

Fellowship Report 2024-25

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Program Title: Head and Neck and Advanced Reconstructive Microsurgery Fellowship

Host centre: Bhagwan Mahaveer Cancer and Research Hospital, Jaipur, India

Program Directors: Dr Umesh Bansal and Dr Sourabh Rawat

Duration: 12 months – 13th June 2024- 12th June 2025

Bhagwan Mahaveer Cancer and Research Hospital is a tertiary oncology centre located in Jaipur, Rajasthan. This hospital represents one of the largest volume oncology and microsurgical reconstruction services in northern India.

The primary aim of this 12-month fellowship was to hone my skills in free flap raising and microsurgery, focusing on defect analysis and individualized reconstructive planning in complex head and neck oncology cases. This fellowship was designed to provide comprehensive hands-on surgical exposure, critical clinical decision-making in patients requiring complex head and neck reconstruction.

The typical day began with reviewing post-operative patients, concentrating on flap monitoring and early complication detection. This was followed by the outpatient department (OPD), where we assessed new oncology referrals requiring primary resection and reconstruction, as well as post-operative follow-ups. This structured clinical exposure ensured continuity of care and reinforced the principles of oncologic and reconstructive surgery.

Afternoons were devoted to operative theatres, where we evaluated surgical defects post-resection and collaboratively planned the most appropriate reconstructive approach. Common defects included maxillary, marginal and segmental mandibular, buccal, and tongue-based defects, predominantly involving intraoral tissues without skin loss. This presented unique reconstructive challenges necessitating precise three-dimensional planning.

Reconstruction primarily utilized anterolateral thigh (ALT) flaps, fibula free flaps, and radial forearm flaps. The fellowship demanded a full working week from Monday to Saturday, including coverage of on-call flap-related emergencies. These responsibilities required prompt decision-making and surgical intervention, significantly enhancing my confidence in flap salvage and postoperative management.

The unit completed over 600 free flap procedures during the fellowship year. I was involved in more than 400 of these cases and personally performed 154 free flap surgeries under supervision. This high-volume experience accelerated my technical proficiency and operative efficiency in microsurgical reconstruction.

Key skills gained include advanced defect analysis, flap design, and meticulous flap harvesting. I mastered microsurgical vessel anastomosis techniques critical to flap survival and developed expertise in managing acute flap complications, including timely revision of compromised anastomoses. This comprehensive training has improved my surgical judgement and intraoperative adaptability.

A cornerstone of the fellowship was the close collaboration with oncology surgeons responsible for tumor resections and neck dissections. This multidisciplinary teamwork facilitated coordinated surgical planning, ensuring oncologic safety while optimizing reconstructive outcomes. Interaction with anesthesiology, nursing, and rehabilitation teams further enriched the holistic care provided to patients.

The fellowship presented a challenging yet immensely rewarding experience due to the complexity and composite nature of the defects, combined with the high patient volume. Throughout the year, I increased both my surgical efficiency and confidence in performing free flap reconstructions. I am now well-prepared to function as a day-one consultant, equipped with the skills, judgement, and experience necessary for independent practice in head and neck reconstruction.

I extend my sincere gratitude to my mentors, Dr. Umesh Bansal and Dr. Sourabh Rawat, for their expert guidance and support throughout this fellowship. I am also thankful to the nursing and surgical scrub teams at Bhagwan Mahaveer Cancer and Research Hospital for their professionalism and dedication.

Furthermore, I appreciate the support and resources provided by BAHNO. It was a great help and I am very grateful to BAHNO for this. BAPRAS (British Association of Plastic, Reconstructive and Aesthetic Surgeons) and RCSEd (Royal College of Surgeons of Edinburgh) also provided support during this Fellowship.