

MANISH LIMBACHIYA*, BRIJESH PATEL*, MINAL BAKSHI*, RINA DAVE*

ABSTRACT

The Giant cell fibroma is a benign tumor of connective tissue origin first described in 1974 by Weathers and Callihan as a distinctive entity. Clinically the Giant cell fibroma present as an asymptomatic, papillary, pedunculated or sessile lesion commonly regarded as a papilloma. It is found most commonly on the gingiva in young people and is characterized histologically by stellate or angular mononuclear and multinuclear giant cells. Here we are presenting an unusual case of Giant cell fibroma in a 17 year old female patient with a painless, firm, fibrous, sessile, gingival growth in relation with lower left lateral incisor with characteristic histopathological features of Giant cell fibroma. The case is being presented as it occurs very rarely.

Received: 15-11-2013; **Review Completed:** 18-12-2013; **Accepted:** 30-01-2014

INTRODUCTION:

The Giant cell fibroma is a benign tumor of connective tissue origin with distinctive clinicopathologic features first described in 1974 by Weather and Callihan. Histologically it was characterized by presence of stellate mononuclear and multinuclear cells hence the name Giant cell fibroma was proposed. The lesion was usually seen in young persons and the commonest location was gingiva. Similar findings were seen by Houston (1982) in his study of 464 cases.

Recently, Bakos (1990) reported 116 cases of Giant cell fibroma with grater incidence in older age groups.

A CASE REPORT:

A female patient aged 17 years came to Government Dental College and Hospital, Ahmedabad, with chief complaint of gingival enlargement in relation to lower left lateral incisor. Before one month she was relatively asymptomatic and then she noticed the enlargement in relation to lower left lateral incisor, which gradually increase to the present size (figure 1). The patient gives no relevant systemic history or any history of trauma.



FIGURE 1

On extra oral examination there is no visible swelling. On intra oral examination there was localized gingival enlargement about 1 cm in diameter in relation to lower left lateral incisor which form firm, fibrous and sessile on palpation. Radiographically there was no bone loss, no displacement of tooth and no root resorption.

From the clinical examination fibrous epulis was diagnosed.

Patient was operated under local anesthesia and the entire lesion was excised and sent for histopathological examination.

* READER

DEPT. OF ORAL PATHOLOGY & MICROBIOLOGY

M. P. PATEL DENTAL COLLEGE, VADODARA, GUJARAT.

AHMEDABAD DENTAL COLLEGE & HOSPITAL, BHADAJ-RANCHHODPURA ROAD, TA:- KALOL DIST:-GANDHINAGAR.

ADDRESS FOR AUTHOR CORROSPONDENCE : DR. BRIJESH PATEL, PHONE: 9898212228



FIGURE 2

On gross examination it was soft tissue specimen with outer surface white in color and 0.50.5 cm in size. specimen was firm in consistency (figure 2).

Histopathologic examination showed the specimen consist of orthokeratotic hyperplastic proliferating stratified squamous epithelium with prominent granular cell layer and elongated and narrow retepegs. (figure 3) Underlying fibrous connective tissue stroma showed stellate and angular shape nuclei of fibroblast. Few scattered binucleated fibroblast was seen (FIGURE 4 & 5). Capillaries filled with red blood cell were seen in the collagenized connectivetissue.

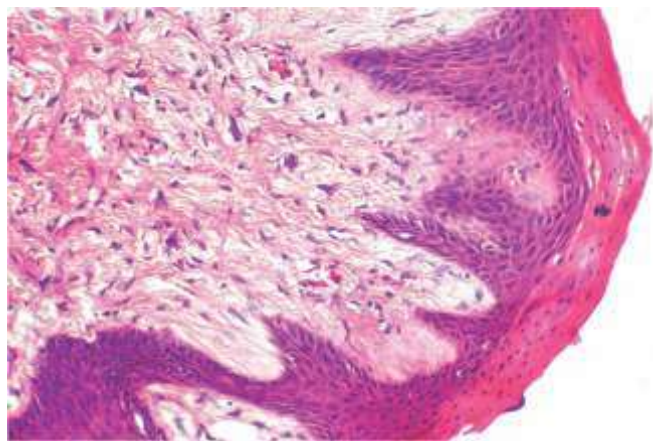


FIGURE 3

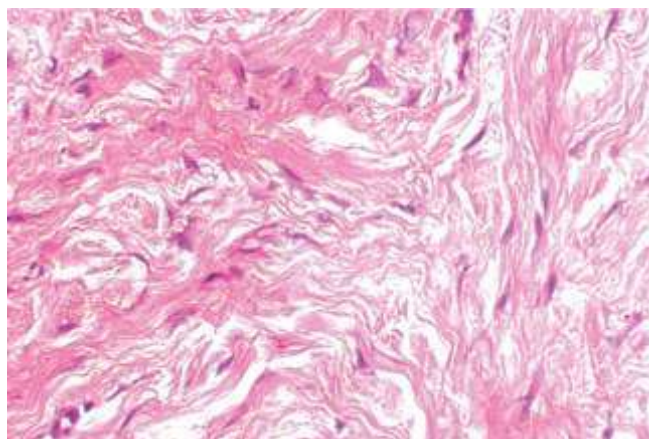


FIGURE 4

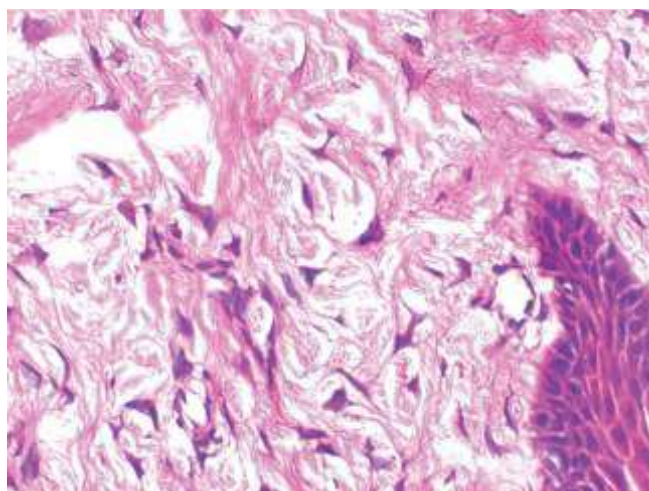


FIGURE 5

From the clinical and histopathologic findings the case was diagnosed as Giant cell fibroma.

DISCUSSION:

The clinical and histopathological finding of this case were very similar to series reported by Weathers and Callihan in 1974.

Weather and Callihan reported a peak incidence in second decade of life and slight predilection to females, however Houston reported a greater incidence in older age groups. The present case was detected in female at age of 17 years.

A marked predilection for the gingiva was also noted in both Weathers and Callihan (1974) and

Houston (1982) studies. In our case it was also found on the mandibular gingiva.

Weathers and Callihan stated that it was more commonly pedunculated and had a papillary surface where as in our case it was sessile.

The present case showed similar histopathological finding such as stellate and angular shape nuclei of fibroblast and few scattered binucleated fibroblast, which correlate with the series reported by weathers and callihan (1974) and Houston(1982).

SUMMARY:

The lesion fulfilling the histological criteria of Giant cell fibroma is non-neoplastic fibrous hyperplasia. It is fibrous tumor with two characteristic cell types: a spindle or stellate cell and a multinucleated giant cell, both of which may be of fibroblastic origin. It is fairly common lesion found in young persons, usually occurring on the gingival. It is distinct from the other fibrous tumor of the oral cavity.

REFERENCES:

1. Weathers DR Callihan MD. Giant cell fibroma. Oral Surg Oral Med Oral Pathol 1974; 37:374-84.
2. Houston GD. The giant cell fibroma: a review of 464 cases. Oral surg Oral Med Oral Pathol 1982; 53:582-7
3. Bakos LH. The giant cell fibroma: a review of 116 cases. Ann Dent 1992;5:32-5.
4. Anneroth G, Sigurdson A. Hyperplastic lesions of the gingival and alveolar mucosa. Acta Odontol Scand 1983; 41:75-86.
5. Textbook of Oral and Maxillofacial pathology (II nd edition): Neville, Damm, Allen and Bouquot.
6. Textbook of Oral pathology (5th edition): Shafer, Hine, Levy.