

Letters to the Editor

'Nothing personal, it's just business'

I read with some sardonic amusement the recent guest editorial on 'The "Uberization of orthodontics" – or how low can you go?'¹

Mention was made of both the growth of limited, so-called short-term orthodontics (STO), as well as the more recent development of do-it-yourself (DIY) orthodontics, namely one that requires patients to acquire their own smart-phone diagnostic dental photographs, take their own dental impressions, and subsequently self-administer a series of clear aligners that have been digitally fabricated to the prescription of a clinician who has never personally consulted with the patient.

In relation to STO, this approach is acknowledged as being an ethical treatment option, but only if it constitutes one of a range of those for a patient to choose from, together with an informed discussion of the various risks, benefits, limitations, anticipated outcomes, commitments and costs for each of them, as reported previously.²⁻⁴

When it does not, it potentially leaves the clinician in jeopardy of having to defend a General Dental Council (GDC) Fitness to Practice allegation of not obtaining valid consent, not to mention letting the patient down by not putting their interests first.⁵

In this type of situation, those who fall foul of the GDC seem more frequently to be non-specialists,⁵ and some may have succumbed to the alluring commercial enticements of speed, simplicity, aesthetics and profit. Perhaps these registrants may also be the product of an undergraduate dental education that inadequately covered the acquisition of critical reading skills, simple statistical assessments, ethics and jurisprudence in its curriculum. Otherwise, more discerning evaluations would be being made about the unsubstantiated claims that are often propounded by those with a vested interest in selling their aesthetic treatment products.

In relation to DIY orthodontics, I have seen one of these television adverts that have been aimed directly at the public. They are professionally produced and to the eye of an innocent they certainly appear to be straightforward,

safe and relatively inexpensive. However, the lack of direct clinical contact and supervision is a major cause for concern that leaves much to be desired.^{1,6}

For both STO and DIY orthodontics, perhaps the origin of why they now prevail is because of the freedom to advertise directly to the public, a freedom that arose in 1988 when the elected GDC Council had to submit to the Office of Fair Trading Director General's directive of relaxing the profession's former advertising restrictions.⁷

While the consequential descent into the gutter of the dental profession that was predicted by many did not materialize, the overly aggressive marketing of cosmetic techniques by some dentists and dental groups has nevertheless been noted, together with the potential for this to undermine the profession's integrity, a perception that seems to be lost on a growing number of dentists who regard dentistry as a business rather than a profession and who see it as just doing another job.⁸

Even if the relaxation of dental advertising has not resulted in a gutter descent, since familiarity breeds contempt, one could argue that it may be partly responsible for the pendulum swing of the personal attributes that seem to currently prevail amongst some professionals, that is, a shift from those of altruism and vocation towards those of business and profit.

In relation to the dentists who facilitate the provision of DIY orthodontics, for those who come under the jurisdiction of the GDC, they risk falling foul of its Fitness to Practice Committee on several counts, not least of which would include failing to undertake an adequate orthodontic assessment, not carrying out sufficient treatment planning, not providing the patient with a written treatment plan, not obtaining written consent, not maintaining an adequate standard of record-keeping and not adequately monitoring the progress of the orthodontic treatment.⁵

It is a sad indictment, but ultimately it may take a public outcry from disaffected DIY orthodontic patients to enforce a change, once the problems associated with their remotely prescribed and produced orthodontic treatments

eventually manifest.

As far as dental advertising is concerned, the genie is definitely out of the bottle⁸ and there will be no putting it back.

So, to answer the rhetorical question posed in the second part of the recent guest editorial's title of 'how low can you go?'¹ the answer may be found in the Sicilian mantra of the Cosa Nostra, which is that it's 'Nothing personal, it's just business'.

But surely, isn't that the crux of the whole problem and, if it is, how can the creeping slide of the practice of dentistry be reversed from being a profession towards merely being a trade?

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A case report of an unusual presentation of a keratocystic odontogenic tumour in the anterior mandible

Keratocystic odontogenic tumours (KCOTs) are commonly seen in the posterior mandible. They can also rarely occur in the anterior mandible and mimic

a lateral periodontal cyst (LPC). Intrabony pathology is rarely seen in the anterior mandible and unilocular appearance is even rarer. We present a case report of a KCOT of the anterior mandible which appeared in the plain radiographs as a unilocular radiolucency and clinically resembled a lateral periodontal cyst.

Case report

A 23-year-old male patient was referred to the Department of Oral and Maxillofacial Surgery by the GDP with a swelling in the lower right lateral incisor and lower right canine region with a duration of 3 weeks. The patient was asymptomatic. Clinical examination revealed a 1 cm diameter fluctuant swelling in the attached gingivae of the LR2 and LR3 extending into the labial/buccal sulcus and obliterating the sulcus. Mucosa overlying the swelling looked normal in colour. LR2 and LR3 were vital for ethyl chloride pulp testing.

An intra-oral periapical radiograph (Figure 1) revealed a well-defined, pear-shaped radiolucency in the interdental region of LR2 and LR3 with a sclerotic margin. The lesion had displaced the roots of the LR2 and LR3 but there wasn't any root resorption seen either on LR2 or LR3.

A provisional diagnosis of lateral periodontal cyst was made and a differential diagnosis of odontogenic keratocyst, unicystic ameloblastoma and central giant cell granuloma were also made.

The cyst was enucleated completely and the cavity was curretaged under local anaesthesia. The specimen was sent for histopathological examination.

Histopathology examination revealed cystic lumen with corrugated parakeratinized squamous epithelium and palisading of basal nuclei. The features are those of a KCOT (Figure 2a, b).

The patient was asymptomatic after 6 months of the surgery. A periapical radiograph taken on review revealed good bony healing. LR3 had also moved back into place (Figure 3).

Discussion

A keratocystic odontogenic

tumour (KCOT) was initially described as a primordial cyst as it was thought that the cyst was originating from the tooth primordium. In 1965, Philipsen described the primordial cyst as an 'Odontogenic Keratocyst' (OKC).¹⁻³ Owing to its neoplastic nature, aggressive behaviour and high recurrence rate, in 2005 the WHO has renamed the OKC as the 'Keratocystic Odontogenic Tumour (KCOT)' and defined it as 'a benign uni- or multicystic, intra-osseous tumour of odontogenic origin, with characteristic lining of parakeratinized stratified squamous epithelium and potential for aggressive infiltrative behaviour'.²⁻⁸ Of all jaw cysts, 11% are KCOTs. Although KCOTs are commonly seen in the posterior mandible, they can also rarely occur in the anterior mandible. Theories say that KCOTs develop from the cell rests of dental lamina dura.^{3,5} Most KCOTs are seen in males (2:1)⁶ with the age predilection of either 30 or 60.^{2,5} They can either present as an asymptomatic swelling, as in our case, or a swelling of the jaw with pain. Seldom are they diagnosed as an incidental finding during a routine radiographic examination.

In plain radiographs, the KCOTs appear as either unilocular cysts with well demarcated margins, or as multilocular cysts.^{2,5,9} It is not uncommon to see the tumour causing root resorption of the adjacent teeth or displacing the adjacent roots, causing divergence of the roots.⁵

Histopathological features

of a KCOT is classic with a thin lining of epithelium consisting of parakeratinized cells or orthokeratinized cells.⁵ A parakeratinized variant is more frequently seen and clinically has more aggressive behaviour than an orthokeratinized type.⁸ The cyst lining has a corrugated appearance which makes the tumour

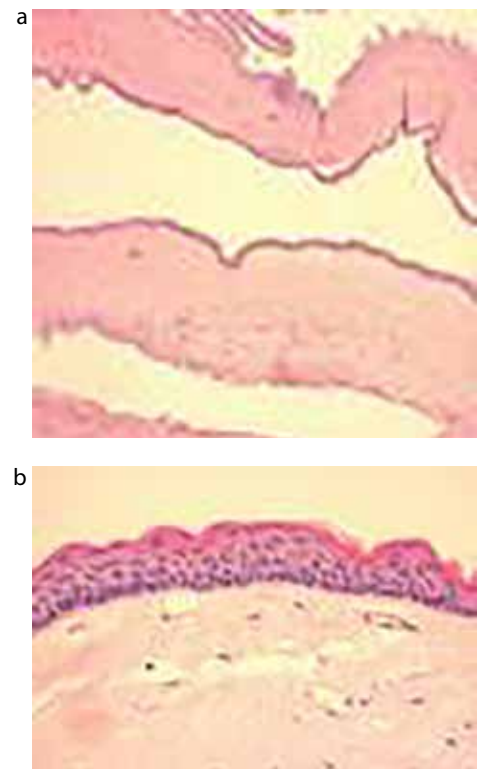


Figure 2. (a, b) Histology of the cystic lumen showing corrugated parakeratinized squamous epithelium.



Figure 1. An intra-oral periapical radiograph taken pre-operatively showing well-demarcated, pear-shaped radiolucency.



Figure 3. A periapical radiograph taken post-operatively showing good bony healing. LR3 has moved back into its original place.

incompletely enucleated and gives rise to a high recurrence rate (13–60%).⁶ The cyst lining is also separated from the supporting connective tissue in many places and the cyst lumen is filled with keratinous material.

Treatment of a KCOT includes enucleation of the cystic lining and curetting the cavity, enucleation with Carnoy's solution and osteotomy.^{5,9,10} Carnoy's solution contains chloroform which has been classified as a carcinogen. Recently, the Food and Drug Association US (FDA) has banned therapeutic agents containing chloroform (Jordan Ecker, 2014).

High recurrence rate of KCOT is not only due to surgical difficulty in enucleating the cyst lining completely because of its corrugated appearance and the friability of the epithelium, but is also due to retention of daughter cells post-surgically.⁶

Multiple KCOT with nevoid basal cell carcinoma and bifid ribs are seen in basal cell naevus syndrome.^{5,7,9}

This case report highlights the importance of early recognition of a KCOT, which can also clinically and radiographically present as lateral periodontal cyst. KCOT should be included in the differential diagnosis of the interdental radiolucency.¹ A KCOT in the interdental area of lower canines can often be misdiagnosed as lateral periodontal cyst, which is also commonly seen in this region. As KCOTs are one of the aggressive odontogenic cysts, careful clinical and radiological follow-up is essential for early recognition of recurrence.

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Dear Editor

I would like to report a case where there seems to be strong circumstantial evidence that an electronic cigarette caused caries. Searches of PubMed and Google found very few references to a link between caries and e-cigarettes.

A 51-year-old female presented with multiple smooth surface active carious lesions. She has recently had several extractions due to caries, coincidentally on her RHS, where she tends to place the e-cigarette. The caries particularly affects the palatal aspect of UR3, incisal aspect of UR1 and the buccal cervical areas of the lower posteriors (Figure 1).

Bitewing radiographs show interproximal caries in most teeth (Figure 2). Oral hygiene is good and, on careful

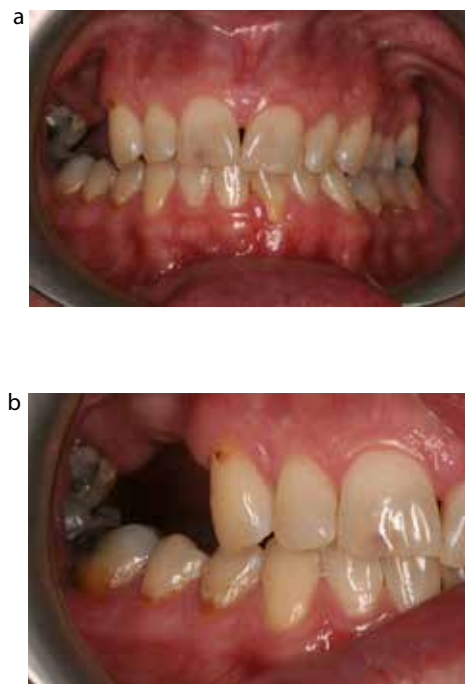


Figure 1. (a, b) The caries particularly affects the palatal aspect of UR3, incisal aspect of UR1 and the buccal cervical areas of the lower posteriors.

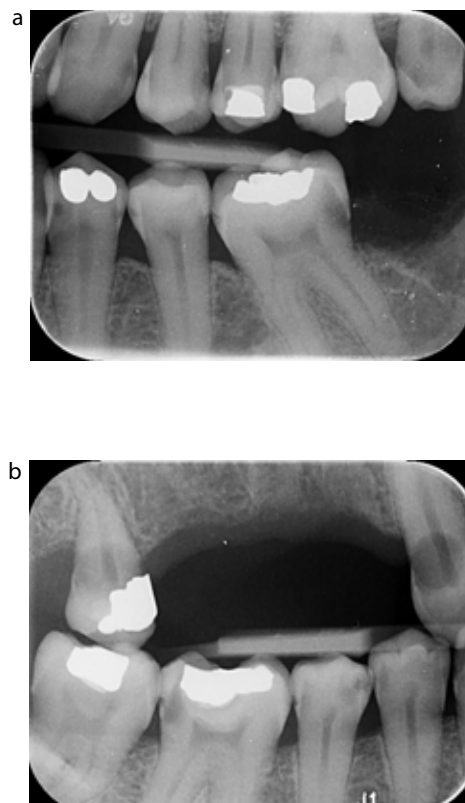


Figure 2. (a, b) Bitewing radiographs show interproximal caries in most teeth.