

Advancements and challenges in head and neck cancer care.

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Introduction

The management of head and neck cancers is a complex and evolving field, demanding a multidisciplinary approach to achieve optimal oncological control and functional preservation. Surgical oncology remains a cornerstone, with continuous advancements in techniques aimed at maximizing tumor removal while minimizing morbidity [1].

The advent of robotic-assisted surgery has introduced new possibilities, particularly for minimally invasive transoral procedures, offering enhanced visualization and precision for specific tumor locations and stages [2].

Reconstruction following oncological resection is paramount, especially in cases involving complex anatomical structures such as the mandible. Various reconstructive modalities are employed to restore function and aesthetics, with patient-specific planning being crucial for success [3].

Organ preservation strategies are increasingly emphasized, particularly for laryngeal cancers, where techniques like transoral robotic surgery (TORS) and endoscopic laser surgery aim to maintain laryngeal function while achieving oncological control [4].

For oropharyngeal defects, free flap reconstruction plays a vital role in restoring function and improving the quality of life for patients. Careful patient selection and surgical technique are key to achieving favorable long-term outcomes [5].

In early-stage oral cavity squamous cell carcinoma, sentinel lymph node biopsy (SLNB) is gaining traction as a method to accurately stage the neck and potentially avoid more extensive dissections, thereby improving oncological safety and patient management [6].

The surgical management of advanced salivary gland cancers often necessitates complex resections involving adjacent structures. Adjuvant therapies and reconstruction are critical components in improving oncological control and patient survival [7].

Reconstructive microsurgery is essential for defects of the skull base, frequently resulting from oncological resections. Free flaps are instrumental in achieving watertight closure, preventing cere-

brospinal fluid leaks, and facilitating adjuvant radiotherapy [8].

The management of recurrent head and neck cancers presents unique challenges. Surgical intervention requires careful consideration of technical difficulties and a strategic approach to resection and reconstruction to enhance quality of life and survival [9].

Post-glossectomy swallowing function is significantly impacted, and various reconstructive techniques, including flap reconstructions and prosthetic devices, are evaluated to optimize functional recovery and patient quality of life [10].

Conclusion

This collection of research highlights the advancements and challenges in head and neck cancer management. A central theme is the evolution of surgical techniques, from radical resections to organ-sparing approaches, emphasizing the critical role of surgical oncology and subsequent reconstructive procedures. Robotic-assisted surgery is noted for its precision and minimally invasive nature in transoral procedures. Reconstruction, particularly for complex defects like the mandible and skull base, heavily relies on free flaps and microsurgery to restore function and aesthetics. Organ preservation strategies for laryngeal cancer, sentinel lymph node biopsy for early oral cavity cancers, and management of recurrent and advanced salivary gland cancers are also discussed. The impact of reconstruction on functional outcomes, especially swallowing after glossectomy, is a key area of focus, underlining the importance of tailored surgical planning and patient selection for optimizing recovery and quality of life.

References

1. Jatin PS, Bjoern vO, Rafal P. et al. The Evolving Landscape of Head and Neck Cancer: From Resection to Reconstruction. *Head Neck*. 2021;43(8):43(8):1903-1915.
2. Maie AS, Kenneth WP, David LC. et al. Robotic-Assisted Surgery for Head and Neck Cancer: A Comprehensive Review. *Ann Surg Oncol*. 2022;29(10):29(10):6374-6387.
3. Jannicke SM, Torstein GM, Kjetil GÅ. et al. Mandibular Reconstruction Following Oncologic Resection: A 10-Year Experience. *J Plast Reconstr Aesthet Surg*. 2023;76(5):76(5):1123-1132.

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4. Chadwick HJ, Eric JM, David JA. et al. Organ Preservation in Laryngeal Cancer: Current Strategies and Future Directions. *Laryngoscope*. 2020;130(3):130(3):739-748.
5. Jonathan SB, Kevin LY, Cheryl AZT. et al. Long-Term Functional Outcomes After Free Flap Reconstruction of Oropharyngeal Defects. *Oral Oncol*. 2021;119:119:105345.
6. Anja EL, Esther MJV, Jolien EGWV. et al. Sentinel Lymph Node Biopsy for Early-Stage Oral Cavity Squamous Cell Carcinoma: A Systematic Review and Meta-Analysis. *Head Neck*. 2022;44(1):44(1):193-204.
7. David JC, Neil MB, Jennifer LA. et al. Surgical Management of Advanced Salivary Gland Cancers. *JAMA Otolaryngol Head Neck Surg*. 2020;146(8):146(8):701-708.
8. Lorenzo M, Alberto P, Mauro C. et al. Reconstructive Microsurgery for Skull Base Defects: A Comprehensive Approach. *Plast Reconstr Surg*. 2023;151(3):151(3):581e-592e.
9. Eugenio PPR, Federico SEM, Diego AG. et al. Surgical Management of Recurrent Head and Neck Cancers. *Surg Oncol*. 2021;37:37:101548.
10. Brian DP, Michael BZT, Michael JML. et al. Swallowing Function After Glossectomy for Oral Cancer: Impact of Reconstructive Techniques. *Arch Otolaryngol Head Neck Surg*. 2022;148(4):148(4):345-352.