Letters to the Editor

Send your letters to the Editor,
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Priority will be given to letters less than 500 words long.
Authors must sign the letter, which may be edited for reasons of space.

STEROID DEBATE

Sir, I write regarding the issue of steroid cover in the prevention of an adrenal crisis.[1] Patients who are susceptible would not be able to produce enough endogenous steroids to cope with the stress of certain procedures. Acute adrenal insufficiency is a life threatening complication in these patients and has a vague presentation making its diagnosis difficult. Symptoms may include weakness, abdominal pain, salt craving, diarrhoea, constipation and syncope. Unfortunately, there are a multitude of other differentials that may distract from making a prompt diagnosis and instituting correct management.[2]

In our setting, the most common cause for this insufficiency is suppression of the hypothalamic-pituitary axis from chronic exogenous steroid usage (secondary adrenal insufficiency).[3] Adrenal crisis may then result from an acute exacerbation of chronic insufficiency, caused in this case by surgical stress. This is particularly the case in patients having steroid replacement therapy for more than four years.[4]

Such varying guidelines are encountered in the management of other conditions and are continually evolving.[5] These include antibiotic prophylaxis in prevention of infective endocarditis, INR levels and, more recently, cessation of aspirin and other antiplatelet medications pre-operatively to minimise intra and post operative haemorrhage.

As there is an objective test for adrenal gland function – the synacthen test (short or long) – it is possible to resolve any suggestions of insufficiency. The short test is relatively quick, and performed usually in the morning involving two blood samples taken 30 minutes apart and a small intramuscular injection given after the first sample is taken. A plasma cortisol response of >500 nmol/L can help exclude adrenal atrophy due to Addison's Disease or steroid therapy.

Given the current evolution of evidence based medicine would it not be considered prudent to consider such a test to provide some objectivity to our management in these cases? Does further work need to be done to establish the reliability of this procedure in testing for the risk of acute adrenal insufficiency after surgery?

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London

1. Gibson N, Ferguson J W. Steroid cover for dental patients on long term steroid medication: proposed clinical guidelines based upon a critical review of the literature. *Br Dent J* 2004; **197:** 681-685.
2. Scully C. Steroid cover. *Br Dent J* 2005; **198:** 350.
3. Guyton A C *et al.* The adrenocortical hormones. *In: Textbook of medical physiology*, 7th ed. pp 909-919. WB Saunders, 1986.
4. Omori K, Nomura K, Shimizu S. Risk factors for adrenal crisis in patients with adrenal insufficiency. *Endocr J* 2003; **50:** 745-752.
5. Perry R J, McLaughlin E A, Rice P J. Steroid cover in dentistry: recommendations following a review of current policy in UK dental teaching hospitals. *Dent Update* 2003; **30:** 45-47.
6. Kelestimur F, Akgun A, Gunay O. A comparison between short synacthen test and depot synacthen test in the evaluation of cortisol reserve of the adrenal gland in normal subjects. *J Endocrinol Invest* 1995; **18:** 823-826.

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SEDATION CHALLENGE

Sir, I followed the correspondence regarding conscious sedation with some interest. In Scotland, the Chief Dental Officer has directed that NHS patients requesting sedation may only receive a single intravenous agent, typically midazolam, or less frequently propofol. However, when a patient is offered 'conscious sedation' what they actually want is anxiolysis and particularly analgesia. The reasons for requesting 'sedation' are fear of the pain associated with the proposed procedure or intra-oral local anaesthetic injections, anxiety regarding oral instrumentation, a demonstrated inability to cooperate with dental surgery (eg pronounced gag reflex) or anxiety and fear related to a previous unpleasant dental treatment episode. Frequently patients will present with some combination of the above. In addition, patients with chronic benzodiazepine, antidepressant, methadone or cannabis use frequently present requesting 'sedation' and pose a challenge to the dental sedationist.

Successful 'sedation' allows all necessary treatment to be performed on a calm, pain free and cooperative patient. In practice not all patients will have this experience. Neither midazolam nor propofol have any analgesic properties (in addition patients with long term substance abuse or chronic benzodiazepine use are very difficult to sedate with conventional doses of midazolam). Propofol alone is not an ideal agent for the provision of sedation in dental surgery as it causes significant pain on injection and can make patients talkative and uninhibited. Patients receiving these agents may have amnesia for their treatment but without doubt some will still experience pain associated with either injections, drilling or extractions. Pain produces movement and vocalisation thus making the work of the dentist more difficult. Treatment is not infrequently curtailed or abandoned because of the distress produced or inability of a patient to remain still when local

anaesthesia is being injected or a difficult extraction is being undertaken.

So when NHS patients in Scotland are being offered 'conscious sedation' with either midazolam or propofol, are we in practice actually meeting the needs of both the patient and the dental surgeon? I suspect not. One size does not fit all!

In practice, both analgesia and anxiolysis can be safely provided by an appropriately trained sedationist in the appropriate environment using titrated doses of alfentanil and midazolam. This combination of drugs is flexible enough to deal with the requirements of the patient (analgesia and anxiolysis) and the surgeon (cooperation) and also deals effectively with the problems posed by patients taking concomitant sedative medication (prescribed or not).

I call upon the Chief Dental Officer for Scotland to review the advice of her predecessor and to begin discussions with all of us who are interested in this area in order that a 'conscious sedation' service that actually meets the expectations of patients is delivered.

C. Greenhalgh
By email
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BOTANICAL GUMS

Sir, since retiring from mainstream dentistry I have taken a special interest in a different type of gums – the botanical variety. The common name of 'gum' is given to species within two groups of trees, the Eucalyptus and the Nyssa. Experience has disclosed parallels between these plants and the oral tissue.

Gum tree bark has similarities with skin and mucosa in that it has a variety of colours and a tendency to exfoliate so creating patterns. As with epidermal tissues, exudates are produced which have a protective function to seal wounds and act as antimicrobial and antifungal agents. The exudates from the Manna gum, *E. viminalis*, are red and sweet tasting. A sense not normally used in periodontology! The olfactory sense is more rewarding with these trees. The most pleasant is probably that of the Lemon Gum, *E. citriodora*; followed by the Peppermint Gum, *E. dives*. Others have the aromas more usually associated with nasal and chest decongestants. All of these vapours being preferable to that of oral foetor.

Colour features in the names of several of the eucalypts – Red Gum, *E. camaldulensis*, Rose Gum, *E. grandis*, Blue Gum, *E. globulus*, Snow Gum, a subspecies of *E. pauciflora*. The Latin name is a misnomer as the species is floriferous. In dental terms these names would be associated with pathologies for example, the Shining Gum, *E. nitens* for good gingival health.

Generally the Gums are fast growing, often producing exuberant overgrowth. This can be dealt with either by early preventive shaping otherwise more drastic surgery may subsequently be needed. Some of the Gums can be kept to bonsai size using artistic talent to produce weird and wacky shapes – not a skill usually employed in periodontology.

Most of the over 800 species of Eucalyptus are found naturally in Australia. In the UK there are few people with a depth of knowledge of Gums. Maybe further study has necessitated antipodean visits, and the academic collective noun should be invoked ie an absence of experts.

The Black Gum, *N. sylvatica*; is the one periodontal reference in the Nyssa family. The most interesting aspect of these trees is their autumn foliage which is reminiscent of the red of inflamed human tissue. It came as a surprise to me that this tree has the homophonic common name of the Pepperidge tree.

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OTHER FACTORS

Sir, I read Dr M. Tickle's letter *No problem up north* (*BDJ* 2008; **204:** 655) with some interest.

Whilst there is no doubt he is right to question statements on access to NHS dental services, if they conflict with figures from the Information Centre, I am concerned that only access figures are being used to show no problems 'up north'.

It is quite clear that the drive from the Operating Framework is very much to get extra patients through practices – South Birmingham PCT in my area has been set a target of an extra 22,000 within its contract holders – but quality services based on proper needs assessments and consultation with patients in most areas are not happening to the degree they should.

Access figures alone cannot be a judgement of no problems, as other factors determine 'no problems'. This contract is still flawed in many aspects as has been highlighted by the Health Select Committee's report and I hope dental leads like Dr Tickle pay attention to it and do not ignore the criticism without taking appropriate action.

E. Crouch
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MUMPS AWARENESS

Sir, in our three GDP practice in Tyne and Wear covering over 10,000 patients, it has come to light that we have diagnosed four cases of suspected mumps in children over the past two months.

Since the advent of the MMR vaccination, which had made this common viral infection almost obsolete, there has been a reduction in the uptake of the MMR vaccination and there do appear to be pockets of unvaccinated individuals meaning that the herd immunity threshold has dropped, allowing such cases to appear.

One of the complications of mumps is an associated parotitis and each of these individuals appeared with parotid involvement mimicking a facial swelling. In the last case, the patient had seen their general medical practitioner who thought that the facial swelling was from a dentoalveolar infection.

GDPs are at an advantage of identifying this condition with their knowledge of the oro-facial tissues and treating and advising patients accordingly.

I hope this keeps readers informed to be extra vigilant of this condition as I suspect it is a condition that the dental and medical professions had almost forgotten about.

R. Pilkington
By email
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