

Technology and ENT

The application of technological advances in medicine has always been more widespread in otolaryngology than in other surgical disciplines. In many ways, this reflects the diversity of our specialty, with otology, rhinology, and head and neck surgery requiring a range of skills, and hence differing equipment. One constant need to allow good surgery to be undertaken is illumination. Mozaffari and colleagues review how advances in light technology have shaped the development of ENT.¹ They describe early methods of illumination that utilised light from the sun and from candles, and bring this up to the present day where we depend on high-powered illumination to facilitate the use of our operating lights, headlights, endoscopes and operating microscopes. Technology is of course a force for good. However, it is important that new advances are evaluated properly to ensure safety, efficacy and cost-effectiveness. In this respect, the UK is fortunate in having government bodies such as the National Institute for Health and Care Excellence (NICE), and the Scottish Intercollegiate Guidelines Network (SIGN), to regulate the introduction of new technology, which otherwise may be purely driven by a commercial market.²

The clinical assessment of patients with balance symptoms has always been a subject of debate. Clinicians emphasise the importance of taking an accurate patient history in establishing a working diagnosis and formulating a management plan.³ The usefulness of vestibular function tests is contentious. Some otologists feel that these tests are time-consuming, labour-intensive and yield little in the way of useful diagnostic information. If vestibular tests are to be used, a cheap and easy test is preferred.⁴ Eza-Núñez and colleagues compare video head impulse testing with caloric and rotatory chair testing in patients with dizziness.⁵ The diagnostic agreement between these three tests was low when they were used to assess lateral semicircular canal function. Only the video

head impulse test had sufficient statistical power to justify its use as a first-line test.

The use of simulation in training is another area where new technology can be used to maximise patient safety. Simulation has been possible in otology and rhinology, and has been enhanced by new technology.^{6,7} One of the commonest emergencies in ENT is peritonsillar abscess (or quinsy). Management of patients with this condition, including surgical drainage, is often delegated to the most junior staff in an ENT department. As such, the adaptation of the Laryngotech trainer to present an accessible quinsy simulator is to be welcomed.⁸

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