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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.

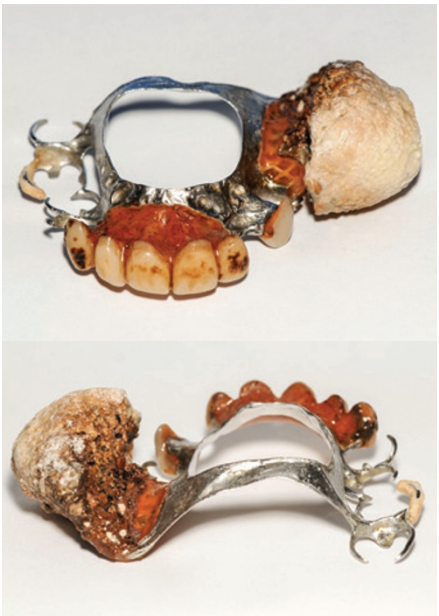
The patient had not removed her upper and lower chrome dentures for 15 years! She had irregularly cleaned her teeth with her denture *in situ* with a toothbrush. During this time she had not needed to attend a dentist, as had no episodes of dental pain, and she explained the dentures had 'attached to 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).[1] 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.[2]

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.[3] 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.[4]

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,[5] 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.[6] 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.

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DOI: 10.1038/sj.bdj.2016.40

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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.[1]

Adverse drug reactions (ADRs) to cardiovascular medication were outlined recently in the literature.[2,3] 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

nystatin were given; despite this the lesion persisted. Three months later, the patient presented with two additional healing aphthous-type ulcers in the buccal sulcus adjacent to the upper left canine and lower right second permanent molar.

Statins were suggested as a potential cause for the ulcerations and so were stopped. Six weeks later, the patient reported complete resolution of symptoms and no episodes of ulceration in this time had been noted. Whilst many patients with oral ulceration have complex polypharmacy, statins are medications that could potentially be stopped without immediate complications and hence a potential causative link could be established or excluded.

D. J. Smith, M. Dillon, J. Russell, A. Kanatas, Leeds

DOI: 10.1038/sj.bdj.2016.41

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RESTORATIVE DENTISTRY

A half century of success

Sir, just over 50 years ago I was hanging about, along with some other 4th year dental students, in the 'Cons Hall' of the old Glasgow Dental Hospital and School waiting for our patients to arrive. At the same time, in the far corner of the hall, a small group of 5th year students, who were resitting their final degree exam in senior operative dental surgery, clustered anxiously, also awaiting the arrival of their patients. After some ten minutes one of our lecturers approached our group, telling us that a patient had failed to attend for the exam and he was looking for a volunteer to step into the breach.

As the resit exam comprised of the preparation and impression of a Class II gold inlay, and as I had small mesial and distal cavities in tooth 15, I was quickly ushered into the chair. The student, already under some considerable pressure, administered local anaesthetic and nervously began his preparation of the tooth. As it was considered the equivalent of presenting a loaded gun to a lunatic in a crowded room, students were not permitted to use air turbines and so the cavity was prepared using steel burs inserted into a pulley-driven slow speed handpiece.

Eventually, after much sweat and tension, the cavity was prepared and examined by the visiting examiner, a high profile academic from one of the London schools. Next, two impressions were taken, one of the cavity and tooth using a copper band with greenstick compo and the second an alginate locating impression. These were also examined. Lastly the tooth was dressed and I was dismissed, within the allotted exam time. Then came the agonising wait for the results, for to fail the resit meant expulsion from the course. Tragically the visiting examiner failed the student. For what reason I can only guess but a week or so later a classmate and close friend, who eventually rose through the ranks to become Dean of Glasgow Dental Hospital and School, collected the gold inlay from the laboratory. After checking fit, occlusion, retention and margins and finding the inlay perfect in every way it was cemented into place using oxyphosphate cement with no need for any adjustment. That gold inlay is still in place, untouched and trouble free for more than 50 years.

As luck would have it the next year the same visiting examiner also failed me in senior operative dental surgery but fortunately I passed the resit, was awarded my degree and settled down to a rewarding career in general practice in Glasgow's East End for 47 years. To my shame I never was able to catch up with that student to tell him of the success of his restoration. Maybe it was better that he never knew.

R. Graham, Glasgow

DOI: 10.1038/sj.bdj.2016.42

IN PRACTICE

Illegal activity

Sir, further to Stephen Hancocks' article, *Is lipstick oral health?* (*BDJ* 2015; **219:** 367) we would argue that it is necessary to investigate and, where appropriate, prosecute both individuals and businesses carrying out any form of dentistry, including tooth whitening, illegally.

The core function of the General Dental Council is to protect patients. Prosecuting individuals who cause, or have the potential to cause, irreparable damage to teeth or gums is just one of the ways we achieve this.

While it is true that many of the complaints we receive come from the people affected, we also receive a large number of complaints from dentists and dental care professionals. Good regulation benefits the profession because it ensures that patients and the public are protected and it enhances the reputation of the GDC as regulator as well as the profession generally.

The facts are these: it is a criminal offence to carry out tooth whitening without being on the register and we make no apologies for actively pursuing those who are not qualified and registered or who cause harm.

We want to work with dentists and dental care professionals to help us prevent and spot any illegal activity. Other than prosecuting cases of illegal tooth whitening, the work of the illegal practice team protect patients by ensuring that those who are suspended or removed from the register also refrain from practising.

It's important that we continue to publicise each successful prosecution so that the public and patients are aware of the risks involved should they choose to have tooth whitening from an unregistered individual.

We obviously respect the independence of the court. But it is also important to note that we have no control over the fines imposed.

Owing to a recent change in the law, we are very pleased that fines can now be imposed for an unlimited amount. A recent case prosecuted by us saw a salon owner in Liverpool fined £1,000 and we think this sends a clear message that this type of activity is not tolerated by the GDC or the courts.

Whilst we agree in principle that the larger the fine the greater the deterrent, the fine is not the only deterrent. When prosecuted, the person also receives a criminal conviction.

In addition to prosecuting, we are doing further work to try and prevent illegal activity from happening. We obviously can't do this in isolation so we are working with organisations such as Trading Standards, the Care Quality Commission, the Medicines and Healthcare Regulation Authority and the Police.

We're also working with Groupon and the Advertising Standards Authority to ensure that only registered GDC professionals can offer tooth whitening to the public.

Our work is broader than prosecuting; we grant registration to dental professionals who meet our requirements, we set standards for dental professionals and for providers of training, we set standards of conduct and performance and we investigate complaints and take appropriate action through fitness to practise.

As always, we would welcome your views on this important issue and how we can continue to improve our work. Please do contact us either via the GDC website, through social media or speak to any member of the GDC customer service team on 020 7167 6000.

J. Green, GDC Director of Fitness to Practise

DOI: 10.1038/sj.bdj.2016.43