### Images in...

# Peripheral ossifying fibroma: dilemma in diagnosis

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#### **DESCRIPTION**

Peripheral ossifying fibroma (POF) exclusively found on the gingiva and may be presented with randomly distributed calcifications, immature bone, separation of teeth and bone resorption.<sup>1</sup> Its prevalence in children is 1.9% with a mean age of 14 years and a higher predilection in females and maxillary incisor-cuspid region.<sup>2</sup> A



Figure 1 Photograph showing the lesion.



Figure 2 Mandibular cross-sectional occlusal view showing calcification within the lesion.

16-year-old boy reported with a soft tissue mass in right lower posterior teeth region since 1 year. The lesion was multi-lobular, exophytic along the lingual and buccal side, firm, pedunculated, non-tender, measuring approximately 3×2.5 cm in diameter, extending from distal surface of right lower canine to molar region with normal coloured, and non-ulcerated overlying mucosa (figure 1). The case was provisionally diagnosed as long-standing pyogenic granuloma and the list of differential diagnosis includes peripheral fibroma, pyogenic granuloma, peripheral giant cell granuloma and focal fibrous hyperplasia. Radiographic views revealed a dystrophic trabecular bone formation with displacement of right lower premolars and marked interdental bone loss (figure 2). Histopathological examination revealed irregular multiple foci of partly calcified areas (figure 3). Based on radiographic and histopathological findings a final diagnosis of POF was given. POF originates from cells of periodontal ligament<sup>2</sup> and most of lesions do not show radiographic characteristics of diffuse radiopaque calcification, bone destruction and tooth separation,<sup>3</sup> in this condition, diagnosis of POF depends on histopathological analysis, while in our male patient, all these findings were observed in premolar region. The purpose of this article is to inform the paediatric dentists about POF which clinically make a dilemma in diagnosis among reactive gingival hyperplastic lesions like peripheral fibroma, pyogenic granuloma, peripheral giant cell granuloma and focal fibrous hyperplasia.



Figure 3 H&E section of the lesion.

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### Learning points

- ▶ POF is a non-neoplastic enlargement of the gingiva with randomly distributed calcifications or ossification, bone destruction and tooth separation, these findings may not be evident in all cases particularly in the initial stages.
- A slow growing soft tissue gingival mass with speckled calcifications in children or young adults should raise the suspicion of a reactive gingival lesion such as POF and histological examination is mandatory for confirmation.

Competing interests None.

Patient consent Obtained.

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