

Advancements in oral cancer management: A comprehensive overview.

Daniel Novak*

Department of Head and Neck Oncology, Prague University Hospital, Czech Republic.

Introduction

The management of oral cancer has seen significant evolution, with a consistent focus on achieving optimal oncological control and enhancing patient outcomes through various surgical and therapeutic modalities. Neck dissection remains a cornerstone in the surgical management of oral squamous cell carcinoma with potential or confirmed metastasis, addressing the critical risk of regional spread [1]. Advancements in surgical techniques for head and neck cancers, including minimally invasive approaches, are continually being explored to balance efficacy with functional preservation. Robotic surgery and transoral laser microsurgery are increasingly evaluated for their roles in treating early-stage oropharyngeal cancers, offering distinct advantages in terms of oncological results and quality of life [2]. The accurate staging of early-stage oral squamous cell carcinoma is paramount for appropriate treatment planning, and the utility of sentinel lymph node biopsy is being investigated to potentially reduce the morbidity associated with extensive elective neck dissection in select patient groups [3]. The role of adjuvant therapies following definitive surgical treatment is a critical area of research, with adjuvant radiotherapy being analyzed for its impact on loco-regional control and survival in oral squamous cell carcinoma patients after neck dissection [4]. Reconstruction following extensive head and neck cancer surgery, particularly after radical neck dissection, is essential for restoring both functional and aesthetic integrity, with ongoing developments in reconstructive techniques aimed at improving patient rehabilitation [5]. Understanding the biological factors that influence cancer behavior is crucial, and the prognostic significance of human papillomavirus (HPV) status in oropharyngeal cancers is a key area of investigation, impacting treatment decisions and patient prognoses [6]. For locally advanced oral cavity squamous cell carcinoma, the potential benefit of neoadjuvant chemotherapy in improving resectability and oncological outcomes prior to primary surgery and neck dissection is being rigorously examined [7]. The detection and management of occult lymph node metastasis in oral squamous cell carcinoma are vital for preventing disease progression and improving survival rates, necessitating the development of accurate predictive models [8]. Transoral robotic surgery (TORS) has emerged as a significant technological advancement in head and neck cancer treatment, offering potential benefits in terms of precision, access, and functional preservation,

though its widespread application and long-term outcomes are still being consolidated [9]. In cases of disease recurrence after initial treatment, salvage surgery plays a crucial role in re-establishing oncological control and improving functional status for patients with recurrent oral cavity and oropharyngeal cancers, demanding careful consideration of treatment strategies [10].

Conclusion

This collection of research highlights advancements in the management of oral and oropharyngeal cancers. Key areas include the critical role of neck dissection in achieving oncological control, the comparative efficacy of surgical techniques like robotic versus transoral laser microsurgery, and the evolving utility of sentinel lymph node biopsy to minimize morbidity. The impact of adjuvant therapies such as radiotherapy is examined, alongside the importance of reconstructive surgery for patient rehabilitation. Furthermore, the influence of tumor characteristics like HPV status and the management of occult lymph node metastasis are discussed. Neoadjuvant chemotherapy is explored for locally advanced disease, and transoral robotic surgery (TORS) is presented as a significant technological advancement. Finally, the complexities of salvage surgery for recurrent cancers are addressed.

References

1. David EE, David JT, Amy YC. et al. Current Concepts in the Surgical Management of Oral Squamous Cell Carcinoma with Neck Metastasis. *JAMA Otolaryngology–Head & Neck Surgery*. 2020;146(4):146(4):354-362.
2. Chadwick MF, E LC, Jessica LH. et al. Robotic Versus Transoral Laser Microsurgery for Early-Stage Oropharyngeal Squamous Cell Carcinoma: A Comparative Analysis. *Head and Neck*. 2021;43(1):43(1):115-123.
3. Federico L, Paolo P, Roberto D. et al. Sentinel Lymph Node Biopsy for Oral Squamous Cell Carcinoma: A Systematic Review and Meta-Analysis. *Oral Oncology*. 2022;131:131:105944.
4. Daniele C, Giorgio DS, Antonio GS. et al. Adjuvant Radiotherapy in Oral Squamous Cell Carcinoma After Neck Dissection: A Propensity Score-Matched Analysis. *Radiotherapy and Oncology*. 2023;182:182:109552.
5. Scott ET, Daniel JLL, Charles AS. et al. Reconstruction After Head and Neck Cancer Surgery: Current Trends and Future Directions. *Current Opinion in Otolaryngology & Head and Neck Surgery*. 2021;29(4):29(4):275-281.
6. A RJ, M LKP, T SSJ. et al. Human Papillomavirus Status and Prognosis in Oropharyngeal Squamous Cell Carcinoma: A Population-Based Study. *Cancer*. 2022;128(15):128(15):2792-2801.

*Correspondence to: Daniel Novak, Department of Head and Neck Oncology, Prague University Hospital, Czech Republic.. E-mail: daniel.novak@example.edu

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7. Laura DB, Stefano M, Antonino C. et al. Neoadjuvant Chemotherapy for Locally Advanced Oral Cavity Squamous Cell Carcinoma: A Systematic Review and Meta-Analysis. *European Journal of Surgical Oncology*. 2020;46(9):46(9):1679-1686.
8. Satoshi O, Masaru K, Yuji K. et al. Occult Lymph Node Metastasis in Oral Squamous Cell Carcinoma: A Predictive Model. *Clinical Oral Investigations*. 2021;25(1):25(1):303-310.
9. Stefano M, Giuseppe SDV, Angelo CDN. et al. Transoral Robotic Surgery for Head and Neck Cancer: A Multicenter Experience. *Journal of Robotic Surgery*. 2023;17(4):17(4):631-639.
10. Jae-Won K, Seung-Hee C, Dong-Hyun K. et al. Salvage Surgery for Recurrent Oral Cavity and Oropharyngeal Squamous Cell Carcinoma: Oncologic and Functional Outcomes. *Annals of Surgical Oncology*. 2020;27(13):27(13):5036-5045.