=3) did not improve MO. Malignant transformation rate was 0.19% (n=2).*

*Progression from OSMF to oral cancer observed was low; however, it remains precancerous. Many patients developed severe dysplasia and debilitating trismus, and OSMF amongst those as young as nine is particularly alarming. Management options are limited; strategies to prevent initial uptake of ST/areca and focused cessation therapies might be more effective in lowering impact.*

## **P75 Antiplatelet management in head and neck oncological patients – a bleeding nightmare?**

*Natalie Watson, Beverley Hunt, Rachel Bell, Mark Tyrrell, Imran Ahmad, Richard Oakley*

### **Introduction:**

*Between 5-15% of patients treated using coronary stents require non-cardiac surgery within 2 years. Current guidelines suggest that dual antiplatelet therapy (DAPT) should be maintained for 4-6 weeks after implantation of bare metal stents (BMS) and for 6-12 months after drug-eluting stents (DES). Ideally, elective surgery should be delayed until the antiplatelet course is complete, but this is not always possible. Head and neck oncological surgery on DAPT represents a significant haemorrhagic risk; we report the strategies utilised when performing salvage laryngectomy in this setting.*

### **Methods:**

*Case note review and online pubmed literature search.*

### **Results:**

*A 66-year-old man required a laryngectomy for recurrent laryngeal squamous cell carcinoma (T2N0M0) after radical radiotherapy 3 years earlier. 4 DES were inserted in 2010 and in July 2014 (6 months prior to laryngectomy). After multidisciplinary team (MDT) discussion (haematologist, cardiologist, vascular surgeons, anaesthetist and head and neck surgeon) it was decided to continue aspirin and stop clopidogrel 5-days pre-operatively. An intravenous loading dose of 1g tranexamic acid was administered at induction of anaesthesia with an infusion of 10mg/kg/hr peri-operatively. An uncomplicated laryngectomy was performed using meticulous haemostasis with monopolar and bipolar diathermy and permissive hypotensive anaesthesia. Subcutaneous thromboprophylactic dalteparin was administered 6 hours post-operatively with DAPT re-commenced day 1 post-operatively.*

### **Conclusions:**

*As coronary stents become more prevalent we increasingly encounter patients on DAPT. We suggest an algorithm and MDT guidelines based on our experience and literature review for head and neck oncologic patients with scheduled surgical admissions regarding the management of antiplatelet therapy.*

**P76 The role of topical Mitomycin C as an adjunct to endoscopic laser division of anterior glottic webs**

*Giri Wijayasingam, Sophie Wilkinson, George Garas, Shaun Mortimore, Mriganka De*

*Anterior glottic web formation remains a common complication of endolaryngeal laser surgery with associated significant vocal handicap. Several techniques such as Laryngeal keel, glottic cold steel division, sialastics have been described in the literature for its treatment with variable success rates. We aimed to evaluate the success rate of our technique involving laser division followed by topical Mitomycin C application.*

*Method:*

*Retrospective record review of 18 patients treated with laser division and MitomycinC application. Recurrence rates and voice outcomes represented the primary outcome measures.*

*Results:*

*Eighteen patients (n=18) were identified from our records (male :female ratio 14:4 with average age of 65 years). "average follow-up was 23 months(sd14.21). At 23 months 78% of patients remain web-free with only 22%having developed a recurrence. 83%reported to be satisfied with their post-operative voice quality.*

*Discussion:*

*The addition of topical Mitomycin C application to opposing raw surfaces following web division appears to lower the rate of recurrence and improve voice outcomes. Further prospective randomised studies are required.*

## **P78 The implementation of an enhanced recovery programme for patients undergoing laryngectomy**

*Gemma Wilson, Mihaela Nistor, Nigel Beasley*

### *Introduction:*

*Enhanced recovery programmes have been shown to improve patient outcomes and reduce length of stay following a wide range of surgical procedures. The evidence of benefit for patients undergoing laryngectomy has not been described.*

### *Methods:*

*7 pillars of care for patients undergoing laryngectomy were identified: complication prophylaxis, haematological and electrolyte monitoring, feeding, mobility, analgesia, stoma and wound care and surgical drains. Enhanced targets for each of these domains were agreed within our multidisciplinary team. We audited our practice against these standards for patients undergoing laryngectomy between July 2012 and April 2014. A care plan incorporating these standards was placed in the notes of patients undergoing laryngectomy between July and December 2014. An audit against these standards was repeated.*

### *Results:*

*13 patients underwent laryngectomy in the first audit cycle. 3 categories had standards which were met more than 90% of the time (prophylaxis, monitoring and feeding). Stoma training did not begin until the third week in 15% of cases. The average length of stay was 21.5 days. (range 10-41 days). 11 patients underwent laryngectomy after the enhanced recovery pathway was introduced. 5 categories had standards which were met more than 90% of the time. The average length of stay was 18.0 days (range 6-37 days). The greatest barrier to discharge was developing competency in stoma care.*

### *Conclusion:*

*Implementation of an enhanced recovery plan has resulted in improved compliance with care standards and a reduced length of stay for patients undergoing laryngectomy.*

## **P79 The end of life environment of patients dying from cancer of the thyroid gland in england from 2003 – 2012**

*M Wilson*

### **Introduction**

*this study aims to evaluate the end of life environment of people who die with cancer of the thyroid gland. numerous surveys both of the general population and of patients nearing the end of life have shown that patients prefer to die at home.*

### **Methods**

*the study analysed incidence data provided by the uk cancer information service (cis) and the office for national statistics (ons) mortality files with regard to people dying of thyroid cancer in england during the period 2003 – 2012.*

### **Results**

*the average annual number of deaths from cancer of the thyroid gland was 286 (0.07% of all cancer deaths). thyroid gland cancer was found to have the largest proportions of deaths occurring in hospital compared to any other type of head and neck cancer (49%; 141 deaths a year on average). it also has a greater proportion of hospital deaths compared to the proportions of deaths for all cancer types (45%), but lower than for all causes (55%). outside of the hospital setting, 21% (60) died at home, 20% (57) in hospice, 8% (24) in a care home and 2% (5) were recorded as "other place".*

### **Conclusion**

*people who die from thyroid gland cancer are the most likely sub-group of the head and neck cancers patients to have a hospital death (49%). only 21% of patients with thyroid cancer died in the home environment. the fact that advanced thyroid cancers potentially involve airway obstruction at the end of life may offer an explanation for this.*

## **P80 Nodal positivity in Parotid Carcinoma.**

*Anika Kaura, Robert Kennedy, Safina Ali, Ricard Simo, Jean-Pierre Jeannon, Mark McGurk, Karim Hussain, Andrew Lyons, Edward Odell, Richard Oakley*

### **INTRODUCTION**

*Currently there is no consensus on the type of neck dissection that should be performed in salivary carcinoma. We evaluated all patients undergoing parotid surgery for carcinoma between 1992-2014. Our aim was to assess patterns of nodal positivity and correlate this to histological subtypes.*

### **METHODS**

*Retrospective data on parotid malignancy was collated using a pre-existing hospital database; including patient demographics, clinical and histopathological factors. For this study, we assessed patients undergoing neck dissection as part of their primary treatment. Analysis included histology sub-typing, staging and rates of nodal positivity at different ND levels.*

### **RESULTS**

*80 patients were analysed. Of these, 50(63%) also had a ND. The three commonest histology's were carcinoma ex-pleomorphic in 15 (30%), acinic cell carcinoma in 10 (20%) and adenoid cystic in 6 (12%). The patterns of nodal positivity and subtypes is seen figure 1. Nodal positivity rates were: level I (13%), level II (25%), level III (7%), level IV (11%) and level V (10%).*

**CONCLUSIONS**

*An elective ND is unnecessary in low risk N0 patients. We recommend a level I-III neck dissection for all N+ patients (at the discretion of the local MDT). In all high risk histologies we recommend a level 1-V ND.*

<b>50 NECK DISSECTION</b>			
<b>(6 incomplete data)</b>			
<b>12 Therapeutic ND</b>		<b>32 Elective ND</b>	
<b>5 Node -</b>	<b>7 Node +</b>	<b>28 Node -</b>	<b>4 Node +</b>
	SUBTYPES		SUBTYPES
	3 Carcinoma ex-pleomorphic adenoma		1 Adenocarcinoma
	2 Adenocarcinoma NOS		1 Adenoid cystic
	1 Salivary duct		1 Salivary duct
	1 Acinic cell		1 Carcinosarcoma ex-pleomorphic adenoma