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.

PAEDIATRIC SEDATION

Sir, intravenous conscious sedation for paediatric dentistry is for various reasons a very controversial issue. One of the main issues of concern is the use of combinations of intravenous drugs, called polypharmacy.

I am currently busy with a pilot study to look at the various factors that may contribute to risk. So far we have entered into the study, using polypharmacy, 154 children, 3-10 years of age, undergoing dental procedures under local anaesthesia and sedation. Our target is conscious sedation. Our sedation technique includes the following drugs: midazolam, ketamine, propofol and remifentanil.

We are using the DOCS scale to evaluate safety and efficacy of the sedation technique. According to this scale, if the score is between -2 and +2 the sedation technique is considered to be in the safe zone.

Children are divided into the following age groups: under 5 years (70), 5-8 years (50), and over 8 years (34).

With this technique done by an experienced sedationist, under ideal circumstances, in a sedation unit, next to the operating theatres, 153 children were rated as between +2 and -2 on the DOCS scale, indicating a safe zone. One child had a -3 rating because of respiratory obstruction caused by depression of the chin by the dentist.

A rating of -2, indicating increased risk, was documented in the following groups: children under 5 years: 14.2%; children 5-8 years: 8%; and children over 8 years: 0%.

A decrease in oxygen saturation of <92% was noted in 14/152 = 9% of children. In children under 5 years 12/70 = 17%, had a drop in oxygen saturation. It is quite interesting to note that the drop in oxygen saturation was caused by flexion of the head in six of the children, depression of the chin in two children, and excessive water in the mouth in four children – all preventable causes. No incidences of laryngospasm or bronchospasm were seen. In children over eight years old no adverse events were seen. This may indicate that children of this age group may have a lower risk for adverse events during intravenous paediatric sedation for dentistry.

It is well known that upper airway narrowing is most likely to appear in pharyngeal structures in children <8 years – they are probably the group at risk during sedation. Children are especially vulnerable because of a smaller diameter of their airways and a high incidence of adeno-tonsillar hypertrophy. It is our belief that in paediatric sedation – done by an experienced, trained sedationist – it is not always the drugs (polypharmacy) that cause adverse events. Other factors also increase risk and lead to adverse events: the 'human factor'.

Risk will be increased if a pre-operative assessment is not done, monitoring is neglected, multiple drugs are used to keep a patient still (if you target immobility you target deep sedation) and the patient is prematurely discharged.

Risk is also related to the experience of the sedationist (training), secretions, and the position of the head during sedation – the airway – it is all about the airway!

The dentist as operator may also contribute to risk by depression of the mandible, and not controlling the suction of water during drilling.

The above-mentioned pilot study shows that 'other factors' may play a role in increasing risk during paediatric sedation. We must be careful in just blaming drugs as the only cause of adverse events.

J. Roelofse
South Africa
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BABOON SYNDROME

Sir, I enjoyed reading the interesting case report of an allergic reaction to mercury and the accompanying review of the literature (*BDJ* 2008; **205:** 373-378). The acute reaction described is fortunately very rare but as such, these types of reactions may not always be recognised when they occur. As well as the skin manifestations described, a further rare presentation not mentioned is the so-called 'baboon syndrome'.[1,2] This is a syndrome of striking, bright erythema of the buttocks combined with dermatitis in flexural areas. Interestingly, acute reactions have most commonly been reported from Japan and Korea where mercury containing disinfectant has been implicated in increased rates of mercury sensitisation.[2,3] Whatever the manifestation of the acute allergy, in patients who have had acute reactions to mercury, subsequent amalgam removal, if required, should be performed under rubber dam and with high volume suction to reduce exposure to released mercury.[4]

M. N. Pemberton
By email

1. Andersen K E, Hjorth N, Menne T. The baboon syndrome: systemically induced allergic contact dermatitis. *Contact Dermatitis* 1984; **10:** 97-100.
2. Oh C K, Jo J H, Jang H S, Kim M B *et al.* An unusual case of mercurial baboon syndrome from metallic mercury in a broken industrial barometer. *Contact Dermatitis* 2003; **49:** 309-310.
3. Nakayama H, Niki F, Shono M, Hada S. Mercury

exanthema. *Contact Dermatitis* 1983; **9:** 411-417.
4. McGiven B, Pemberton M, Theaker E D, Buchanan J A G, Thornhill M H. Delayed and immediate hypersensitivity reactions associated with the use of amalgam. *Br Dent J* 2000; **188:** 73-76.

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TURTLE RECALL

Sir, we wish to draw colleagues' attention to Tesco's Steps 0-2 years soft turtle toothbrush (Figs 1-2). The small plastic turtle on the toothbrush handle can easily be dislodged and the loose fragment poses an aspiration risk.

Having received a number of complaints, Tesco has recently withdrawn the toothbrush and organised a public recall. Please could colleagues facilitate the withdrawal process by bringing it to the attention of parents and carers who may have purchased a brush of this type.

Figs 1-2 Tesco Steps soft turtle toothbrush

A. Shaw, M. Moffat
By email

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OCCLUSAL CONFLICT

Sir, I sympathise with both Dr Holland and Dr Aggarwal (*BDJ* 2008; **205:** 104). One may have found more evidence than the other but most of it is negative and none of it tells us why occlusal problems exist. To use a homely simile, the evidence shows that the faster you drive over a crossroad the less likely you are to have a collision. These are both situations where the evidence can lead you in the wrong direction. Logic is needed to create sense out of disjointed evidence.

In the natural environment aeons ago, the teeth wore into a perfect mesh but soft diet and open mouth postures destroy this relationship. You can dream up a thousand research projects to examine modern occlusal disharmony but few if any of them will lead to an effective cure. Be logical and you will realise that if the teeth are in contact enough (four to eight hours each day?) the cure is automatic.[1]

Okay, patients can't (won't) do that! Yes they can; a Stage 3 Biobloc appliance[2] correctly adjusted and worn will teach them to keep their teeth in contact all night every night and within a month all the teeth will occlude equally. Incidentally it also cures malocclusion, TMD and OSA. We all need to be a bit more logical.

J. Mew
By email

1. Proffit W R, Fields H W, Nixon W I. Occlusal forces in normal and long-faced adults. *J Dent Res* 1993; **62:** 566.
2. Mew J R C. Biobloc therapy. *Am J Orthod* 1979; **76:** 29-50.

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LESSONS FROM LATIN

Sir, what a joy it was to read Cooper and Cascarini's *Maxillary etymologies* in your journal (*BDJ* 2008; **205:** 393-394). They are continuing many centuries of Latin scholarship meaningful to modern culture.

As fresher dental students in the fifties, we had been taught Latin at school. The dreaded test, in class, had been 'Latin unseen' which was the translation of a Latin text without a Latin dictionary. This required a sound knowledge of grammar and the imagination to find words of Latin origin still in current use. We discovered that this applied to anatomy which was Anglicised Latin and that senior surgeons still used Latin terminology. Many other subjects used words of Latin origin or borrowed Greek.

It was at the Renaissance that Latin scholarship, Arabic numeration and revived ancient learning launched the scientific approach generally. However, for the previous millennium, it was the monasteries which had preserved and promoted scholarship and education as well as medicine and other forms of welfare for rich and poor alike. English is now a global language but Old English (Anglo-Saxon) first began to be written in Latin script in these islands in the seventh century through Roman Catholicism and the widespread use of Latin by the Church goes back to Constantine the Great, the first Christian emperor (324 AD) of the whole Roman empire. Thus these peculiar marks on this piece of paper can now be read by billions of people.

It is essential for unambiguous communication that standard English is preserved by proper usage. The answer can be found in Latin. Two thousand years ago, Julius Caesar wrote an account of his Gallic wars which is still perfectly readable, yet Gall is now France which speaks French, one of the Romance languages derived from Latin. English will change enormously and diversely in the future due to rapid technological advance and the different cultures that use it. I submit that the study of Latin usage still has the ability to broaden the understanding of language, its proper usage and the historical context of the present.

I look forward eagerly to the next article!

T. Sholl
Lewes

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U-TURN

Sir, I am reluctant to interfere in a debate between two respected colleagues and old friends of mine, Dr Barsam and Dr Rich (*BDJ* 2008; **205:** 523), about the effects of the system of capitation on the state of children's teeth; nor do I ever see a need to defend the Department of Health. However, following the statement by Dr Rich that '[the figures] are self evident and the Department didn't do anything about them' I have to point out that history does not support this statement.

The new capitation payment system to dentists working in the GDS, for the provision of care and treatment for children,

started in 1984 with a very small pilot scheme involving a handful of dental practices (including my own). This was extended into a full trial of this method of paying dentists later in the 1980s. The results of the trial were reported in 1989.[1] In a nutshell, they suggested that the outcomes for child patients treated under the capitation scheme were little different to those treated under a conventional payment system. But they were looking at a very limited number of practices and there was much debate at the time about this conclusion in the report, which is not relevant to this letter.

Nevertheless, the government of the time did not wait for the publication of the report before deciding to change the system for all GDS dentists, to payment by capitation (for children) and this was introduced with the (then) new contract of 1990.

Largely as a result of concerns expressed by those responsible for monitoring at the Dental Practice Board (amongst other organisations) the Department of Health entered into discussions with the General Dental Services Committee in 1995 about changes to the 1990 contract. These included the re-introduction of item-of-service fees for children's dentistry. Agreement was reached, with item-of-service once more provided from 1996 onwards for children's dentistry.

So, the Government did listen to (at least) these concerns of the profession and made a 'U-turn' when all the evidence showed the need. It remains to be seen whether the current government will be prepared to 'U-turn' on any matters related to the new (2006) GDS.

A. S. Kravitz OBE
By email

1. Coventry P, Holloway P J, Lennon M A *et al.* A trial of a capitation system of payment for the treatment of children in the General Dental Service. *Community Dent Health* 1989; **6:** Supplement 1.

DOI: 10.1038/sj.bdj.2009.15

COUPLANDS' CHISELS

Sir, I was interested to read the article by Bussell and Graham (*BDJ* 2008; **205:** 505-508) in which they asked for information on the origin of Couplands' chisels. During the 1970s I visited an oral surgery practice in Ottawa, Ontario, where one of the partners was Dr James P. Coupland. I understand that James Coupland's cousin, Douglas Charles William Coupland, had developed the chisels/gouges during the 1920s.

Douglas Coupland had qualified at the Royal College of Dental Surgeons in Toronto in 1922 and worked in dental practice in Sudbury for two years. He studied exodontia at the Mayo Clinic and then set up an oral surgery practice in Ottawa. Douglas Coupland proved to be very successful and by 1930 his cousin James Coupland had joined him as an associate. In the same year Douglas Coupland was President of the Eastern Ontario Dental Association and became president of the Ottawa Dental Society in 1932. Tragically, he died of the complications of mitral stenosis in 1936, at the age of 35.

During the 1920s or early 1930s Douglas Coupland had negotiated with Hugo Friedman, whose firm Hu-Friedy later manufactured the chisels, initially as a set of eight or 12 (soon reduced to three). The firm also produced surgical suckers designed by Dr Coupland. In 1983 I received a letter from one of Douglas Coupland's sons, who stated that his father's greatest contribution had been the aspirators with interchangeable tips, rather than the chisels (Dr Coupland had two sons, both of whom studied dentistry).

Messrs Hu-Friedy wrote to me in 1983 stating that they thought that the Couplands' instruments had been in production since the early 1930s. In a letter from Down's Surgical dated 5 May 1987, Geoffrey Down stated that Couplands' chisels had first appeared in the 1935 edition of the Down's Catalogue.

In spite of having only 13 years of clinical practice, Douglas Charles William Coupland seems to have achieved a considerable amount. As a retired maxillofacial surgeon, I can confirm that Couplands' chisels were of enormous value throughout my practising lifetime.

P. Cove
By email

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TACTFUL HISTORY

Sir, on reading the letters page this week I have to wonder how Professor Scully 'tactfully' includes the question of sexual history (*BDJ* 2008; **205:** 468). I have to say some of my patients are reluctant to even reveal to me that they smoke or drink alcohol on their medical histories let alone tell me how many times they have been lap dancing in the past year!

J. Warham
Leamington Spa

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RUBBER REVOLUTION

Sir, I read with interest correspondence from Danda *et al.* (*BDJ* 2008; **204:** 352)[1] and more recently Ballal (*BDJ* 2008; 205: 523)[2] on this topic.

The latter describes the 'Isolite' mouthpiece system (www.isolitesystem.com) 'which will retract and protect cheek and tongue from accidental damage from high speed turbines ... it is easy to place and comfortable for the patient.'

I have used such a simple and rapid technique for over 38 years to utilise a similar idea on most patients requiring operative dentistry.

This system which has been used on a day-to-day basis in my private practice provides – in addition to protection and retraction such as described by the above writers – a welcome and extremely valuable reduction of the contamination of the workspace environment of dentist and nurse by the cocktail of microbiological debris that is the turbine generated aerosol.[3,4]

It's called rubber dam!

K. Marshall
Llansteffan

1. Dhanda J, Thomas M, Kheraj A. High speed laceration. *Br Dent J* 2008; **204:** 352.
2. Ballal V. Safety measures. *Br Dent J* 2008; **205:** 523.
3. Samaranayake L P, Reid J, Evans D. The efficacy of rubber dam isolation in reduction of atmospheric bacterial contamination. *J Dent Child* 1989; **56:** 442-444.
4. Cochran M A, Miller C H, Sheldrake M A. The efficacy of the rubber dam as a barrier to the spread of microorganisms during dental treatment. *J Am Dent Assoc* 1989; **119:** 141-144.

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