

“Quirky Bulb” On the Lower Jaw: An Organizing Haematoma

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ABSTRACT

Organizing Haematoma is a rare, non/neoplastic benign lesion with locally destructive behaviour that may mimic a malignancy. Usually symptoms do not occur, while the lesion remains localized. An Organized Haematoma is an encapsulated blood clot undergoing neovascularization and fibrosis. It has also been referred to as a hemophilic pseudotumour and/or a haematoma like tumour, which is rarely found in the head and neck region. Other reported cases have been related to trauma or an underlying haemangioma. However, most of the cases have no identifiable underlying pathology, trauma or systemic disease. We are reporting an unusual presentation of Organizing Haematoma over the edentulous mandible.

Keywords: Blood clot, Mandible mass, Radiograph, Traumatic injuries

CASE REPORT

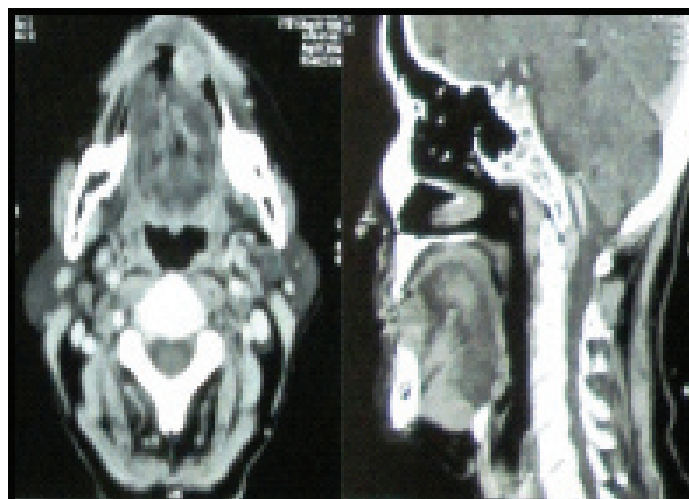
A 52-year-old female patient visited Vishnu Dental College and Hospital, Bhimavaram in the month of August 2014 with the chief complaint of swelling in the left lower front teeth region since three months. Patient was apparently normal before. She started developing a swelling in left mandibular anterior teeth region three months ago. She underwent extraction of teeth with no complications and reported edentulism of jaw since three months. The swelling initially started as peanut size and had slowly progressed to attain the present size. Patient reported no history of bleeding. She gave the history of difficulty in speech. She also reported that swelling has started only after the extraction of left mandibular canine, which was done three months back. Further, history revealed that she was under medication since one year for hypertension and diabetes.

Local examination of the lesion revealed solitary pedunculated growth, roughly oval in shape, measuring approximately 3x2.5 cm which was located on the edentulous ridge of left mandibular canine tooth region and extending lingually to the floor of the mouth, with no surface erosions [Table/Fig-1]. The swelling was found to be erythematous with areas of bluish tinge. The swelling was covered by necrotic debris on the surface and had corrugated appearance. On palpation all inspeactory findings were confirmed with respect to size, shape and extent of the growth. The swelling was found to be soft to firm in consistency which was fluctuant, non tender and with no sign of bleeding. Necrotic debris over the growth was removed partially and there was no evidence of pus discharge.

Provisional diagnosis was given as Peripheral giant cell granuloma of left edentulous mandibular anterior region. We advised intraoral periapical radiograph, which revealed multilocular radiolucency with delicate radiopaque striations [Table/Fig-2]. CT scan of this

condition showed, focal well defined homogeneously enhancing lesion measuring 1.6x1.4 that revealed focal soft tissue growth and the impression was given as soft tissue enhancing lesion in the floor of the mouth [Table/Fig-3]. Complete surgical excision of the lesion was done under local anaesthesia and sent for histopathological examination.

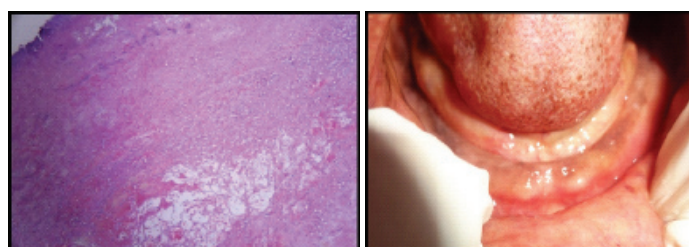
Histopathological examination revealed fibrinopurulent membrane overlying haematoma. Bacterial colonies and numerous candidal hyphae were evident at the periphery. Centre of the lesion showed numerous chronic inflammatory cells, hemorrhagic areas, few blood vessels and young fibroblasts suggesting infected Organizing Haematoma [Table/Fig-4]. Postoperative evaluation of the mandibular anterior region after six months revealed normal healing and bone formation [Table/Fig-5].



[Table/Fig-3]: CT images showing mass on the left edentulous mandibular anterior region.



[Table/Fig-1]: Clinical photograph showing growth on the left edentulous mandibular anterior region. **[Table/Fig-2]:** Intraoral periapical radiograph showing multilocular radiolucency at left edentulous mandibular anterior region.



[Table/Fig-4]: Histopathology of infected organizing haematoma. **[Table/Fig-5]:** Post treatment photograph showing complete resolution of swelling after six months.

DISCUSSION

When we hear the word haematoma, we often associate it with a postoperative complication that requires incision and drainage and possible intravenous antibiotics when infected. The term haematoma is defined as a swelling or mass of blood that is usually unclotted and is confined to an organ, tissue, or space, and is caused by a break in a blood vessel. Nevertheless, haematomas may be present for months and can often be very debilitating to the patient [1].

Haematomas may develop spontaneously due to a traumatic event or they may develop slowly in a chronic expanding form following surgery or vascular defect. It occurs because the wall of a blood vessel has been damaged and blood has leaked into tissues where it does not belong, finally resulting in significant swelling [2]. It is interesting that our patient gave a history of extraction of teeth in the mandibular anterior region and initiation of the swelling after the extraction. Accordingly, the possible cause for the Organizing Haematoma in the present case appears to be the extraction of teeth in the anterior part of the mandible.

The most plausible theory regarding the etiology and pathophysiology of Organizing Haematoma is chronic haematomas resulting from various causes, such as trauma, surgery, or underlying bleeding tendency, that can develop into Organizing Haematoma. During this process, chronic haematomas undergo several pathophysiologic events including angiogenesis, neovascularization, and surface fibrosis. This complex process results in progressive expansion and local bony erosion associated with Organizing Haematoma [3]. The present case had a similar

sequence of events and also showed multilocular radiolucency with delicate radiopaque striations. Differential diagnosis of organizing haematoma is a challenge because the radiographic and CT findings usually are not very specific. Clinical histories of trauma, surgery or hemophilia may be significant clues for Organizing Haematoma [4].

CONCLUSION

Organizing Haematoma is a rare oral non neoplastic condition and general dental practitioner is often the first professional to detect and establish the diagnosis of this uncommon condition. Extraction of teeth is a regular procedure carried out by dentists and trauma is the major cause for Organizing Haematoma, which may be because of these extractions. So, to avoid inappropriate treatment of this condition, dentists should consider Organizing Haematoma as one of the differential diagnosis for the post surgical slow growing swellings with bony changes.

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