Letters to the Editor

Dentist or Detective?

During dental school, we are taught to take a thorough history, assess appropriately, carry out special investigations before considering differential diagnoses and formulating a treatment plan. However, there are cases where the history does not correlate with the clinical symptoms, or when special investigations reveal nothing abnormal, and it is a struggle to decide where to refer.

I witnessed such a case unfold. A 17-year-old female patient presented with a 10-day history of a locked jaw and frequent episodes described as seizures. This was a particular point of interest as the 'seizures' were described as sudden jerking movements of the limbs with no loss of consciousness, incontinence or loss of reflexes. In fact, the patient would remain conscious and responsive throughout. The patient's past medical history revealed an eating disorder and multiple hospital admissions, while the social history provided by the family described a stress-free teenager embarking on a highly sought-after first job. The patient had undergone a wide range of special investigations to rule out neurological disorders, tetanus and the possibility of a stroke, while the use of muscle relaxant was unsuccessful in releasing the clenched jaw. Our assessment revealed no signs of an anterior disc displacement without reduction of the temporomandibular joint, which may cause a locked jaw.

After a bold suggestion that the symptoms may be voluntary, the patient underwent psychological analysis to reveal the likelihood of a subconscious functional disorder and a differential diagnosis of Munchausen's syndrome. Munchausen's syndrome is a psychiatric factitious disorder wherein those affected feign disease, illness, or psychological trauma to draw attention, sympathy, or comfort to themselves.¹

This case demonstrates that, in some rare scenarios, reaching a diagnosis may require a health professional to think laterally (once all logical and likely diagnoses have been considered). As dentists, we may be exposed to similar

patients complaining of atypical facial pain, TMJ issues and even toothache. Without suggesting that we become sceptical, it is important to consider psychological contributors and the use of Cognitive Behavioural Therapy.¹

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Case report: atypical eruption of lower third molar in a patient who declined surgery

Approaches to management of third molars in the UK has changed since the introduction of the NICE guidelines in 2000¹ and prophylactic removal of third molars has been mostly discontinued. Where removal is indicated, the risk of morbidity with the procedure, notably ID nerve damage, can be of concern to clinicians and patients alike.²

A 43-year-old female patient attended following a referral from her general dental practitioner for re-assessment of both lower third molars. The patient was previously seen in early 2012 regarding discomfort associated with these teeth which had both developed multiple episodes of pericoronitis.

Figure 1 shows the position of LR8 and the high degree of risk of ID nerve damage which could have been present with extraction of this tooth. Coronectomy was proposed for LR8, however, owing to the absence of symptoms, the patient declined treatment.

At repeat presentation in late 2015, the patient reported that the lower right third molar had changed position and had 'grown' to be in an 'awkward' position. Clinical examination at repeat assessment identified that the lower right third molar had erupted considerably, to the extent that it was now an occlusal interference. Radiographs taken to assess the position of the tooth (Figure 2) in relation to the ID canal showed a considerable change from initial presentation (Figure 1); the tooth had moved to become a routine extraction with a reduced risk to the inferior dental nerve. The LR8 was removed with forceps and no alteration of sensation to the area supplied by the inferior dental nerve was reported.

Though multiple indications could lead a clinician to propose surgical intervention, this case suggests that, when risk of ID nerve damage is high, retention and monitoring over a longer period of time could be entirely appropriate, if the patient's oral hygiene is optimized and the tooth is not mesio-angular in orientation. In this scenario, caries development around the second molar is less likely and the potential morbidity associated with



Figure 1. Tooth at initial presentation (2012).



Figure 2. Tooth following re-referral (2015).

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extraction was entirely avoided. It would generally be anticipated that a lower third molar would remain in its position with the risk of paraesthesia remaining if extraction were considered at a later date. This degree of movement of a third molar seems highly unusual and no reports of third molars erupting in this manner could be identified. Regardless of this case being isolated, clinicians must consider that, even if removal of a tooth complies with NICE guidelines, it may not be necessary to remove at that stage in the absence of symptoms. For motivated patients with good oral hygiene, monitoring should always be considered as a treatment option.

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Treatment of complicated crown or crown-root fracture: some additional information

The article entitled Dental Trauma Part 2: Acute Management of Fracture Injuries in the December 2016 issue of Dental Update was an interesting read.1 Indeed, it is very well summarized and highlights the acute management of various tooth fractures associated with trauma. The presentation of information together with a series of illustrations describing various injuries and their management is impressive. However, I would like to highlight an important fact about Cvek pulpotomy which should have been mentioned in the article. Cvek pulpotomy can be carried out in immature permanent teeth irrespective of the time elapsed since the injury, provided that the tooth is still vital.2 However, Cvek pulpotomy proves to be very successful

only if carried out within 24-48 hours following injury to young permanent teeth with completely formed roots,² although some success has been achieved when teeth with traumatic pulp exposure for as long as four days were treated by Cvek pulpotomy. However, the success rate is greatly reduced after 48 hours following traumatic pulp exposure.^{2,3} Nevertheless, every attempt should be made to preserve the vitality of young permanent teeth as it will result in continued dentine deposition in the cervical area, thus strengthening the tooth.4 Besides, as already mentioned in the article by Djemal et al,1 upon pulp excavation, if healthy pulp tissue cannot be reached up to the cervical level, root canal treatment should be carried out. This is because the cell rich coronal pulp tissue is more likely to facilitate healing after Cvek pulpotomy as the radicular pulp is more fibrous and unicellular.4 Hence, the judgement of whether to perform Cvek pulpotomy or pulpectomy on a young permanent tooth with completely formed roots eventually lies with the treating physician.

In addition to Cvek pulpotomy, an additional treatment option is direct pulp capping which was not mentioned in the article.1 Direct pulp capping can be performed instead of pulpotomy if the pulp exposure is pin point and the treatment is carried out within one hour following injury.4 Furthermore, the importance of isolation when carrying out direct pulp capping or Cvek pulpotomy cannot be overemphasized. In the article by Djemal et al,1 the use of rubber dam was not mentioned. Moreover, the illustrations also do not depict the use of rubber dam while Cvek pulpotomy was carried out. Ideally, during any form of treatment involving the pulp tissue, use of rubber dam is mandatory to ensure longterm success.

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Splinting traumatic dental injuries

The article entitled Dental Trauma Part 1: Acute Management of Luxation/Displacement Injuries Management was informative and provided readers with a comprehensive understanding of the management and sequelae of such injuries.1 Interestingly the authors only mention splinting with composite and 0.018" stainless steel wire. The online dental trauma quide alludes to other possible splints to use in such instances, 'acid-etch flexible resin splints, acid-etch-wire composite splints, acid-etch composite nylon line splints, acid-etch orthodontic wire splints and titanium trauma splints'.2

There doesn't appear to be any clear consensus on the exact type of splint to use according to the IADT trauma guidelines and online Dental Trauma Guide.^{3,2} Clinicians have their own preferences, depending on their experience, availability for specialist input, place of work or department, availability of materials and availability of nursing staff for assistance. Having worked in Accident and Emergency, as well as on a Paediatric Dental Department, I have treated numerous patients with traumatic dental injuries requiring immediate management. The splints of choice proving to be the most effective in the units where I have worked have been constructed using orthodontic brackets and 0.014" NiTi wire. There are a number of advantages to using orthodontic brackets; ease of placement (especially if working single handily in A&E), the ability to encourage orthodontic movement

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