## **Editorial**

It has been a great pleasure to browse The Journal of Laryngology & Otology Digital Archive in order to compile a freely accessible special 'rhinology anthology' ('rhinolanth' for short) issue centred around sinus disease and the evolution of endoscopic sinus surgery. We would like to dedicate it to Professor Nick Jones; our long list had at least another 10 of his original articles, and we were reminded of his enormous contribution to rhinology. He has already inspired a generation of rhinologists, but we hope that some trainees who did not have the fortune to work with him will have the opportunity to learn from the selected papers. His paper on septal correction, 1 while not strictly linked to our theme, is essential reading for any ENT surgeon, and could not be overlooked.

We start with some excellent papers on the microbiology of acute sinusitis. We have failed to heed the warnings of antibiotic overuse, as described in a 2005 paper by Brook, but fortunately the recent paper by Miah et al.<sup>3</sup> shows that in most cases of complicated allergic rhinitis, the isolated organisms are still sensitive to the majority of common antibiotics. An updated study conducted 20 years from now is less likely to reveal the same results. Thunberg and colleagues' study, simple yet elegant, shows that anterior rhinoscopy and culture is comparable to sinus puncture, and therefore may allow more selective use of antibiotics in primary care. In chronic sinus disease, attention has turned to the immunomodulatory effects of antibiotics, as highlighted in Fan and colleagues' study of clarithromycin. The efficacy, dosage and indications for low-dose clarithromycin have yet to be firmly established, and we suspect that there is probably significant overuse at present. It is also unclear whether biofilms are causative in the pathophysiology of chronic rhinosinusitis, or simply opportunistic bystanders in the setting of epithelial dysbiosis.<sup>6</sup>

Any rhinologist will know the perils of diagnosis, particularly in patients with facial pain and post-nasal drip. Rigid endoscopy is an essential part of the diagnostic investigation; McCluney *et al.*<sup>7</sup> suggest there is little benefit in topically anaesthetising the nose before this procedure. A simple change in practice could reduce costs and morbidity associated with using the nasal spray, which is as relevant in today's healthcare economy as when this article was first

published. Computed tomography (CT) is often helpful and mandatory before surgery. Mason and colleagues' review of CT evaluation remains of great value nearly 20 years after publication.<sup>8</sup> It is cases where chronic rhinosinusitis has been excluded that are often the most challenging, and where Professor Jones' wisdom and experience come to the fore. His paper on the use of ice-cold carbonated water<sup>9</sup> has helped enormously in our clinical practice, and we would recommend it to anyone struggling to treat a patient with catarrh. Patients with facial pain needn't become your own headache, and with careful assessment and treatment, nearly half will become pain free. 10 Recognising patients with secondary chronic rhinosinusitis, who have normal sinuses despite being convinced otherwise, is sometimes as difficult as managing those patients mentioned above. Valerie Lund's experience of vasculitis in the nose and sinuses is unparalleled: the manifestations of Wegener's in nearly 200 patients are described in a paper by Srouji et al. 11 A top tip, straight from Professor Lund, is to ask all patients if they 'feel unwell' - a positive response should prompt consideration of systemic disease.

We were also delighted to include more sinus royalty, with David Kennedy's review of the evolution of endoscopic techniques setting the scene for a couple of technical innovations. 12-14 Not all advances are useful, and Valdes and colleagues' negative findings are as valuable in print as those studies that show benefit, but so much more difficult to publish – *The Journal* should be commended for disseminating such findings. The current Guest Editors can personally vouch for the merits of Wormald and McDonogh's 'bath plug' technique 14 in the event of unexpected skull base injury during endoscopic sinus surgery, and every surgeon performing functional endoscopic sinus surgery should take note!

Of course, any compilation on chronic rhinosinusitis must include some treatment results, and we have included a number of papers investigating outcomes of medical and surgical treatment for chronic rhinosinusitis. <sup>15–19</sup> We can be reassured that our treatment is largely effective, both in terms of patient-rated outcomes and biological endpoints. The heterogeneity of outcomes in chronic rhinosinusitis studies, however, continues to hinder effective meta-analysis, and the

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editorial 379

development of a core outcome set is needed to help reduce research waste. As endoscopic techniques have evolved, the scope of conditions has widened, and the boundaries continue to be extended. Many sinonasal and skull base malignancies can now be managed effectively endoscopically, but it is important to ensure the outcomes remain comparable to open approaches.<sup>20,21</sup>

Looking through the Digital Archive, it has been fascinating to see both the transition from short case reports, personal opinions, through case series, to methodologically rigorous systematic reviews and randomised controlled trials. It has become extremely difficult to publish single cases; however, small series of very rare conditions must continue to be considered suitable for publication, as these conditions will never form the subject of randomised trials. We have picked some of our favourites from a 100 years of archives<sup>22–24</sup> – from the lethal midline granuloma, now thought to be a T-cell lymphoma, to the relatively novel immunoglobulin G4 diseases. We also enjoyed the description of the dynamic changes following surgery for silent syndrome; even if we can't understand why the orbital floor remodels, it is great to see it happen radiologically.

So, we hope that you enjoy our 'rhinolanth' issue, a retrospective review of what we consider to be some of the best sinus-related papers from The Journal. We suspect that a future volume will look quite different. There is about to be an explosion of humanised monoclonal antibodies available, and as their role in the management of chronic rhinosinusitis with nasal polyps becomes established, we suspect the role of surgery in this group will decline significantly. As we gain a better understanding of the sinus microbiome, it is likely that we will move away from antibiotics for chronic rhinosinusitis without nasal polyps, and instead look to restore the natural balance of flora. Perhaps probiotics are the future? It is almost impossible to predict where skull base surgery will go, what new surgical corridors will be described, and what instrumentation will get us there - but if one door to surgery for polyps closes, there is no doubt that the challenges to sinus surgery will continue and other doors will open. There's never been a better time to be a SNOT doctor!

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