LETTERS TO THE EDITOR

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CASE REPORTS

Giant sialolith

Sir, salivary lithiasis is a condition characterised by the obstruction of the salivary gland or its excretory duct by a calculus or sialolith associated with: swelling, pain, and infection of affected gland, resulting in salivary ectasia and even provoking the subsequent dilatation of the salivary gland. They are classified as 'giant' in any case where the dimension exceeds 15 mm. Giant sialoliths in the submandibular gland is a rare disorder.^{1,2}

A 62-year-old man presented with a painful swelling in the left submandibular region. The patient had noticed swelling in the region about 4 years earlier, but did not seek professional medical attention at that time. The patient reported that the lesion had gradually increased in size and had recently become painful. Intraoral bimanual palpation revealed a hard and tender mass. Extra oral examination revealed that the swelling was localised to the left submandibular region which was tender on palpation. Intraoral examination revealed a slight elevation of the left floor of the mouth, with absent salivary flow from the Wharton's duct. A radiograph revealed a large calcified mass extending from submandibular gland to the Wharton duct (Fig 1).

Submandibular gland resection was performed under general anesthesia. Intraoperatively, it was found that the body of the gland was totally filled with a giant sialolith and the gland parenchyma was atrophic. Pathologic examination confirmed the diagnosis of chronic sialadenitis and a giant sialolith, 30×15 mm in size (Fig 2). The postoperative period was uneventful and the patient recovered without any complication. Different treatment options may be selected according to the size and location of the sialolith. Small stones often may be 'milked out' through the ductal orifice using bimanual palpation. If the stone is too large or located in the proximal duct, surgical removal of the stone or gland may be required.^{2,3}

Sabit Demircan, Istanbul, Turkey



Fig. 1 Sialolith involving the submandibular gland



Fig. 2 The removed gland and sialolith

- Oteri G, Procopio R M, Cicciu M. Giant salivary gland calculi (GSGC): Report of two cases. Open Dent J 2011; 5: 90–95.
 - Wallace E, Tauzin M, Hagan I *et al.* Management of giant sialoliths: Review of the literature and preliminary experience with interventional sialendoscopy. *Laryngoscope* 2010; **120**: 1974–1978.

DOI: 10.1038/sj.bdj.2015.583

Sialoliths and megaliths

Sir, having read the paper by Kraajj *et al.* on salivary stones¹ we recently saw a rather large sialolith. Further reading revealed that it was in fact a megalith which are defined as a sialolith which exceeds 15 mm in any one of its dimensions^{2.3} and are most commonly found in the Wharton's duct. These stones have usually been present as a partial obstruction for prolonged periods of time and in the absence of infection can lead to atrophy, reduced secretory function and fibrosis of the gland.⁴

Our patient was in her sixties and was referred by her GDP regarding an acute swelling affecting her right floor of mouth and right submandibular region. She complained of intermittent swelling which was exacerbated by eating. A recent course of penicillin had provided little relief and she



Fig. 1 Megalith on the floor of the mouth



Fig. 2 The megalith measured 17.6 \times 12.4 mm

now described an acidic taste in her mouth.

Clinical examination revealed tenderness of the right submandibular gland. Intraorally there was a large firm palpable swelling in the right floor of the mouth with distended overlying mucosa and a purulent discharge. A lower occlusal radiograph revealed the megalith, in the right floor of the mouth (Fig 1), which we removed under local anaesthesia. It was largely extra-luminal and measured 17.6×12.4 mm (Fig 2).

Megaliths are likely to have been present for many years in order to reach their size and they tend to continue to grow unhindered and undiscovered until infection intervenes. Early intervention reduces the chance of long term irreversible structural and functional changes to the submandibular gland.⁴ We therefore feel that it is important to palpate the submandibular ducts as part of the routine oral soft tissue examination in primary care as many of these sialoliths could be detected before they give rise to symptoms.

S. Ahiaku and T. Lord, by email

 Kraajj S, Karagozoglu K H, Forouzanfar T, Veerman E C, Brand H S. Salivary stones: symptoms, aetiology, biochemical composition and treatment. Br Dent J 2014; 217: 636–637.

Siddiqui S J. Sialolithiasis: an unusually large submandibular salivary stone. Br Dent J 2002; 193: 89–91.

- Arunkumar K V, Garg N, Kumar V. Oversized submandibular glad sialolith: a report of two cases. *J Maxillofac Oral Surg* 2015; 14 (Suppl 1): 116–119.
- Arslan S, Vuralkan E, Cobanog B, Arslan A, Ural A. Giant sialolith of submandibular gland: a report of a case. J Surg Case Rep 2015; DOI: 10.1093/jscr/rjv043.
- Siddiqui S J. Sialolithiasis: an unusually large submandibular salivary stone. *Br Dent J* 2002; 193: 89–91.

DOI: 10.1038/sj.bdj.2015.584

RESEARCH IDEAS

Correlation does not imply causation

Sir, your readers may not know that there is a significant correlation (99.26%) between the divorce rate in Maine, USA and the per capita consumption of margarine over 2000-2009.¹ This may have little to do with dentistry, however, it raises an important counterpoint to an issue raised by my esteemed colleagues Dr de Gea Rico and Dr Williams in their recent letter to the *BDJ*.²

In the letter, they highlight the findings of Dayer *et al.*'s 13 year Lancet study into the changing incidence of infective endocarditis (IE) since the adaption of the NICE guidelines.^{3,4} (I would similarly urge my dental colleagues to remain vigilant for the sign and symptoms of IE especially in patients at high risk for the condition.)

The headline finding of the study was the significant increase of IE in England since the introduction of the 2008 NICE guidelines and abolition of antibiotics prophylaxis.

Importantly, the study highlighted that it could not prove a causal link between the cessation of antibiotics prophylaxis and an increase in IE incidence. There were no data on the causative organism which led to IE episodes. This is clearly outlined in the study and undermines any assumption that oral bacteria, such as Steptococcus viridans, may be causally linked to episodes of IE. In fact Dayer et al. speculated about other possible non-oral causes for the increase in IE incidence. Interestingly, the study also highlighted the incidence of IE increasing prior to the introduction of NICE guidelines, for unknown reasons, which may suggest a non-oral cause for the increase.

The authors of the study do point out that their analytical model was based upon several estimates which in itself could have led to potential errors. Readers should be wary of drawing causal conclusions from the data outlined in the IE study as much as the spurious suggestion that chemicals in margarine were responsible for matrimonial disharmony in the population of Maine in the previous decade.

The scope of Dayer *et al.*'s paper is commendable and its findings remain

ORAL HEALTH CONSEQUENCES OF THE CRISIS IN SYRIA

Sir, the humanitarian crisis in Syria continues to negatively impact many Syrian refugees' access to quality healthcare in neighbouring countries.^{1,2} During the crisis, hundreds of dental clinics have been destroyed or closed as a result of the strikes from the different parties involved in the war, and thousands of highly qualified dental professionals from all dental specialties have left Syria. In response, and with help from medical and charity organisations, dentists from various specialities have established several dental clinics in border regions of Turkey (Urfa, Killis, Reyhanli) and Jordan (Zatari Camp) - sometimes just a few kilometres from the Syrian borders - to provide the Syrian refugees with much needed oral health care. To the best of our current knowledge, 19 dental clinics for refugees have been established in the regions bordering Syria, with 13 of them in Turkey: 4 in Urfa, 2 in Killis, 2 in Reyhanli and 5 smaller primitive dental clinics in the refugee camps bordering Syria; and 6 others in Jordan (Zatari Camp). These clinics are lacking in resources, such as radiographic machines, important dental materials, and sterilisation protocols and equipment. They are especially ill-equipped to deal with facial injuries, and this has detrimental physical and emotional effects on their patients. This minimalism equates them with 'field hospitals'.3

Reported adverse consequences of the war among the refugees include decreased oral hygiene and increased periodontal diseases including chronic generalised gingivitis and periodontitis. When they were asked why they do not brush their teeth, most patients reported that they would rather buy food for their children than buying a toothbrush and toothpaste. The rate of dental caries and odontogenic infections, including acute periapical abscesses and even orofacial infections, have increased. Traumatic injuries in the maxillofacial and temporomandibular

interesting. Though perhaps most importantly it keeps IE in the forethoughts of the dental profession and highlights the evolving nature of the research on which our clinical guidelines are built.

Adil Aslam, by email

- Spurious correlations. Available online at http:// www.tylervigen.com/spurious-correlations (dccessed July 2015).
- 2. de Gea Rico A, Williams L R. The power of data. Br Dent J 2015; **218:** 440.

regions, including both boney and softtissue injuries, have immensely increased in incidence and severity. This includes amputations, facial lacerations and fractured bones (temporomandibular joint, maxillary, mandibular and nasal), as well as injuries to the teeth and surrounding dental structures. Some of these problems were the result of poor treatments that were performed inside Syria because of either a lack of proper dental/medical materials and supplies or the unavailability of expert surgeons/specialists or both.

Furthermore, there has been a continuous decrease in financial support from governmental and non-governmental organisations for dental initiatives; this shortage should lead to adjusting the strategies to focus more on preventive procedures and positive psychological support to those who are in dire need. Lastly, as this humanitarian crisis worsens there is a desperate need for action from the dental community to build more awareness and strengthen efforts in mitigating the tragic medical and dental consequences of what is being labelled as the 'greatest humanitarian tragedy of our times'.⁴

Humam Saltaji, Edmonton, Canada Acknowledgements

HS is supported through a Clinician Fellowship Award by Alberta Innovates - Health Solutions (AIHS), the Honorary Izaak Walton Killam Memorial Scholarship by the University of Alberta, Alpha Omega Foundation of Canada Grant, and the Honorary WCHRI Award by the Women and Children's Health Research Institute (WCHRI). The funders had no role in decision to publish or preparation of this letter. The authors declare no potential conflicts of interest related to this letter.

- 1. Saltaji H. 4 years of the humanitarian tragedy in
- Syria: who cares? *Lancet*. 2015; **385**: 943.
 Hurley R. Who cares for the nine million displaced people of Syria? *BMJ* 2013; **347**: f7374.
- Attar S, Aleppo City Medical Council. Field hospitals in Syria. Lancet 2014; 383: 303.
- 4. World Food Programme. Aid principals call for action to increase humanitarian access and funding for Syria crisis. 2014. Available online at https:// www.wfp.org/news/news-release/aid-principalscalling-decisive-action-increase-humanitarianaccess-and-funding-sy (accessed July 2015).

DOI: 10.1038/sj.bdj.2015.586

- Dayer M J, Jones S, Prendergast B, Baddour L M, Lockhart P B, Thornhill M H. Incidence of infective endocarditis in England, 2000-13: a secular trend, interrupted time-series analysis. *Lancet* 2015; 385: 1219–1228.
- National Institute of Clinical Excellence (2008). Prophylaxis against infective endocarditis: Antimicrobial prophylaxis against infective endocarditis in adults and children undergoing interventional procedures. Available online at http://publications. nice.org.uk/prophylaxis-against-infective-endocarditis-cg64 (accessed July 2015).

DOI: 10.1038/sj.bdj.2015.585