Maxillo-facial radiology case 137

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CJ Nortjé

Below are clinical pictures and radiographs of patients presenting with a well demarcated focal mass occurring on the gingiva. Most reported series of cases show a predilection for occurrence in females with a mean age of 29 years. What is your diagnosis?

INTERPRETATION

There are numerous histologically different types of focal overgrowths which may occur on the gingiva, such as the peripheral giant cell granuloma, the pyogenic granuloma and the lesions illustrated above in Figs A, B and C., which have been known by various names but may be best referred to as peripheral odontogenic fibromas. There is no universal agreement among all investigators that this lesion is in fact odontogenic in origin. The peripheral odontogenic fibroma can occur at any age, although it appears to be somewhat more common in children and young adults. The lesions are equally divided between the maxilla and mandible and over 80% occur anterior to the molar area. The clinical appearance of the lesion is characteristic but not pathognomonic. It presents as a well demarcated focal mass of tissue with a sessile or pendunculated base. It is the same colour as normal mucosa or slightly reddened (Fig. A) and in some cases areas of calcification may be visible on the radiograph (Fig. B) The lesion most commonly appears to originate from an interdental papilla. The surface may be intact or ulcerated (Fig. C). In the vast majority of cases there is no apparent underlying bone involvement.

Considerable confusion has previously existed in distinguishing between the peripheral ossifying fibroma and the peripheral odontogenic fibroma and these lesions were often in fact regarded synonymously. They are now considered to be distinct and separate entities. The peripheral ossifying fibroma occurs exclusively on the gingiva. It appears as a nodular mass, either pedunculated or sessile, that usually emanates from the interdental papilla and the colour ranges from red to pink. Most lesions are less than 2cm in size, although larger ones occasionally occur (Fig. D). The lesion predominates amongst teenagers and young adults, with peak prevalence between ages of 10 and 19. Almost two thirds of all cases occur in females. There is a slight predilection for the maxillary arch, and more than 50% of all cases occur in the incisor/cuspid region. Usually the teeth are unaffected. Radiologically, peripheral ossifying fibromas are initially radiolucent and gradually develop increasing amounts of calcification/ossification as they mature (Fig. E). In very rare cases peripheral ossifying fibroma may present simultaneously in both the upper and lower jaws (Fig. F).

Reference