Margin Analysis in Head and Neck Cancer: State of the Art and Future Directions

Thamizhp Pozhil Guna, MDS¹, R. Sathyanarayanan, MDS¹, K. Madhu, MDS², and S. Bharathi, MDS³

¹Department of Oral and Maxillofacial Surgery, Indira Gandhi Institute of Dental Sciences, Puducherry, India; ²Oral and Maxillofacial Surgeon, Trichy, Tamil Nadu, India; ³Oral and Maxillofacial Surgeon, Karaikudi, Tamil Nadu, India

Sir,

We comment on the article titled “Margin Analysis in Head and Neck Cancer: State of the Art and Future Directions” published in *Annals of Surgical Oncology*, November of 2019.¹ The article is an important contribution to head and neck cancer surgery because it documents the oncologic significance of a surgical margin clearance in head and neck squamous cell cancer (HNSCC). I commend the authors for their meticulous work and well-consolidated work.

The authors emphasized the importance that many publications place on the definition of close margins in HNSCC,² addressing the critical difference between close versus negative margins. Surgical margins are a cornerstone of HNSCC treatment because positive surgical margin status is associated with increased mortality.³ The authors also highlight the fact that markers of malignant transformation can be found in surgically clear margins, underscoring the limitations of standard histopathology.^{4,5} A summary of novel techniques also was reviewed including various optical imaging techniques, electrocautery aerosol analysis, molecular margin analysis, and spectroscopic analysis of resected tissues and margins, which represent new tools for surgical margin analysis.⁵

I once again compliment the diligent work by the authors for their exquisite article, which introduces readers to various existing and upcoming techniques for surgical

margin analysis in HNSCC while also providing them with a deeper understanding of the significance of surgical margin analysis.

DISCLOSURE There are no conflicts of interest.

REFERENCES

1. Li MM, Puram SV, Silverman DA, Old MO, Rocco JW, Kang SY. Margin analysis in head and neck cancer: state of the art and future directions. *Ann Surg Oncol*. 2019;26:4070–80.
2. Alicandri-Ciufelli M, Bonali M, Piccinini A, Marra L, Ghidini A, Cunsolo EM, et al. Surgical margins in head and neck squamous cell carcinoma: what is “close”? *Eur Arch Oto-Rhino-Laryngol*. 2013;270:2603–9.
3. Haque R, Contreras R, McNicoll MP, Eckberg EC, Petitti DB. Surgical margins and survival after head and neck cancer surgery. *BMC Ear Nose Throat Disord*. 2006;6:2.
4. Bradley PJ, MacLennan K, Brakenhoff RH, Leemans CR. Status of primary tumour surgical margins in squamous head and neck cancer: prognostic implications. *Curr Opin Otolaryngol Head Neck Surg*. 2007;15:74–81.
5. Robbins KT, Triantafyllou A, Suárez C, López F, Hunt JL, Strojan P, et al. Surgical margins in head and neck cancer: intra- and postoperative considerations. *Auris Nasus Larynx*. 2019;46:10–7.

Publisher’s Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.