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.

EXTRACTION VENUE

Sir, I write in response to G. Kini's letter (*BDJ* 2007; **203:** 440), regarding consensus on the most appropriate venue for extractions in bisphosphonate patients. I would firstly like to recommend the Australia paper[1] which I have found helpful in the informed consent process for these patients. The paper also suggests that almost 10% of Australian adults have an extraction of a tooth per year. Are UK figures comparable? In Lothian and Borders we have a population of just over one million of whom 6,000 adults received alendronic acid last year. If the Australian figures are comparable then this will equate to 600 extractions in this bisphosphonate group per year. Although our department could conceivably absorb a new patient group of this magnitude we would prefer to keep it in the primary sector and I would put forward three arguments to support this:

1. The extraction protocol is relatively simple
2. The risk of developing BONJ is usually low
3. When BONJ develops it is usually of a less aggressive nature and generally responds to treatment (exceptions exist).

My advice to practitioners considering straightforward extraction in the uncomplicated alendronic case is to: i) improve periodontal health where possible, ii) to provide pre- and post-operative chlorhexidine mouth rinsing and iii) to follow up and observe healing of the socket. If healing is not observed within three to four weeks we would welcome a referral. In a complicated alendronic acid or risedronate case, ie where the drug has been taken for a long period, concurrent use of corticoid steroids, in the smoker and the elderly, outcomes are less certain and informed consent becomes more difficult. We would in these cases be happy to give case by case guidance or accept management. In the ibandronic acid, pamidronate and zoledronic acid cases a high incidence and severity of BONJ is accepted. Most specialist units would I am sure be keen to be involved with the management of this group at an early stage. The number of patients is relatively small but the severity of possible complications is great.

In summary I would suggest that it falls to Dr Kini and colleagues (who will ultimately be asked to deal with the severe jaw complications associated with bisphosphonate use) to consider the universally accessible literature and to draw up treatment protocols and referral pathways to guide their primary care colleagues at a local or regional level.

I would be happy to share our efforts at developing such a protocol and those interested can request *Bisphos Protocol* from me by emailing nick.malden @lpct.scot.nhs.uk.

N. Malden
By email

1. Mavrokokki T, Cheng A, Stein B, Goss A. Nature and frequency of bisphosphonate-associated osteonecrosis of the jaws in Australia. *J Oral Maxillofac Surg* 2007; **65:** 415-423

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NO NEED FOR GRAFTING

Sir, in regard to the recent *BDJ* article,[1] I would like to ask if you could put my technique of removing fractured or misplaced, very well integrated dental implants before the authors of the article and all of your readers as well.

First, I detach the overlying mucosa or surrounding gingiva from the implant neck and keep them away. Then I attach one pole of the electrocautery to the platform or body of the implant while the other pole is attached to the patient's leg or hand. I put the electrocautery on coagulation mode for five seconds. This procedure will cauterise and necrotise the layer of bone which is in close proximity, or integrated to the implant. I then suture the mucosa, prescribe some analgesics and dismiss the patient.

After seven days the patient comes back to the office and we unscrew the implant out of the bone very easily, even without the need for anaesthetic injection. It has worked for me over the years and in three cases when I had to remove the osseointegrated implants because the prosthodontist was not satisfied with the position or angulation. In most cases when only 1 mm or 1.5 mm of bone is left at the buccal and lingual side of the implant and the practitioner has decided to remove it, creating a through and through bone defect is what really happens when a trephine is used to remove the implant and its surrounding bone from the jaw. Then we have to go through the very difficult and timely/costly process of repairing or reconstructing the alveolus. With my technique, there will be no need for future grafting or any kind of reconstruction. The socket will heal by itself.

M. Jafari
By email

1. Virdee P, Bishop K. A review of the aetiology and management of fractured dental implants and a case report. *Br Dent J* 2007; **203:** 461-466.

DOI: 10.1038/bdj.2007.1194

TECHNIQUE SENSITIVE

Sir, some of the materials we use in the mouth can be harmful when used inappropriately. Your recent article on bony necrosis following the use of

paraformaldehyde paste (*BDJ* 2007; **203:** 511-512) beautifully illustrates this point.

In the first two cases, the precise method of usage is not mentioned but the radiograph and report on the third case show that material was placed contrary to the manufacturer's instructions, ie not sealed within the tooth by a cement such as a poly-carboxylate. In common with many of our materials, the safe use of paraformaldehyde is technique sensitive and Case 3 demonstrates the consequences of an inappropriate technique. The fault was therefore with the operator and not the material.

Perhaps it would be wise for us to consider appraising our techniques before we condemn our materials. One would not wish to be the bad workman who blames his tools.

Your publication has reported various cases where hypochlorite has caused terrible tissue damage and pain when it has been used with an inappropriate technique and yet there is no similar call for the use of hypochlorite 'to be strongly discouraged in all instances'.

C. Marks
Southampton
DOI: 10.1038/bdj.2007.1195

DRUG INTERACTIONS

Sir, FDA approval was given in January 2007 for EXENATIDE to be used to improve blood glucose control in people with type 2 diabetes. Since this has appeared in the BNF, some practitioners have shown concern about possible drug interactions.

While insulin is the main hormone involved in control of blood sugar levels, it is not the only one. Glucagon-like peptide 1 (GLP-1) is a small intestine hormone (an incretin) which has a glucose-lowering effect and also increases pancreatic beta-cell mass by stimulating neogenesis and reducing apoptosis. Unfortunately, GLP-1 is rapidly degraded by the enzyme dipeptidylpeptidase IV *in vivo*. Exenatide is a synthetic analogue of GLP-1 resistant to this enzyme.

Originally isolated from *Heloderma suspectum* lizard salivary glands, exenatide (Byetta) is administered subcutaneously twice daily via a pre-filled pen, and acts to enhance glucose-dependent insulin secretion, enhance glucose-dependent suppression of high glucagon secretion, slow gastric emptying, reduce food intake, restore first-phase insulin secretion and promote pancreatic beta-cell proliferation.[1] Exenatide is used with other oral anti-diabetes medications to help lower the blood sugar.[2]

Exenatide slows gastric emptying and can thus affect drugs that really need to pass through the stomach quickly to avoid breakdown by gastric juices, and it can thus reduce their effect. Drugs used in dentistry that may potentially interact with exenatide include acetaminophen (paracetamol)[3] and antimicrobials, but there are no reports suggesting these interactions are clinically significant. Exenatide also potentially interacts with warfarin but this also appears not to be clinically significant.[4]

C. Scully
By email

1. Combettes M, Kargar C. Newly approved and promising antidiabetic agents. *Therapie* 2007; **62:** 293-310.
2. Barnett A. Exenatide. *Expert Opin Pharmacother* 2007; **8:** 2593-2608.
3. Blase E, Taylor K, Gao H Y, Wintle M, Fineman M. Pharmacokinetics of an oral drug (acetaminophen) administered at various times in relation to subcutaneous injection of exenatide (exendin-4) in healthy subjects. *J Clin Pharmacol* 2005; **45:** 570-577
4. Soon D, Kothare P A, Linnebjerg H *et al.* Effect of exenatide on the pharmacokinetics and pharmacodynamics of warfarin in healthy Asian men. *J Clin Pharmacol* 2006; **46:** 1179-1187.

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SILENT REVOLUTION

Sir, the article by Jones *et al.*, *Attitudes in Wales towards hygienist-therapists* (*BDJ* 2007; **203:** 524-525) certainly provokes questions. The main message that this puts across is the lack of knowledge on the part of GDPs of the training and work of dental therapists. This view is reiterated in the Editor's Summary and the 'Comment' by Dr Noble. We seem to be witnessing a 'silent revolution' in the way that the provision of dental care is moving.

What is a dental therapist legally permitted to do?

I think most UK dentists are aware that they can do simple restorative work on children and adults. But what else? The GDC publication 'Developing the Dental Team' states that they should also have 'a knowledge of preformed stainless steel crown and pulp therapy in primary teeth' and of 'advanced restorative techniques in both dentitions'. 'Knowledge', in this context, is defined as 'a sound theoretical knowledge of the subject but need only have limited clinical/practical experience'. The GDC also states that 'there should be no barrier to prevent DCPs expanding their range of skills' and they are 'permitted to practise in respect of those responsibilities for which they have received education and training ... and for which they have received authorisation from a registered dentist'.

The British Association of Dental Therapists' website confirms that a therapist can do 'Pulp therapy treatment of deciduous teeth... (providing they have completed appropriate training)', but what about advanced restorations? Both pulp treatment and advanced restorations come into the same GDC category. Do therapy schools now teach both? When does a 'simple' restoration become an advanced one?

I have no problem with therapists undertaking straightforward procedures within the team environment, providing they are working within the limits of their competence and providing the authorising dentists are aware of their limitations. But what of the future? All registrants are required to undertake CPD. If this includes developing skills into more advanced restorative procedures, what is to stop them? It is human nature that some will push to the legal limits or even further, with or without the blessing of a dentist who may be unclear of the regulations.

Already DCPs can work in separate establishments. Law has been changed that could permit DCPs to undertake the business of dentistry some time in the future. There is pressure to allow them to diagnose and formulate treatment plans. If this comes about, it will presumably be legal for therapists to set up in independent practice, undertaking the full range of simple and advanced restorative procedures with only 102 weeks training (the GDC minimum)! Is this the way forward for quality, safe dentistry in the future?

Recently, therapist training has been at the expense of that for hygienists. Now that most schools provide the combined course, there are now very few

places left for hygienists only. We seem to be moving from preventively orientated DCPs to operatively centred ones. We need more of the former, and then we will need fewer of the latter. Also, hygienists play a major role in assisting the dentist in the management of periodontal diseases. It is not surprising that the advertisement columns of the *BDJ* show that dentists are looking for hygienists, not therapists.

Hygienists are well defined, internationally recognised members of our professional community. Therapists are ill defined, and unique to the UK. Whether it is desirable to phase out hygienists in favour of therapists is something that we need to debate.

D. G. Hillam
By email
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TOOTH SURFACE RECORDING

Sir, I would like to share with your readers a suggestion for numerically recording the status of tooth surfaces in addition to a visual dental chart.

The system involves numbering the labial/buccal surfaces as 1, the mesial surfaces as 2, the lingual surfaces as 3, the distal surfaces as 4, and the occlusal surfaces as 5. Anterior teeth therefore have surfaces numbered 1 to 4, and posterior teeth have surfaces numbered 1 to 5 (Fig. 1).

The surface number is then used as suffix to the tooth number. Using the FDI system for example, indicating the occlusal surface of a right maxillary first premolar the code would be 145 (where 14 indicates the tooth and 5 indicates the surface). Similarly, the buccal surface of a left mandibular second molar would be 371 (where 37 indicates the tooth and 1 indicates the surface).

A further refinement is to use the symbols ˆ, v, <, >, and o. Here, if the arrow points towards the main horizontal line, it indicates the lingual surface; away from the horizontal line it indicates the labial/buccal surface; pointing to the median line indicates the mesial surface and away from the median line, the distal surface; o indicates the occlusal surface (Fig. 2).

Taking an example of this the palatal surface of the right maxillary central incisor would be denoted 1v|, the labial surface 1ˆ|, mesial 1>| and distal 1<|. Similarly, |6o would indicate the occlusal surface of a left maxillary first molar.

The system has other benefits such as when you see an even number surface code (2 or 4) as denoting caries, the even-numbered surface of the adjacent tooth might also be under carious threat.

R. Huang
Chengdu, China
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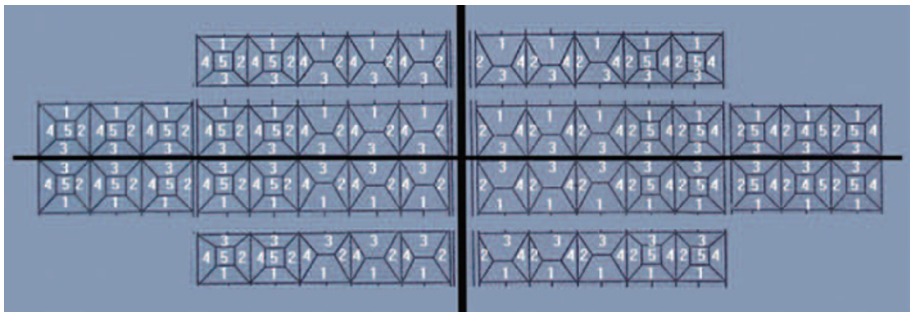

Fig. 1 Surfaces with their numbers

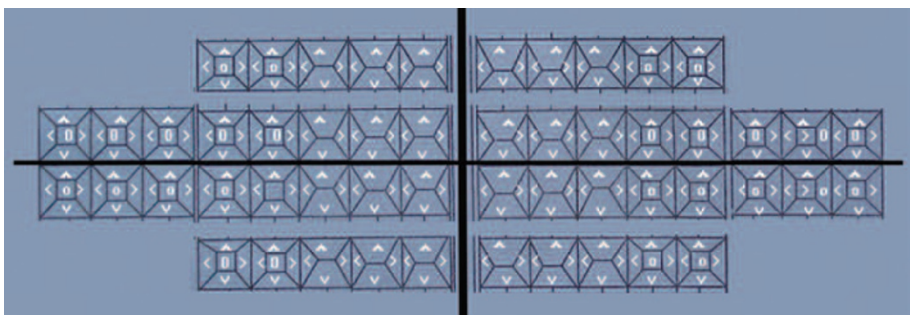

Fig. 2 Surfaces with their symbols