ABSTRACT Pyogenic granuloma is the most common inflammatory hyperplasia occurring in the oral cavity. It is caused by an exaggerated response to chronic low-grade irritation due to trauma or aggravating factors. In this case series, we present two cases of pyogenic granuloma occurring on the maxillary and mandibular posterior region with aetiology being erupting teeth and post-extraction. Both cases are treated with surgical excision only.

KEYWORDS Pyogenic granuloma, Oral cavity, Benign, Preshedding

Background

Pyogenic granuloma is a benign inflammatory lesion developing from over response to a stimulus which could be trauma or aggravating factor. The term PG was introduced by Hartzell in 1904, also named after him as Hartzell’s disease [1]. It is commonly seen on the skin, oral cavity, keratinized mucosa and less commonly gastrointestinal tract [2]. It is a most common lesion occurring at all age, comparatively more in females than males and high incidence around seven years in children and high female predilection. [3] Various etiological factors include trauma or irritation caused by preshedding mobility or near exfoliating teeth, bony spicules, calculus, natal teeth and drugs [4, 5]. PG’s common site is gingiva but can occur on lips, buccal mucosa and tongue [5, 6].

PG starts as a solitary smooth, elevated, sessile or pedunculated lobulated mass in pink to reddish colour transforming into an ulcerated mass with a yellowish exudate on the oral mucosa. It is more common on the buccal side than lingual of anterior teeth. It is usually asymptomatic slow-growing lesion without the involving bone, but sometimes it may cause bone resorption. [4, 7, 8, 9] This case series presents two cases of pyogenic granuloma associated with post-extraction and calculus.

Case reports

Case report 1

An 11-year-old girl reported to the dentistry department with a chief complaint of swelling in the upper left back region since few months and occasional bleeding from swelling. There was no significant medical history and family history. Intraoral examination revealed a solitary oval-shaped red coloured pedunculated mass with a smooth surface measuring 4x3 cms in the left maxillary posterior region extending from middle half of left maxillary permanent first molar (26) to distal surface of first premolar (24) and is attached to the marginal and attached gingiva of left maxillary first molar [fig.1, 2]. There are no visible or palpable palpitations. There are no significant intraoral irritating factors except for erupting teeth which could be aetiology associated with inflammation hence diagnosed as inflammatory hyperplasia. Correlating history and intraoral findings, it was diagnosed provisionally as a pyogenic granuloma.

Under local anaesthesia, excision biopsy was done and sent for histopathological study. The patient was recalled after 1 week for review, and healing was satisfactory [fig.3, 4]. The diagnosis was confirmed from histopathological features.

Case report 2:

A 9-year-old girl reported to the dentistry department with a chief complaint of swelling in the right lower region since two days associated with bleeding from swelling. Patient’s guardian reported that child underwent extraction three days back of grossly decayed teeth in the private dental clinic. The swelling started very next day and rapidly growing to the present size. It was associated with continuous mild bleeding. There was no
significant medical history and family history. Intraoral examination showed a solitary oval-shaped brownish-red coloured pedunculated mass with a smooth surface measuring 3x3 cms in the right mandibular region besides the extracted site of the mandibular primary second molar (85) extending mesially to mandibular permanent first molar (46) to the distal surface of first primary molar (84) [fig. 5]. It is attached to the marginal gingiva of the mandibular primary second molar. There are no visible or palpable palpitations. There are no significant intraoral irritating factors except for extraction socket, which could be aetiology associated with inflammation hence diagnosed as inflammatory hyperplasia. Under local anaesthesia, excision biopsy was done and sent for histopathological study. The patient was recalled after 1 week for review, and healing was satisfactory [fig. 6]. The diagnosis was made from histopathological features.

Discussion

Pyogenic granuloma is a commonly occurring benign tumour like lesion resulting from an exaggerated response to traumatic or irritating factors. Histologically PG can differentiate into two type’s lobular capillary hemangioma and non-lobular capillary hemangioma. Histological it is characterized by the presence of
Pyogenic granuloma is considered as a benign inflammatory lesion resulting from an exaggerated response to chronic low-grade irritation. Clinical features of PG are characteristic, making its diagnosis easy, but caution has to be taken as they resemble some of the vascular lesions. Management of PG should be targeted in both eliminating causative irritation factors and conservative surgical excision in most of the times is successful.

**Conflict of interest**

There are no conflicts of interest to declare by any of the authors of this study.

**References**


