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REVIEW ARTICLE

PYOGENIC GRANULOMA OF 12 YEARS OLD FEMALE CHILD

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ABSTRACT

Pyogenic Granuloma is a type of inflammatory localized gingival enlargement of the oral cavity which is benign tumor like lesion. It occurs due to deleterious effects of chronic low grade irritation, trauma, hormonal factors and some drugs. This case report highlighted the presence of massive localized gingival enlargement in a 12 years old female child. History, Clinical, Radiological and Histopathological analysis showed that this is a case of pyogenic granuloma. This is unique because of 12 years old child, rapidly growing nature and large size of lesion.

Key words:

Pyogenic Granuloma, localized Gingival,
Enlargement, Children.

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INTRODUCTION

Pyogenic granuloma (PGs) are benign vascular lesions that occur most commonly on the acral skin of children (Requena and Sanguenza 1997; Weibel 2011). The term pyogenic granuloma is a misnomer. Originally, these lesions were thought to be caused by bacterial infection; however the etiology has not been determined. The histopathologic appearance is fairly characteristic; the lesion is, in fact, a lobular capillary hemangioma (Rachappa *et al.*, 2010). It is often found to involve the gums, the skin and nasal septum and has also been found far from the head such as in the thigh. PG was first described in 1897 by two French surgeons, Poncet and Dor, who named this lesion botryomycosis hominis. Oral pyogenic granuloma in reality is the most common gingival tumor, shows a striking predilection for the gingiva accounting for 75% of all cases. The lips, tongue and buccal mucosa are the next more common site. The present case illustrated the occurrence of massive localized gingival enlargement as pyogenic granuloma (PG) in a 12 years old female child.

Case Description

12 years old female patient reported to the out patient department of Periodontology with chief complain of a massive swelling in right side of the mandibular anterior region of the jaw for 4 weeks and profuse bleeding, unable to chew on the affected side. Intraoral examinations revealed gingival over growth extending from right canine to first molar involving 43, 44, 45, 46. The over growth covered the crown of the teeth and

was firm in consistency (Figure 1). The lesion was red, hemorrhagic, pedunculated and showed indentation of the opposite dentition on the surface. No lymphadenitis or any systemic abnormality was detected. Radiological and hematological examinations were performed. Radiological findings of mandible did not depict radiolucency or any alteration in architecture of alveolar bone. Routine hematological examination revealed mild anemia and other biochemical tests were normal. She was referred to department of medicine for proper systemic evaluation and management of anemia. One week later the blood examinations were done that showed normal values. Finally excisional biopsy was performed after written consent with her parents for confirmatory diagnosis of the lesion. The excised tissue was sent for histopathological analysis.

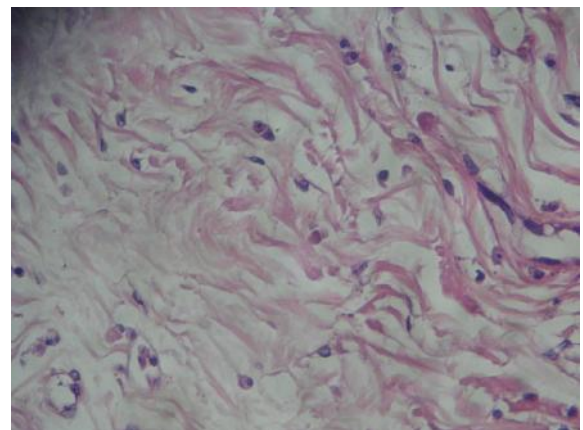


Figure 1. presurgical status showed massive localized gingival enlargement that was extended from teeth 43-46.

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Figure 2. H&E stained photomicrograph at high magnification depict large number of blood vessels and spindle shaped fibroblasts in to the connective tissue.

DISCUSSION

Clinically this case has unusual presentation like large, red hemorrhagic, pedunculated lesion that showed bleeding on slight provocation. Similar clinical cases were reported by several researchers (Eversole 2002; Neville *et al.*, 2002) Neville BW 2002 as pyogenic granuloma (PG). History of the patients revealed that this lesion was progress rapidly to cover the crown of the teeth (43, 44, 45, 46 Figure 1) and red, hemorrhagic, pedunculated. Neville BW 2002 and Ragezi ZA 2003 were postulated that PG is slow, asymptomatic and painless but it may also grow rapidly. Young PG are highly vascular in appearance because they are composed predominantly of hyperplastic granulation tissue in which capillaries are prominent. Thus minor trauma to the lesion may cause considerable bleeding, due to its pronounced vascularity. Although PG occur in all ages, it is predominant in second decade of life in young adult females, possibly because of vascular effects of female hormones Neville BW 2002. Lesions are more common on the maxilla as compare to mandible; anterior areas are more frequently affected than posterior areas Neville BW 2002.

In this case the lesion was extended from anterior to posterior region of mandible. Histopathological analyses (Figure 2) showed majority of small and large vessels engorged with R.B.C. The spindle shaped fibroblasts are dispersed in to the stroma. Neville BW 2002 and Eversole *et al.* (2002) were reported similar histopathological findings in case of pyogenic granuloma. Thus; this case is very interested and may be helpful in the diagnosis of localized gingival enlargement of the oral cavity.

Conclusion

The present case has unusual presentation of huge size and grows rapidly within 2 weeks. After excision no sign and symptoms of recurrence were evident. She is fully satisfied with her treatment and comes regularly for follow-up visit since 18 months.

Acknowledgement

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REFERENCES

- Eversole LR. 2002. Clinical outline of oral pathology: diagnosis and treatment. 3rd ed, BC Decker, Hamilton 113-4.
- Neville BW, Damm DD. *et al.* 2002. Oral&Maxillofacial Pathology. 2nd ed WB Saunders, Philadelphia. 437-495.
- Rachappa MM, Triveni MN *et al.* 2010. Capillary hemangioma or pyogenic granuloma: A diagnostic dilemma. *Contemp Clin Dent.* 1(2):119-22.
- Requena L, Sanguenza OP_1997. Cutaneous vascular proliferation. Part II. Hyperplasias and benign neoplasms. *J Am Acad Dermatol.* 37(6):887-919.
- Weibel L 2011. Vascular anomalies in children. *Vasa.* 40(6):439-47.
