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The Eustachian tube: balloon dilatation and decongestants, and novel approaches in otolaryngology education

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Editorial

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The Eustachian tube, both its function and dysfunction, has been a topic of discussion for longer than otolaryngology has existed as a discipline. Real progress in translating knowledge to therapy has been disappointing, to say the least. There is a sense that in very recent years the tide has been turning. The recent appointment of a clinician, Professor Manohar Bance, who has a strong track record of research in this area, to a chair in one of the UK's ancient universities, has been a promising development. Similarly, a fascinating and inspirational duo of lectures by Professor Denis Poe at the Royal Society of Medicine meeting in London in December 2019 has raised interest. The interest in direct Eustachian tube therapy for patulous disorders as well as balloon dilatation for proven cases of Eustachian tube disorders has added to traditional therapies, which now seem somewhat stale and limited. A paper in this issue from a Cambridge group shows, surprisingly, that topical nasal decongestants may not have the effect on Eustachian function that had been hitherto assumed.¹

In a paper from Dundee, by McMurran and colleagues,² with a modest but nonetheless interesting cohort, balloon tuboplasty was used for patients with proven dysfunction symptoms, including patients with middle-ear effusions and retractions. Outcomes were impressive, with the main complication being difficulty with the essential post-operative Valsalva manoeuvre in a small proportion. One interesting patient group comprised candidates for the Armed services with Eustachian tube dysfunction and barotraumatic symptoms, as grommets are not usually suitable for these situations. A previous smaller series reported in *The Journal of Laryngology & Otology*, from Coventry,³ showed benefit in subjective but not objective measures of Eustachian tube dysfunction.

Koumpa and colleagues' survey of UK consultants⁴ on the subject of balloon dilatation had a low response rate, but 23 per cent of the sample reported using the technique, which is an encouraging start, and this figure will undoubtedly rise as evidence accumulates. Assessment using a specific questionnaire (Eustachian Tube Dysfunction Questionnaire-7) in a paper from Tel Aviv suggests a link between sleep apnoea and Eustachian tube dysfunction.⁵ There can be a mismatch between patient symptoms and proven actual dysfunction, as highlighted in many papers, including McMurran and colleagues', so conclusions from questionnaires alone must be guarded.

The Journal is seeing an increased flow of papers on education and training topics. Now that the undergraduate curriculum is overcrowded and often under-provided with ENT topics (at least from an otolaryngologist's perspective), using induction time efficiently is paramount. Similarly, post-graduate programmes need to be efficient, as the reduction of hours and reduced patient contact must not translate into poorer standards. Chen and colleagues from Victoria, Australia, review the wide variety of applications of three-dimensional printing to training in all areas of ENT,⁶ from endoscopy to temporal bone drilling. A team from St Mary's Hospital in London used simulation of ENT procedures and compared it with traditional lecture-based teaching,⁷ and showed that trainees' confidence was better when the more practical approach was used. This may not be surprising, but could provide evidence to assist the funding of the more expensive but effective methods of implementing safer induction systems. The papers complement a study from St George's Hospital, London, published in this journal last year,⁸ which showed the benefits of a mixed lecture and practical session for students, to supplement the undergraduate programme.

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