



PERIPHERAL OSSIFYING FIBROMA MIMICKING AS GRANULOMA PYOGENICUM IN A PREGNANT WOMEN

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ABSTRACT Peripheral Ossifying Fibroma (POF) is a reactive hyperplastic lesion that exclusively occurs in the gingiva and is characterized by the deposition of dystrophic calcification, cementum-like tissue, immature and mature bone within the connective tissue. It is difficult to diagnose lesion clinically, so help of histopathology is needed for confirmation. We report a case of peripheral ossifying fibroma mimicking as granuloma pyogenicum in a pregnant women.

KEYWORDS :

INTRODUCTION

Pregnancy remains an important chapter in women's life, a whole new experience. The hormonal changes occurring during pregnancy. Many of these changes are reflected in the gingiva such as increased inflammation, bleeding, focal and generalized enlargement. Besides these changes, other conditions that can be seen are pyogenic granuloma, peripheral ossifying fibroma and Peripheral giant cell granuloma. Peripheral ossifying fibroma (POF) is a common inflammatory reactive lesion exclusively observed in the periodontal tissues. It mostly affects the anterior maxilla of young adults and females. The local irritant factors associated with the lesion are trauma, dental biofilm, calculus, and irregular restorations. Although POF pathogenesis remains unclear, it is believed that it may be originated from the gingival soft tissues or the periosteum as well as from the superficial periodontal ligament.

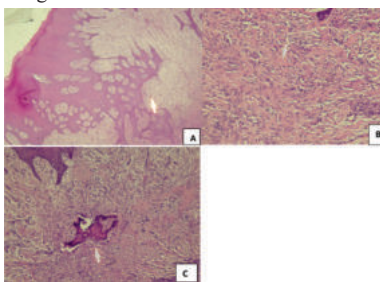
Case Report

30 year female presented in ENT OPD with complaints of growth on upper gingiva since 7-8 months duration along with burning sensation and irritation in hard palate for the last 3 months. Growth was gradually progressive, painful which aggravated on eating spicy food along with difficulty in swallowing. Patient also complained of bleeding from the growth and loosening of tooth. No history of similar complaints in the past.

On Examination- The swelling was firm to hard, tender measuring approximately 1.5 cm in diameter extending from the midline to medial aspect of right lateral incisor which bleeds on touch. Clinical diagnosis of granuloma pyogenicum was made.

Investigations- Lab Investigations done were within normal limits.

After lab investigations were done the growth was excised and sent for histopathological examination. The histopathological examination revealed a well circumscribed soft tissue tumor lined by keratinized stratified squamous epithelium revealing marked acanthosis (squamous hyperplasia), elongation of rete ridges with focal areas showing ulceration which is covered by fibrino-purulent exudative material. Sub-epithelial tissue shows fibro-connective tissue, mature and immature bone formation, areas of dystrophic calcification along with proliferating blood vessels.



Final Diagnosis: Histopathological Features Were Consistent

With Peripheral Ossifying Fibroma

- Low power view 40x showing keratinized stratified squamous epithelium with acanthosis, elongation of rete ridges
- High power view 40x showing extensive proliferation of plump fibroblasts in collagenous background
- High power view 40x showing bone in highly sclerosed background

DISCUSSION

The term peripheral ossifying fibroma was coined by Eversol and Rovin in 1972. Females are most commonly affected than males. Most commonly seen in the younger age group. Incisor- cuspid region of the maxillary arch is the most common site. It usually appears as a painless mass on gingiva measuring not exceeding 3 cm. Although they are generally <2 cm in diameter, size can vary and some lesions may be as large as 9 cm in diameter. It can be sessile or pedunculated. Colour of the lesion varies from red to pink i.e. earlier lesions appears red and having irregular surface and older lesions appears pink and having smooth surface. Surface may be ulcerated. Weeks or months may pass before it is seen and diagnosed.

In our case the patient was pregnant at the time when she noticed the growth which gradually progressed in size. The lesion occurs commonly in females, especially during puberty and pregnancy. The changes are related with hormones which have also been shown in literature. The hormonal influence is seen more commonly during second decade and declines after the third decade.

The differential diagnosis of this condition includes traumatic fibroma, PGCG and pyogenic granuloma. Pyogenic granuloma is most common oral lesion known to involve the gingiva. Oral pyogenic granuloma is a smooth or lobulated exophytic lesion manifesting as small, red erythematous papules on a pedunculated or sometimes sessile base, which is usually hemorrhagic. Clinically, POF arises as a gingival mass with a slow and progressive growing potential, generally without radiographic alterations, but radiopaque areas may be identified. The clinical appearance of POF resembles other gingival reactive lesions; thus, histopathological analysis is essential to the definitive diagnosis. The peripheral ossifying fibroma can be easily mistaken for pyogenic granuloma. The sex and age similarities have been stated by Eversole and Rovin.

Peripheral ossifying fibroma does not require any surgical intervention. However, some cases do need the intervention if the size of the growth increases. The complete surgical removes the chances of recurrence. In 16-20% of cases. The recurrence occurs due to incomplete resection, plaque, surgical trauma.

CONCLUSION

Intraoral lesions are very common and can be normal looking to

malignant. So they should be given important emphasis. Since poor oral hygiene can be important cause in the oral cavity during pregnancy. Pregnant should be given proper education to maintain hygiene. Since condition are clinically similar, biopsy remains the gold standard for the diagnosis.

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