Laryngology & Otology

cambridge.org/jlo

Editorial

Cite this article: Fishman J, Fisher E. Endoscopic stapes surgery, advanced head and neck cancer following the coronavirus disease pandemic, and upper airway remodelling in obstructive sleep apnoea. *J Laryngol Otol* 2022;**136**:1013–1013. https://doi.org/10.1017/S0022215122002213

Endoscopic stapes surgery, advanced head and neck cancer following the coronavirus disease pandemic, and upper airway remodelling in obstructive sleep apnoea

Jonathan Fishman and Edward Fisher, Senior Editors

Utilising a microscope for otological surgery offers a plethora of advantages, such as ambidextrous hand mobility and stereopsis. Endoscopic ear surgery, on the other hand, offers a more transparent view of the middle-ear cavity that is not limited by the line-of-sight view, with the disadvantages of single-handed surgery and two-dimensional views.^{2,3} An article in this month's issue of *The Journal of Laryngology & Otology* sought to compare microscopic and endoscopic stapes surgery. Thirteen studies were included in their meta-analysis. Although both techniques resulted in comparable outcomes concerning success rates (as evaluated by air-bone gap improvement), post-operative pain and dysgeusia favoured the endoscopic approach. The authors hypothesise that the improved visualisation of the surgical field provided by the endoscope enables less bony auditory canal drilling, and, consequently, less post-operative pain, as well as limited manipulation of the chorda tympani, leading to better rates regarding post-operative dysgeusia. However, the authors point out that like any other newly introduced technology, this innovative approach has a learning curve for those not acquainted with endoscopic otology.⁵ Their findings are comparable to previous studies which have also concluded that endoscopic stapes surgery has similar surgical and functional advantages as compared with microscopic surgery.6

A study by Flynn *et al.* in this month's issue seeks to address whether patients are presenting later and with more advanced head and neck cancer following the coronavirus disease 2019 pandemic.⁷ This retrospective cohort study compared all presentations of head and neck cancer between June and October of 2019 with the same period following the peak of the pandemic in 2020 in West Scotland, a region populated by 2.5 million people. A total of 528 patients met the study inclusion criteria. Compared with 2019, patients in 2020 were more likely to present with a higher cancer stage (p = 0.002) and have a longer preceding symptom duration (p < 0.001), and were more likely to have an emergency hospital admission attributed to head and neck cancer complications or sequelae (p = 0.017). Further work is required to assess whether these findings are temporary or longer lasting (e.g. as a result of patient reluctance to seek medical attention, or difficulties in accessing primary care).

Finally, the molecular correlates of obstructive sleep apnoea were studied by Lin *et al.*, who found that patients with obstructive sleep apnoea demonstrated more severe inflammation, increased airway remodelling, and increased protein and messenger RNA expression of pro-inflammatory and pro-fibrotic cytokines compared with control participants. It is hypothesised that airway inflammation and remodelling may alter tissue compliance, which could adversely affect upper airway collapsibility.

References

- 1 Mudry A. The history of the microscope for use in ear surgery. Am J Otol 2000;21:877-86
- 2 Baazil AHA, Dobbe JGG, van Spronsen E, Ebbens FA, Dikkers FG, Streekstra GJ et al. A volumetric threedimensional evaluation of invasiveness of an endoscopic and microscopic approach for transmeatal visualisation of the middle ear. J Laryngol Otol 2021;135:410–14
- 3 Guneri EA, Cakir Cetin A. Ossicular chain reconstruction: endoscopic or microscopic? *J Laryngol Otol* 2020:134:1108-14
- 4 Hajiioannou J, Gkrinia E, Tzimkas-Dakis K, Palla E, Brotis A, Korais C et al. Microscopic versus endoscopic stapes surgery: systematic review and meta-analysis. J Laryngol Otol 2022;136:1014–1022
- 5 Narendrakumar V. Training in endoscopic ear surgery using the papaya petiole. J Laryngol Otol 2021;135:648–51
- 6 Pauna HF, Pereira RC, Monsanto RC, Amaral MSA, Hyppolito MA. A comparison between endoscopic and microscopic approaches for stapes surgery: a systematic review. J Laryngol Otol 2020;134:398–403
- 7 Flynn W, Maqsood R, Maseland T, Montgomery J, Douglas C. Advancing head and neck cancer following the coronavirus disease 2019 pandemic. J Laryngol Otol 2022;136:1118–1124
- 8 Bhamra N, Gorman B, Arnold W, Rajah A, Jolly K, Nieto H et al. The impact of coronavirus disease 2019 on suspected head and neck cancer two-week-wait referrals. J Laryngol Otol 2022;136:248–51
- 9 Lin CC, Wang YP, Chiu CH, Sun YK, Lin MW, Tzeng IS. Molecular signalling involved in upper airway remodelling is enhanced in patients with obstructive sleep apnoea. J Laryngol Otol 2022;136:1096–1104

© The Author(s), 2022. Published by Cambridge University Press on behalf of J.L.O. (1984) LIMITED