

# Bacterial biofilm and chronic sialadenitis, survival outcomes in human papilloma virus positive oral cancer, and long-term use of trimethoprim/sulfamethoxazole in recalcitrant chronic rhinosinusitis

Musheer Hussain, Edward Fisher and Jonathan Fishman, Senior Editors

## Editorial

**Cite this article:** Hussain M, Fisher E, Fishman J. Bacterial biofilm and chronic sialadenitis, survival outcomes in human papilloma virus positive oral cancer, and long-term use of trimethoprim/sulfamethoxazole in recalcitrant chronic rhinosinusitis. *J Laryngol Otol* 2018; **132**:567. <https://doi.org/10.1017/S0022215118001238>

The July issue of *The Journal of Laryngology & Otolology* has much of interest. In this editorial, we look at just three of the many informative, interesting and useful articles in this month's issue of *The Journal*.

Biofilms have an acknowledged role in infections.<sup>1,2</sup> Schröder and colleagues found morphological evidence of bacterial biofilm in submandibular gland sections from patients with chronic sialadenitis; this was not seen in controls with no sialadenitis in their submandibular salivary glands.<sup>3</sup> The bacteria in the biofilms resembled cocci, which is not unexpected; however, these findings do raise questions regarding the role of biofilms in sialolithiasis, something the authors have commented on.

Adnan Ali *et al.* investigated patients with and without human papilloma virus (HPV) positive oral cavity squamous cell carcinoma and found no difference in five-year survival between these two groups.<sup>4</sup> This is based on an uncommon distribution of subsites in their population, possibly related to areca nut consumption and geographical variation. The study uses polymerase chain reaction assays for HPV status,<sup>5</sup> rather than a P16 surrogate analysis. The involvement of HPV in the tumour biology of oral cavity tumours remains a controversial area and additional studies of this type are needed to provide more data.

A preliminary study on the treatment of recalcitrant chronic sinusitis with purulence, by de Bonnecaze *et al.*, showed improvement in nasal function, as measured by the Sino-Nasal Outcome Test 22 (SNOT-22).<sup>6</sup> The authors prescribed a three-month course of low-dose trimethoprim/sulfamethoxazole. The number of patients in the study is small and there was no control; nevertheless, the authors report no side effects and consider the method safe. Further work on this is required, as the need to manage this difficult group of patients<sup>7</sup> is clear.

## References

- 1 Ramakrishnan Y, Shields RC, Elbadawey MR, Wilson JA. Biofilms in chronic rhinosinusitis: what is new and where next? *J Laryngol Otol* 2015;**129**:744–51
- 2 Youn CK, Jun Y, Jo ER, Jang SJ, Song H, Cho SI. Comparative efficacies of topical antiseptic eardrops against biofilms from methicillin-resistant *Staphylococcus aureus* and quinolone-resistant *Pseudomonas aeruginosa*. *J Laryngol Otol* 2018;**132**:519–22
- 3 Schröder SA, Eickhardt-Dalbøge S, Bjarnsholt T, Nørgaard T, Homøe P. Morphological evidence of biofilm in chronic obstructive sialadenitis. *J Laryngol Otol* 2018;**132**:611–4
- 4 Adnan Ali SM, Awan MS, Atif S, Ali N, Mirza Y. Correlation of human papillomavirus infection and clinical parameters with five-year survival in oral squamous cell carcinoma. *J Laryngol Otol* 2018;**132**:628–35
- 5 Mehanna H, Evans M, Beasley M, Chatterjee S, Dilkes M, Homer J *et al.* Oropharyngeal cancer: United Kingdom National Multidisciplinary Guidelines. *J Laryngol Otol* 2016;**130**:S90–6
- 6 de Bonnecaze G, Chaput B, Dupret-Bories A, Vergez S, Serrano E. Functional outcome after long-term low-dose trimethoprim/sulfamethoxazole in chronic rhinosinusitis with purulence: a prospective study. *J Laryngol Otol* 2018;**132**:600–4
- 7 Leonard CG, Masih C, McDonald S, Taylor G, Maiden N, Leyden PJ. Anti-tumour necrosis factor therapy is associated with certain subtypes of chronic rhinosinusitis. *J Laryngol Otol* 2016;**130**:560–4