

Letters to the Editor

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British Dental Journal,
64 Wimpole Street,
London
W1G 8YS
E-mail bdj@bda.org

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

MISTAKEN DIAGNOSIS

Sir, it was with nostalgia that I read *Case report: foreign body in the palate of an infant* by Hussain *et al.* (*BDJ* 2008; 205: 25-23). It took me back to my early post-qualification days of 1974, working in the Department of Paediatric Dentistry in Cardiff Dental School, when a mother with a 15 month old infant was referred to the department from the local hospital.¹

The referral letter read as follows: 'This baby came here two weeks ago with a small blister in the roof of the mouth, gradually the area had sloughed off leaving a large circular defect. Blood tests showed that the Wasserman reaction, Khan test and Reiter protein complement fixation tests were negative. A full blood count was normal, but the E.S.R. (Westergren) was raised to 25. The baby was treated with ampicillin syrup for seven days with no improvement in his condition.'

Interviewing the baby's mother revealed that she had noticed a 'hole' in his palate two weeks before, and attempted to contact the family doctor. As he was unavailable she immediately took her son to the local hospital. There he was examined, several blood tests carried out and she and the baby were asked to return on a number of occasions. The mother was asked repeatedly, despite her first negative reply, if she or her husband had ever had a 'disease'. Although syphilis was not actually named, this was clearly implied through the range of blood tests carried out on the infant. During this time the baby apparently continued to enjoy his usual good health showing no indication of pyrexia or suffering any soreness of the mouth. At the time of referral the parent was extremely anxious and convinced her child had a serious condition.

On arrival at the paediatric dental department, the baby was active and alert and seemingly quite healthy. Oral examination of the palate revealed a perfectly round 'ulcer', dark blue in colour and approximately 2 cm in diameter, in the centre of the hard palate (Fig. 1), with a raised area of inflammation around it. To the mother's great relief, a thin disc of reinforced plastic fibre was removed from the palate with tweezers (Fig. 2) to expose the slightly inflamed underlying mucosa (Fig. 3). One week later the inflammation had resolved. It would seem that the child had wedged the plastic object, perhaps the backing of a button, onto the palatal mucosa where its retention was aided by an adhesive coating.

The mistaken diagnosis probably occurred because of the difficulty some clinicians encounter when examining



Fig. 3 The inflamed underlying mucosa

the oral cavity of small babies. A simple method is to sit the child on the parent's knee, facing away from the operator, and then lean him/her back into the lap of the examiner.² Using this technique it was possible to fully examine the oral cavity and remove the foreign body without recourse to general anaesthesia.

J. Fiske

By email

1. Fiske J, Swallow J N. 'Perforated palate' in a fifteen month old baby: a case report. *Probe* 1974.
2. Slack G L. *Br Dent J* 1961; 111: 22.

DOI: 10.1038/sj.bdj.2008.810

RUBBER DAM PURPOSE

Sir, in a science-based profession such as dentistry new discoveries can provide valuable insight into how and why treatments work, and therefore enable techniques to be improved. However, this only happens if the deductions that follow the discovery are intelligent and the conclusions reached are true.

The discovery that the bacterium *Enterococcus faecalis* is often found in teeth where endodontic treatment has failed has led some in the dental profession to conclude that the use of rubber dam should be mandatory. They assume the bacteria are transferred to open root canals by saliva. I believe this conclusion is illogical and probably not true.



Fig. 1 The round 'ulcer' or 'perforation' in the centre of the hard palate



Fig. 2 The thin disc of reinforced plastic fibre removed from the palate with tweezers

1. *Enterococcus faecalis* is often found in teeth that have been treated with rubber dam applied
2. Many root fillings done without rubber dam are permanently successful. No study has shown that rubber dam has any effect on the success of endodontic treatment
3. Teeth can be reasonably well isolated with cotton wool rolls, and the presence of sodium hypochloride in the canal must surely act as a barrier to saliva.

Is it absolutely certain that saliva is a contaminant? Oral surgeons do not think so. Nature has programmed animals to lick wounds and we advise that an avulsed tooth be placed in the patient's mouth to ensure that it is bathed in saliva. Unless *Enterococcus faecalis* is also present in the blood, surely it cannot be present in the saliva at the point it emerges from a healthy salivary gland. Given the frequency with which we swallow, it would seem unlikely that saliva is in the mouth long enough to become colonised.

Surely a more likely explanation for *Enterococcus faecalis* being associated with failed root fillings is that the endodontic treatment achieved only partial eradication of microbes. This means that the bugs remaining will be the stronger more virulent varieties, which then proliferate and colonise the habitat left vacant by the removal of less hardy types.

If we accept that some feature of modern endodontic technique is resulting in inadequate disinfection of the canals, a possible candidate must surely be the practice of completing both preparation and obturation at the same appointment. This technique is popular with specialists, who favour it purely for administrative convenience.

I am a GDP yet in endodontics I achieve a near perfect success rate. I attribute this to never completing the treatment in one appointment. After the canals are prepared they are soaked in a solution of parachlorophenol, which is left *in situ* for several days before the obturation appointment. If I exclude special circumstances such as root fracture and cases treated during a brief period some six years ago (when I had been persuaded

to use calcium hydroxide in place of parachlorophenol), in the last ten years I have not had to extract any tooth that I had previously root filled. This involves some 2,000 treatments, mostly on molar teeth. Whilst this is not an audited survey I do have a stable patient base and review most of my patients at least once a year. There may be failures I do not know about, but surely it would be churlish not to allow that my endodontic treatments are, generally, a worthwhile exercise.

In spite of this, a specialist endodontist would describe what I do as 'clinically negligent' simply because, in common with many non-specialist practitioners, I do not use rubber dam. Why do so many senior members of the dental profession accept and support this unproven view? Why is the contrary view put forward by the moderate majority simply swept aside?

No dentist wishes to be charged with clinical negligence, therefore many may decide not to provide endodontic treatment. Their patients who require this treatment will then be faced with a stark choice. Either pay a higher fee to a specialist (often hundreds of pounds more than would have been charged by their own dentist), or have the tooth extracted. Many people will not be able to afford the higher charge and will therefore be forced to have their tooth extracted. Or worst, have no treatment at all and risk developing a potentially life threatening abscess.

It used to be said that for endodontics, rubber dam was essential to prevent instruments being dropped down the patient's throat. I understand it has now been agreed that by taking a number of simple measures, a root filling done without rubber dam can actually pose less risk in this respect than many other dental procedures. Unless a robust case is made to show that it is essential to achieve absolute isolation of the tooth, what purpose is served by the claims made for rubber dam?

R. Mackay, Chalfont St. Peter
DOI: 110.1038/sj.bdj.2008.811

UNINTENTIONAL OVERSIGHT

Sir, having read the excellent article by A. Dougall and J. Fiske, *Access to special care dentistry, part 3. Consent and capacity* (BDJ 2008; 205: 71-80), I would

like to point out a perhaps unintentional oversight with regards to the Mental Capacity Act 2005 (MCA 2005).

The Mental Act 1983 (MHA 1983) has been reformed hence culminating in the Mental Health Act 2007 (MHA 2007). This amending act is far reaching and also substantially amends the MCA 2005. The main reforms are intended to come into force by October 2008, which is the proposed date for a new definition of mental disorder. Some provisions will not be introduced until even later, such as those on Independent Mental Health advocates (October 2009).¹

T. Badh

1. Fennell P. *Mental health: the new law*, 1st ed. Bristol: Jordans, 2007.

DOI: 10.1038/sj.bdj.2008.812

DISCRIMINATORY

Sir, I must write in to support Dr Elgalaid's view (*Overseas registration; BDJ 2008; 205: 3-4*).

I have also felt it similarly inequitable and discriminatory that EU graduates do not have to do vocational training whilst British ones do. Politics again m'thinks!

G. Simmons, Barking

DOI: 10.1038/sj.bdj.2008.813

COMMISSIONING APPLIANCES

Sir, I suspect the GDC has bitten off more than it can chew with the publication of their consultation document on the commissioning of dental appliances. The maintenance of professional standards is one thing but attempting to regulate manufacturing standards in the dental laboratory is another matter altogether and not one for the GDC.

This very important issue needs urgent attention and I regret the fact that the consultation document leaves little room for manoeuvre as the Council has painted itself into a dark corner already.

As dentistry embraces Computer Assisted Design (CAD) and Computer Assisted Manufacturing (CAM) technology in our surgeries and dental laboratories so does our knowledge and understanding improve enormously. We know now for example that the existing standards that relate to impression materials BS EN ISO 4823:2001 and the gypsum materials used to replicate dental impressions BSI EN ISO 6873:2000

are woefully inadequate and fall far short of what is required to support the CAD/CAM technology that can now deliver precisely fitting dental appliances with unerring consistency. Quaint and subjective linear testing procedures for dental materials need to be replaced with more realistic screening procedures that recognise the power of advanced computer software. Product Standards in respect of dental appliances are notably absent and the everyday use of recognised process controls in most sectors of manufacturing industry is not a familiar part of dental procedures.

The GDC should recognise the need for an independent British Institute of Dental Technology and delegate to it the responsibility for all matters related to the maintenance of benchmarked Standards governing the production of any dental prosthesis. It would be entirely appropriate for the GDC to set up a dental convention to make recommendations for a radical restructuring of dentistry that recognises the importance of properly integrated education and training programmes for both clinicians and dental technologists and the elevation of dental technology into an autonomous branch of bioengineering.

N. J. Knott
By email

DOI: 10.1038/sj.bdj.2008.814

DENTURE ULCERATIONS

Sir, we would like to share with your readers a case of a 74-year-old partially dentate female patient referred to our oral and maxillofacial surgery department. She presented to her GDP with a loose fitting maxillary complete acrylic denture which she has worn for many years. The denture was relined with a heat cure acrylic and a week later the patient began complaining of a sore palate.

On clinical examination the patient's hard palate was erythematous with some superficial healing ulcers (Fig. 1). When a clinician sees continuing ulcerations, vesicullo-bullous conditions do need to be considered, however, we suspected the patient was reacting locally to leaching of monomer in relation to inadequately cured lining material as she had previously successfully worn this denture for a number of years. The ulcer-

ation, also, was only present in the denture bearing area. Simple measures were advised such as leaving her denture out, using warm salt water mouth rinses and a Betamethasone rinse. Her ulceration rapidly improved (Fig. 2).



Fig. 1 Patient's hard palate was erythematous with some superficial healing ulcers



Fig. 2 Patient's hard palate after following simple advice

Although leaching of monomer from inadequately cured denture relining material has been widely reported it is not often seen. There are numerous reports suggesting that residual monomer methylmethacrylate (MMA) in acrylic resin denture bases is associated with mucosal irritation.¹ Also several studies have determined that substances leached out from acrylic resin can lead to irritation of oral tissue, inflammation, or an allergic reaction.²

The key message gained from this case is to take a comprehensive history and examination and appreciate that simple measures can manage many cases.

G. Bhamrah, M. Millwaters
Harlow

1. Ureporn Kedjarune U, Charoenworakul N, Koon-tongkaew S. Release of methyl methacrylate from heat-cured and autopolymerized resins: cytotoxicity testing related to residual monomer. *Aust Dent J* 1999; **44**: 25-30.
2. McCabe J F, Basker R M. Tissue sensitivity to acrylic resin. *Br Dent J* 1976; **140**: 347-350.

DOI: 10.1038/sj.bdj.2008.815