Adenoids in paediatric chronic rhinosinusitis, deep neck space infections and optimising otowicks in otitis externa

The exact role of the adenoid in paediatric chronic rhinosinusitis is still under debate. In this month's issue of The Journal of Laryngology & Otology, a study by Bettadahalli and Chakravarti demonstrates an improvement in quality of life following adenoidectomy for paediatric chronic rhinosinusitis. Whether the improvement seen following adenoidectomy is related to adenoiditis, or is due to the elimination of the contribution of the adenoids to sinus disease, is unclear. Nonetheless, there is increasing evidence that within the setting of paediatric chronic rhinosinusitis, the adenoid acts as a reservoir of pathogenic bacteria through the formation of biofilms, rather than a source of obstruction per se.^{3,4} The 2012 European position paper on rhinosinusitis endorses adenoidectomy for the management of paediatric chronic rhinosinusitis in cases where maximal medical therapy has failed.⁵

A large multicentre, retrospective study by Mejzlik et al. in this month's issue, involving 586 patients, analyses the factors that contribute to life-threatening complications in patients with deep neck infections.⁶ In their study, the proportion of patients demonstrating life-threatening complications (defined as mediastinitis, sepsis, dyspnoea, pneumonia, internal jugular vein thrombosis, pleural effusion and death) was found to be as high as 10.2 per cent. Infections involving the retropharyngeal and major blood vessels spaces, and the presence of Candida albicans in cultures, were found to be the highest risk factors for the development of such complications. This is a reminder of how devastating deep neck space infections can be; such infections require prompt treatment. Their investigation complements a study published earlier this year, which demonstrated the effectiveness and safety of ultrasound-guided drainage as an alternative to conventional incision and drainage, and the recently published national prospective multicentre audit of guinsy management and outcomes.^{7,8}

An elegant *in vitro* study by Bola *et al.* demonstrates how otowicks require priming with six drops so that the initial dose is fully absorbed, before starting treatment. Bacteria were also shown to penetrate otowicks, although this was prevented by continuous application of antibacterial ear drops. The study also questions the usual recommendation of replacing otowicks every 2–3 days to prevent bacterial colonisation, as the findings showed that otowicks still transmit antibacterial drops at 5 days. This may be useful if encountering a delay in patient review.

Newer, less-invasive techniques are being applied within the field of head and neck surgery. In this issue, Moreno *et al.* report on the use of 3 Tesla magnetic resonance imaging (MRI) in the pre-operative evaluation of tongue squamous cell carcinoma. ¹⁰ The authors conclude that the 3 Tesla MRI imaging measure of tumour thickness correlated highly with histological tumour thickness, and is an effective method of detecting both nodal metastasis and extracapsular spread. This technique may be useful in predicting pre-operatively which patients require neck dissection. Also in this issue, Golding *et al.* describe the use of ultrasound-guided wire localisation, a technique already well established in breast surgery, to facilitate removal of pathological cervical lymph nodes. ¹¹

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