

- Anderson T, Thomas C, Ryan R, Dennes M, Fuller E. *Children's Dental Health Survey 2013. Technical Report: England, Wales and Northern Ireland.* p 58. London: Health and Social Care Information Centre, 2015.
- Office of National Statistics. *Pen Portraits for the 2011 Area Classification for Local Authorities.* London: ONS, 2015.
- Office of National Statistics. *Child Dental Health Survey 2013.* Table 4.16. London: ONS, 2015.
- Braveman P. Health disparities and health equity: concepts and measurement. *Annu Rev Public Health* 2006; **27**: 167–194.

## PROSTHODONTICS

### Tenacious lump of calculus

Sir, as the maxillofacial on-call doctor at Gloucester Royal Hospital, I was asked to assist with the removal of both the upper and lower dentures for a lady who was due for an endoscopy. She had a late presentation for suspected gastric cancer.

The patient had not removed her upper and lower chrome dentures for 15 years! She had irregularly cleaned her teeth with her denture *in situ* with a toothbrush. During this time she had not needed to attend a dentist, as had no episodes of dental pain, and she explained the dentures had 'attached to her over time'!

I eased the upper denture out and was shocked to see the tenacious lump of calculus lingering on the flange as shown in Figs 1–2 – this is after a good scrub with a toothbrush.

The lower was attached to the soft tissue in the floor of the mouth and would have required surgical excision under local anaesthesia, which the patient declined.

I. Midwood, by email  
DOI: 10.1038/sj.bdj.2016.39



**Figs 1–2 Upper denture with calculus lingering on the flange**

## PHARMACOLOGY

### Dual therapy guidance

Sir, dental practitioners face an increasing number of medically compromised patients who are on prolonged use of new types of medications for coronary diseases combined with antiplatelet drugs. The invention of new (direct or target) oral anticoagulants (NOACs), including dabigatran, apixaban, and rivaroxaban, which have more favourable pharmacokinetics, as well as a higher safety level, has renewed interest in combination polytherapy.

There is no doubt that dual anticoagulant therapy may have a significant impact on perioperative and postoperative dental care, particularly involving a more complex dental procedure such as oral or periodontal surgery. According to available data, the addition of NOACs to antiplatelet therapy results in a substantial increase in bleeding, most pronounced when NOACs are combined with dual antiplatelet therapy (eg aspirin/clipodogrel and dabigatran/rivaroxaban).<sup>1</sup> Clinical trials elucidated a dose-dependent increase in major bleeding events, including internal (eg intracranial), with apixaban and rivaroxaban when combined with dual antiplatelet therapy.<sup>2</sup>

Since August 2015 recommendations by the Scottish Dental Clinical Effectiveness Programme (SDCEP) in relation to combined antiplatelet and NOACs dual therapy do not advise a specific course of action and they only indicate a need for consultation with a general medical practitioner or specialist.<sup>3</sup> Consultation with an anticoagulation clinic or clinical haematologist is always necessary prior to dental surgery for patients in combined dual anticoagulant therapy due to considerably higher risk of bleeding. Due to the more stable and predictable effects, temporary discontinuation and restarting the NOACs causes less risk than warfarin. When restarting the NOACs, a desirable anticoagulant effect reaches its targeted level within a few hours following administration.<sup>4</sup>

International dental guidelines for the new oral anticoagulants are based on a comparison of their bleeding risks with warfarin or low-molecular-weight heparins. Unfortunately, there are no evidence-based guidelines for the dental management of patients receiving these agents. Manufacturers' specifications for NOACs suggest an interruption to anticoagulation therapy prior to only general surgery,<sup>5</sup> but unlike those for warfarin, do not provide separate recommendations for dental and general surgery. For dabigatran a reversal agent was approved in 2015 for use in the setting of urgent procedures or

life-threatening bleeding.<sup>6</sup> Hypothetically, it can also potentially be used in emergency cases of severe excessive bleeding following major oral surgery. For rivaroxaban, apixaban, and edoxaban there are no specific antagonist agents reversing the effect of this class of new anticoagulants.

A. Dzedzic, Medical University of Silesia  
DOI: 10.1038/sj.bdj.2016.40

- Rubboli A, Oldgren J, Marin F, Lip G. Combination of a new oral anticoagulant, aspirin and clopidogrel after acute coronary syndrome: new therapeutic standard? *Intern Emerg Med* 2013; **8**: 673–680.
- Oldgren J, Wallentin L, Alexander J H *et al.* New oral anticoagulants in addition to single or dual antiplatelet therapy after an acute coronary syndrome: a systematic review and meta-analysis. *Eur Heart J* 2013; **34**: 1670–1680.
- Management of dental patients taking anticoagulants or antiplatelet drugs. Scottish Dental Clinical Effectiveness Programme, August 2015.
- Breik O, Cheng A, Sambrook P, Goss A. Protocol in managing oral surgical patients taking dabigatran. *Aust Dent J* 2014; **59**: 296–301.
- West M, Sime G. Managing anticoagulated patients. *Scottish Dental Magazine*, September 2015.
- FDA Approves Praxbind® (idarucizumab), Specific Reversal Agent for Pradaxa® (dabigatran etexilate). 19 October 2015. Available at: [https://www.boehringer-ingenheim.com/news/news\\_releases/press\\_releases/2015/19\\_october\\_2015\\_dabigatranetexilate.html](https://www.boehringer-ingenheim.com/news/news_releases/press_releases/2015/19_october_2015_dabigatranetexilate.html) (accessed 5 January 2016).

### Statins and oral ulceration

Sir, statins are inhibitors of 3-hydroxy-3-methylglutarylcoenzyme A (HMG-CoA) reductase that have revolutionised the treatment of hypercholesterolemia. Their beneficial effects have been well documented. According to the British Heart Foundation, over 66 million statins prescriptions were written last year: a figure which has trebled in the past ten years.<sup>1</sup>

Adverse drug reactions (ADRs) to cardiovascular medication were outlined recently in the literature.<sup>2,3</sup> The prevalence of oral manifestations of ADRs is not fully known, and the pathophysiological mechanisms for which these occur have yet to be fully elucidated; there have been reports in the literature associating oral ADRs to simvastatin use.

A 62-year-old gentleman recently presented to our clinic with a 12-month history of a recurrent keratotic lesion with areas of small ulceration on the right lateral border of tongue, which became symptomatic when exposed to acidic or spicy foods. He took regular atorvastatin for hypercholesterolemia; he was a non-smoker and recorded very occasional alcohol intake.

Histopathological analysis through an incisional biopsy suggested candidiasis with focal ulceration. A two week course of systemic fluconazole and topical