other agents producing a bleeding tendency, and suggests reducing trauma, restricting tooth extraction to a maximum of four teeth at any single visit, and using local haemostasis (sutures, packs and pressure). For VKAs, the standard advice on pre-operative checking of the INR within 24 hours to ensure a level of <4 is advised. No pre-operative blood testing or dose adjustment is recommended for NOACs. Dentists should seek advice from a senior dental or medical colleague in any patients with another clotting defect, recently placed stent, liver or kidney functional impairment, alcohol problems and in patients under treatment with cytotoxic agents.

The anticoagulant effect can if necessary be reversed in emergency situations when VKAs are used, using vitamin K, fresh-frozen plasma, prothrombin complex concentrate, or recombinant factor VIIa. However, no antagonists have been available thus far for NOACs. Compared with VKAs, the NOACs have a shorter half life and shorter duration of anticoagulant effect. If reversal of NOACs is essential, haemodialysis has been recommended to eliminate dabigatran and there is some evidence that coagulation factor concentrates may be effective.5-7 Now there is new evidence that an antibody fragment which binds dabigatran (aDabi-Fab) can reverse its anticoagulant effects8 and, if substantiated, this may prove a major advance for the emergency reversal of dabigatran.

> C. Scully By email

- Khoo C W, Tay K H, Shantsila E, Lip G Y H. Novel oral anticoagulants. Int J Clin Pract 2009; 63: 630–641.
- 2. Griffiths M J, Scully C. New anticoagulants. *Br Dent J* 2012; **213:** 96.
- Sime G. Dental management of patients taking oral anticoagulant drugs. April 2012. Available online at www.abaoms.org.uk/docs/Dental_management anticoagulants.doc (accessed July 2013).
- Kerr R, Ogden G, Sime G. Anticoagulant guidelines. Br Dent J 2013; 214: 430.
- van Ryn J, Stangier J, Haertter S et al. Dabigatran etexilate - a novel, reversible, oral direct thrombin inhibitor: interpretation of coagulation assays and reversal of anticoagulant activity. Thromb Haemost 2010; 103: 1116–1127.
- Zhou W, Schwarting S, Illanes S et al. Hemostatic therapy in experimental intracerebral hemorrhage associated with the direct thrombin inhibitor dabigatran. Stroke 2011; 42: 3594–3599.
- Pragst I, Zeitler S H, Doerr B et al. Reversal of dabigatran anticoagulation by prothrombin complex concentrate (Beriplex P/N) in a rabbit model. J

Thromb Haemost 2012; 10: 1841–1848.
Schiele F, van Ryn J, Canada K et al. A specific antidote for dabigatran: functional and structural characterization. Blood 2013; 121: 3554–3562.

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BLEEDING SOCKETS

Sir, many emergency department (ED) doctors have their first experience of managing a patient with a dental problem in the middle of the night. Most of the problems are either managed inappropriately or are immediately referred to their registrar or maxillofacial team.¹

Although it isn't the most common problem, bleeding post-dental extraction sockets can be frightening for the patient and the medical team due to the risks of airway compromise2 and blood loss.3 Initial treatment in the ED usually involves pressing surgical gauze or a cotton roll into the socket with pressure applied by the patient biting on it. If this fails then the gum is anaesthetised and a horizontal mattress suture placed. These tasks are more difficult for molar sockets and especially in a distressed patient, when there is inadequate equipment and poor visualisation of the site, as often encountered by a junior doctor in the ED.

I have developed an instrument which has been successfully used on a number of occasions, avoiding more aggressive interventions. By using a small piece of Surgicel (haemostatic cellulose4) wrapped around a Toothette (a pink sponge on a stick used to provide moisture to patients who are unable to swallow), the haemostatic matrix can be delivered directly to a bleeding socket as it clings well to the sponge (Fig. 1). The sponge itself can then be easily bitten down on by the patient and moulds to the socket, in contrast to the uncomfortable bulkiness of gauze. An additional advantage of the Toothette is that it can be safely placed in the wound by the patient or clinician with the plastic handle held firmly in the adjacent teeth or lips to ensure the haemostatic agent is kept in place. This is an improvement of a previous design where Surgicel was wrapped around a cotton roll and maintained in the wound with some difficulty. Both products are cheap and readily available in EDs, and when used together



Fig. 1 A Toothette with a the Surgicel in place

provide an effective tool for stopping post-dental extraction haemorrhage.

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- Patel K K, Driscoll P. Dental knowledge of accident and emergency senior house officers. Emerg Med J 2002; 19: 539–541.
- Funayama M, Kumagai T, Saito K, Watanabe T. Asphyxial death caused by postextraction hematoma. Am J Forensic Med Pathol 1994; 15: 87–90.
- Moghadam H G, Caminiti M F. Life-threatening hemorrhage after extraction of third molars: case report and management protocol. J Can Dent Assoc 2002: 68: 670–674.
- Suleiman A M. Influence of Surgicel gauze on the incidence of dry socket after wisdom tooth extraction. East Mediterr Health J 2006: 12: 440–445.

DOI: 10.1038/sj.bdj.2013747

PEJORATIVE STATEMENT

Sir, I was disappointed to read the letter by J. Critchley titled *Severe bilateral click* (*BDJ* 2013; 214: 540) containing the pejorative statement 'As we often hear, her migraines began following the removal of all four first premolars and fixed orthodontics in her mid-teens'.

The reality is of course 'As we often hear, there is no evidence that extraction of first premolar teeth as part of orthodontic treatment results in TMD'. Silence is deafening.

PROOFLESS PUDDING

Sir, in response to the letter from C. Marks entitled *Grossly deformed bodies* (*BDJ* 2013; 214: 433), we would like to present our thoughts as StRs in periodontology.

Marks writes, 'The causal link for this self-inflicted disease seems perfectly obvious: poor diet and oral hygiene.' This appears to be a rather gross and unfair generalisation of this group of patients without any evidence base whatsoever. Added to this, the statement 'anyone capable of allowing their body to become so grossly deformed is