

Reparative Granuloma of the Mandible

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Abstract: We report the case of a young patient who presented a reparative granuloma revealed by a left lateral mandibular swelling evolving in a complex clinico-radiological presentation complicated by underlying mandibular fracture; It is an often mandibular or maxillary tumor, its etiopathogeny is not yet elucidated, characterized by its clinico-radiological polymorphism, a panoply of medico-surgical techniques exists, that's indication depends on several parameters (clinical and radiological) and where surgery remains the alternative of choice.

Keywords: Reparative granuloma, mandibular fracture, surgery

INTRODUCTION

Giant cell reparative granuloma is a rare benign bone tumor [1]; its etiopathogeny is still poorly known, it affects with preference the maxillary bones representing 7% of all their benign tumors [2]. Its prognosis is better compared to other giant cell tumors in term of recurrence and malignant degeneration provided that the most appropriate therapeutic strategy is adopted [3]. We focus on the giant cell reparative granuloma, a particular anatomico-clinical entity, through this clinical case.

CASE REPORT

We report a case of a 22-year-old patient with a history of dental avulsion of the 37th. The reason for consultation was the appearance of a left latero-mandibular swelling evolving for 5 months with the appearance of lancinating pain and dental loss.

The examination found a tumor filling the left vestibule laterally; associated with an exophytic cauliflower lesion on the pelvic mucosal side facing the mass. The panoramic dental radio and the facial CT had

objectified a unilocular bone lytic process of the preangular left horizontal branch in with cortical rupture and invasion of neighboring soft tissues (Figure 1, 2).



Fig-1: Dental panoramic: clear left unilocular pre-angular image with clear boundaries and underlying mandibular fracture

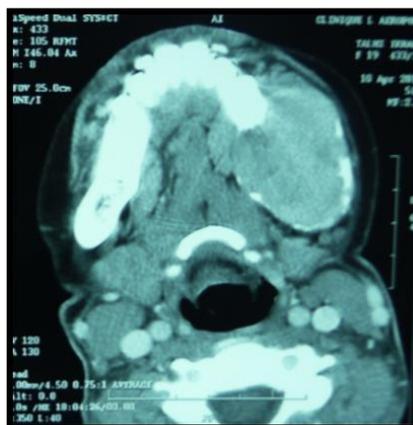


Fig-2: CT scan of the face: osteolytic process of the left horizontal branch of the mandible without a clear interface with the muscles above

The biopsy was performed three times concluding a reparative granuloma with giant cells a requested phosphocalcic record is without particularity.

The patient underwent a corporeo-preangular interrupted segmental left mandibulectomy (Figure 3) and secondary reconstruction by iliac bone graft assisted by induced membrane.

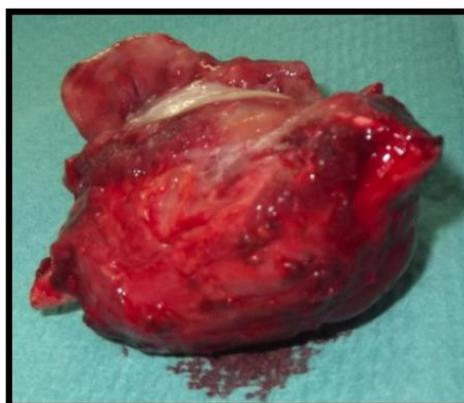


Fig-3: Surgical specimen: interrupting segmental mandibulectomy taking the opposite mucosa (arrow)

The evolution is simple without sign of recurrence on a decline of 15 months.

DISCUSSION

Restorative granuloma is a benign reaction process occurring the most often in a context of trauma (dental avulsion) [4]; it occurs with predilection in young adult females [2] in several clinical forms: central intraosseous, submucosal peripheral, non-aggressive or aggressive [4,5]. Reaching the neighboring soft tissues is a risk factor of recurrence such as the case of our patient.

Clinically, it is most often of non-specific and poor symptomatology [4] which explains the variability of the clinical features from simple fortuitous discovery during a routine examination to the blackboard noisy, rapidly evolving and painful clinic (in our case the evolution was marked by the appearance of fleshy mass of the pelvic-lingual mucosa and the occurrence of mandibular fracture).

Its radiological presentation is variable, non-specific, often single or multilocular osteolytic images [6], the need for further radiological assessment may be useful in advanced forms where CT and MRI find their place [3]. Its histological appearance can be confused with other giant cell tumors, hence the need for histochemical and immunological studies.

Surgical treatment is the rule of care despite the medical arsenal offered in the literature, particularly injections of corticosteroids, calcitonin and interferon whose results vary according to the teams, and which can be a good alternative in non-aggressive beginner forms, thus allowing to avoid surgical mutilation [1,5].

The surgical indication in terms of technicality depends on several parameters, clinical (age, aggressiveness) and radiological (extent and location) [6] It varies from a simple curettage which proves sufficient in simple and limited lesions, otherwise the

surgery becomes radical and decaying in aggressive and invasive forms as we have advocated in this patient.

The choice of reconstruction by bone grafting assisted by induced membrane is for us an indication of choice where the induced membrane, in addition to its nutritional, vascular and stabilizing role, is especially in this particular case a protective barrier for the graft.

CONCLUSION

The non-anatomico-clinical parallelism of the reparative granuloma, such as the case of our patient is a diagnostic difficulty that may require a wide range of paraclinical investigations, and imposes surgery that can be mutilating by haunting recidivism.

Contributions of the authors

All the authors contributed to the medical care of the patient, as well as the writing this article they approved.

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