Imaging in autoimmune inner-ear disease and endolymphatic hydrops, bone cement for improving hearing outcomes in stapes surgery, and the reporting of results. External ear canal cholesteatoma: a hypothesis

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Autoimmune inner-ear disease is diagnosed on a history of progressive hearing loss, possible vestibular symptoms and laboratory test results. Thus, the study by Lobo et al.1 in this month’s issue of The Journal of Laryngology & Otology makes interesting reading. Their study of patients with suspected primary immune-mediated inner-ear disease found that over 90 per cent had endolymphatic hydrops on intratympanic gadolinium three-dimensional magnetic resonance imaging (MRI). Gadolinium was diluted 8-fold and injected 24 hours prior to the scan. In secondary immune-mediated inner-ear disease, hydrops was less common. This adds to a previous paper by Patel et al.2 that showed a lack of visualisation of the right or left vestibular aqueduct on MRI as a significant finding in patients with Ménière’s disease. Advances in imaging are rapidly changing our concepts of inner-ear disorders.

The use of bone cement to improve hearing in middle-ear surgery is well known.3,4 Ardıç et al.5 used an endoscope to apply bone cement over the prosthesis and the long process of the incus in their study comparing two methods of stapedotomy. They found better outcomes in terms of air–bone gap closure with the use of the endoscope and bone cement.

In an interesting paper, Watson and da Cruz6 show that despite American Academy of Otolaryngology – Head and Neck Surgery guidelines, results following stapes surgery have not always been accurately reported, leading to inflated outcomes. This would affect the consent process and patient expectations, which is a topical issue in the present climate.

Now for something controversial. External ear canal cholesteatoma and benign necrotising otitis externa are considered independent entities. However, Hertz and Siim7 propose that these are a continuum of the same disease at different stages of development.

References

1 Lobo D, Tuñón M, Villarreal I, Brea B, García-Berrocal JR. Intratympanic gadolinium magnetic resonance imaging supports the role of endolymphatic hydrops in the pathogenesis of immune-mediated inner-ear disease. J Laryngol Otol 2018;132:554–9
6 Watson GJ, da Cruz M. Reporting in stapes surgery: are we following the guidelines? J Laryngol Otol 2018;132:479–85