

# LETTERS TO THE EDITOR

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## PHARMACOLOGY

### Prolonged meds use

Sir, I would like to thank Dr Raval for shedding light on a life-threatening acute angioedema in his article.<sup>1</sup>

The prolonged use of medications (biphosphonates, warfarin, immunosuppressors, anxiolytics and psychotropic drugs, angiotensin converting enzyme – ACE) is becoming more and more common, and dental practitioners may frequently face dilemmas related to the increased risk of medical emergencies in dental practice.

General management of dental patients with a history of ACE use (hypertension, heart failure) may require additional investigations before undergoing routine dental treatment. Dentists should consider asking all patients if they have a history of unexplained skin swelling as part of their routine history. On the other hand, dentists may play a crucial role in helping to establish a potentially lifesaving diagnosis, in the case of suspecting symptoms of congenital C1-esterase inhibitor deficiency and hereditary angioedema (HAE).<sup>2</sup>

In patients with diagnosed HAE, a short-term pharmacological prophylaxis with the use of C1 esterase inhibitor is a viable option before dental treatment in patients with existing hereditary angioedema. Human C1 esterase inhibitor (C1-INH), registered in the UK under brand name Berinert (CSL Behring Ltd) can be administered not only for emergency treatment in case of acute head and neck angioedema but also as a pre-procedure prevention of acute episodes of hereditary angioedema type I or II.<sup>3</sup> According to the UK Monthly Index of Medical Specialities: 'pre-procedure dental or medical prevention should be done with the use of 1,000 units within six hours before medical, dental or surgical procedure by slow intravenous injection or infusion in hospital setting'. However, according to the US Food and Drug Administration agency, the safety and efficacy of Berinert for prophylactic therapy has not been established.<sup>4</sup>

Berinert is made from human blood, and hence it may contain infectious agents (eg

viruses and, theoretically, the Creutzfeldt-Jakob disease [CJD] agent – prions). This risk has been considerably reduced to minimum by screening plasma donors, by testing for the presence of certain current virus infections, and by specific processes in order to inactivate and/or remove certain agents during manufacturing.

When considering a prophylactic injection/infusion with C1 esterase inhibitor before dental treatment, when there is a risk of angioedema onset in patients with HAE, informed consent should be obtained following thorough explanations. The physician should discuss the risks and benefits of this product with the patient before prescribing or administering it.

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3. UK Monthly Index of Medical Specialities (mims). Drug details: Berinert (POM). Available at: [www.mims.co.uk/Drugs/cardiovascular-system/circulatory-disorders/berinert/](http://www.mims.co.uk/Drugs/cardiovascular-system/circulatory-disorders/berinert/) (accessed 14 April 2014).
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## MEDICAL EMERGENCIES

### Essential piece of kit

Sir, the paper on emergency oxygen therapy (*BDJ* 2014; **216**: 113–115) contained some well catalogued detail of the potential hazards and sequelae of inappropriate O<sub>2</sub> administration by dentists.

Data were included from the National Patient Safety Agency that reported 281 cases of iatrogenic harm to patients from poor oxygen management with nine deaths directly attributed and a contribution to 35 more. Attention is drawn to chronic obstructive pulmonary disease and undiagnosed chest pain being potentially highly hazardous for indiscriminate high flow oxygen administration.

These caveats aside, the use of pulse oximetry is mentioned a number of times in the paper but is seen as being unlikely in practices not offering sedation ('usually only practices that administer sedation will have a pulse oximeter').

Is this anecdotal, and if so, then why? A simple digital pulse oximeter measuring about 2.5 x 1.5 inches, that will easily slip onto a finger, can be easily obtained from retailers such as Amazon for about £35.

The Resuscitation Council recommendations, also set out in the paper, include a recommendation for pulse oximetry. I can't help feeling that in light of this and the confirmed cases of harm from poor technique that are mentioned, perhaps an ideal opportunity was missed to strongly recommend to dentists an essential, inexpensive piece of kit!

Having used the model mentioned – and there are many similar – on multiple occasions in my part-time role as an ambulance first responder in the community – where oxygen administration is front line therapy – it has proved its value so many times over. Perhaps this item should be seen as a 'must have' in every practice toolbox for medical emergencies.

K. F. Marshall, Llansteffan

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## ORAL SURGERY

### ARONJ masterclass

Sir, on 23 October 2013, a joint meeting between the Faculty of Dental Surgery and the British Association of Oral Surgeons was held at the Royal College of Surgeons of England, London. The aim of the masterclass on antiresorptive agent-induced osteonecrosis of the jaw (ARONJ), also referred to as BRONJ, BIONJ and ONJ, was to improve understanding of the benefits of antiresorptive therapy for patients with metabolic and metastatic bone disease, acknowledge that those patients receiving high dose antiresorptive therapy for metastatic bone disease may be at slightly increased risk of developing ARONJ, and improve the inter-professional communication regarding the prevention and management of patients with ARONJ.

## ERRONEOUS ABSCESS

Sir, the cover of the *BDJ* of 24 January 2014 (volume 216, issue 2), showed a skull with a space occupying lesion in the anterior left maxilla. The caption stated that this lesion was an abscess! An abscess is defined in many dictionaries as a collection of pus. The lesion shown has occupied the anterior left maxilla and expanded and eroded the labial and palatal bone. It is likely to have been a large cyst either apical, residual or developmental, or a benign tumour. It is unlikely to have been a granuloma as that does not reach this large size. An abscess could have arisen in a cyst if it became infected while the subject was alive but

this would not have left macroscopic bony evidence. There may be more evidence for the likely pathology on handling the skull than appears on the photograph. The caption also states that the lesion has had an effect on the mandible. There is no evidence for this on the photograph.

I realise that the erroneous caption may have been supplied by the Hunterian Museum of the Royal College of Surgeons but I feel that, since this picture may be used in an educational context, in the interest of accuracy this caption needs to be altered.

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The day highlighted the different perspectives on ARONJ and raised concern that the dental profession on occasion provide inadequate advice for patients receiving antiresorptive therapy with regards to their dental treatment. This letter summarises the key messages from the meeting and is a consensus of the presenters listed below. A multidisciplinary white paper is planned to follow.

In summary the group agreed to support the following:

1. The Scottish Dental Clinical Effectiveness Programme (SDCEP) – Oral Health Management of Patients Prescribed Bisphosphonates, Dental Clinical Guidance, April 2011.
2. Improvements in communication between the dentist and the oncologist/haematologist/metabolic bone physicians.
3. Dentists should support the use of antiresorptive therapy (bisphosphonates [BPs] and denosumab) prescribed for patients with osteoporosis and metastatic spread of cancer to bone, and not discourage them from taking the medication due to fear of dental complications. The benefits of these agents clearly outweigh the risks by a wide margin. For patients with osteoporosis, these treatments result in an approximate 60% reduction in vertebral fractures and 20% reduction in non-vertebral fractures. In relation to neoplastic disease involving bone, patients benefit significantly with reduction in bone pain, improved quality of life and at least a 50% reduction in skeletal complications of malignancy including pathological fracture, spinal cord compression, need for radiotherapy and hypercalcaemia.
4. The incidence of ARONJ is extremely low/negligible in patients receiving treatment for osteoporosis (about one in 10,000) and therefore dentists should generally treat these patients as normal dental patients, and routine dental care should be provided. Those patients who have received long-term antiresorptive therapy for osteoporosis should be considered for a more complete risk assessment prior to dentoalveolar surgery given the reporting of persistent, albeit rare, occurrence of ARONJ in this scenario. However, patients at slightly increased risk of ARONJ eg cancer patients receiving higher doses of BPs or denosumab (annual risk about one in 100) should receive regular six-monthly dental care.
5. Any patients receiving high dose potent antiresorptive treatment for cancer (including myeloma) should be referred for dental assessment before starting this therapy when possible (if urgent management precludes this, it should take place as soon as possible). Good communication between the dentist and the oncologist/haematologist is required for optimal management.
6. If dentists encounter patients with ARONJ then they should report the condition using the MHRA yellow forms (<http://yellowcard.mhra.gov.uk>).
7. The development of a network of dentists for shared experiences, agreed protocols, to encourage reporting, data collection and participation in research is recommended.

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