LETTERS TO THE EDITOR

Send your letters to the Editor, British Dental Journal, 64 Wimpole Street, London, W1G 8YS
Email 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. Readers may now comment on letters via the *BDJ* website (www.bdj.co.uk). A 'Readers' Comments' section appears at the end of the full text of each letter online.

PHARMACEUTICALS

Timing of extraction

Sir, I read with great interest the recently published paper *National clinical guidelines for the extraction of first permanent molars in children* (*BDJ* 2014; 217: 643) where the authors stated that evidence of radiographic root bifurcation development in the second permanent molars (SPM) is the ideal clinical radiographic clue for enforced extraction of compromised first permanent molars (FPM) which produced the best occlusal position for SPM.¹ This radiographic clue corresponds to Demirjian Stage E early bifurcation and Stage F late bifurcation of SPM.² It should be mentioned that this radiographic clue does not apply to all SPM as there are some clinical situations where bifurcation development does not occur at all as in cases of pyramidal roots, or bifurcation development is delayed as in cases of taurodontism.

Taurodontism has a racial variation with a prevalence rate of 0.25–11.3%, and in particular the SPM are the most commonly affected teeth. It is classified into three categories depending on the degree of apical displacement of bifurcation area.^{3,4} The clinical dilemma is with mesotaurodont (moderate) and hypertaurodont (severe) types where bifurcation development is severely delayed and can affect the timing of enforced extraction of FPM. Furthermore, the behaviour of bodily movement of taurodontic SPM after extraction of FPM is not known and whether they succeed in ultimate space closure or not. The only clue we have for the possibility of development of taurodontic SPM is their possible association with other dental anomalies including oligodontia, amelogenesis imperfecta, supernumerary teeth, pulpal calcification and microdontia-dens invaginatus.^{3,4}

F. B. Rihani, by email

1. Cobourne M T, Williams A, Harrison M. National clinical guidelines for the extraction of first permanent molars in children. *Br Dent J* 2014; 217: 643–648.
2. Teo T K, Ashley P F, Parekh S, Noar J. The evaluation of spontaneous space closure after the extraction of first permanent molars. *Eur Arch Paediatr Dent* 2013; 14: 207–212.

NEWER ORAL ANTICOAGULANTS

Sir, your article¹ and other sources have noted the main advantages and concerns about the newer target-specific oral anticoagulants (NOACs) such as dabigatran (a direct thrombin inhibitor) and rivaroxaban, edoxaban, and apixaban (direct Factor X inhibitors).² Initially developed and marketed as not requiring routine laboratory monitoring, it is clear that in several situations, knowing the level of anticoagulant activity of the NOACs is imperative for patients' safety and optimal dosing.³ Such situations include before invasive emergency surgery, when there is spontaneous/traumatic haemorrhage, in the very elderly, extremes of body weight, in those with renal impairment or in overdose situations.⁴

To date, the inability to directly reverse the NOACs and to monitor effects have been seen as their main drawbacks. The preferred method for monitoring NOAC according to latest British guidelines⁴ include the ecarin clotting time and the dilute thrombin time for monitoring dabigatran, and the anti-factor Xa assays for monitoring the direct factor X inhibitors.

Now a recent phase I clinical trial has appeared⁵ in which the anticoagulant effects of the factor X inhibitor edoxaban has been successfully and safely reversed by a novel agent, PER977, which, within 10–30 minutes, restored baseline haemostasis. PER977 had been shown earlier, *in vitro* and in animal studies, to bind and reverse the anticoagulant effect of all the above NOACs. Phase II clinical trials are underway on what promises to be an advance in this important field of anticoagulation.

A. N. Robinson, Singapore
C. Scully, London

1. Syeed N, Ansell M, Sood V. Dabigatran (Pradaxa®): surgeon's friend or foe? *Br Dent J* 2014; 217: 623–626.
2. Scully C. *Scully's medical problems in dentistry*, 7th ed. Churchill Livingstone, Elsevier, 2014.
3. Cohen D. Dabigatran: how the drug company withheld important analyses. *BMJ* 2014; 349: g4670.
4. Kitchen S, Gray E, Mackie I, Baglin T, Makris M. Measurement of non-coumarin anticoagulants and their effects on tests of Haemostasis: Guidance from the British Committee for Standards in Haematology. *Br J Haematol* 2014; 166: 830–841.
5. Ansell J E, Bakhr S H, Laulicht B E *et al*. Use of PER977 to reverse the anticoagulant effect of edoxaban. *N Engl J Med* 2014; 371: 2141–2142.

DOI: 10.1038/sj.bdj.2015.151

3. Jafarzadeh H, Azarpazhooh A, Mayhall J T. Taurodontism: a review of the condition and endodontic treatment challenges. *Int Endod J* 2008; 41: 375–388.
4. Haskova J E, Gill D S, Figueiredo J A, Tredwin C J, Naini F B. Taurodontism – a review. *Dent Update* 2009; 36: 235–236, 239–240, 243.

DOI: 10.1038/sj.bdj.2015.150

ORAL SURGERY

Checklists and double checks

Sir, I read with interest the article by Saksena *et al.*¹ describing the development of a checklist applicable to outpatient settings to 'prevent wrong tooth extraction'. The medical community has learned valuable lessons in 'error avoidance' from the experience of aviation industry.² To err is human and the importance of checklists and a double check system by another competent person (eg a co-pilot) is well recognised

in the aviation industry. With regards to prevention of 'wrong tooth extractions', I would like to point out the desirability (or even necessity) of having a second appropriately trained person who can double check the correct tooth identification prior to extraction. There are certain instances in which mere counting of teeth cannot ensure the correct identification of the tooth to be extracted eg distinction between a first and second premolar in the absence of a canine tooth with space closed. A minimum knowledge of dental anatomy to enable correct tooth identification, eg by the assistant nurse, could be considered essential to perform a meaningful double check.

In the outpatient settings of United Kingdom hospital dental services, dental surgeons are sometimes assisted by registered general nurses, who might not be