PC006

CHIRURGIE CERVICO-FACIALE ET CANCEROLOGIE

Management maxillary osteitis fibrosa cystica in a patient with secondary hyperparathyroidism: a report of a case

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Abstract

Brown tumor of bone, also called osteitis fibrosa cystica is a rare non-neoplastic lesion resulting from abnormal bone metabolism in hyperparathyroidism (HPT). Facial involvement is exceptional and, when present, usually involves the mandible, but is rare in the maxilla. These lesions can simulate a malignancy on clinical examination and routine radiographs. We aim through this case to present clinical and therapeutic particularities of a maxillary located brown tumor secondary to a HPT in a young woman.

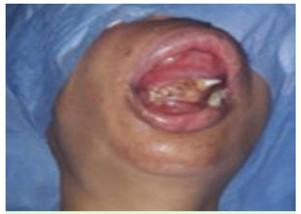

Figure 1: Peroperative view showing an expansive, deforming mass of the right jaw extended to the alveolar bone with teeth diastema

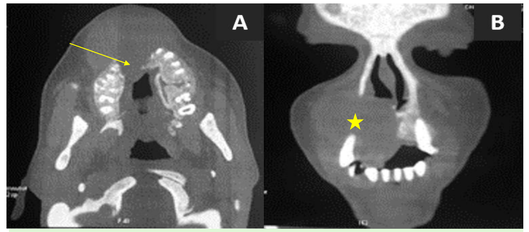

Figure 2: Axial facial CT (A) with frontal reconstruction (B) showing an expansive osteolytic lesion of the right maxilla (star) with destruction of the alveolar bone (arrow)

Objectifs

We aim through this case to present clinical and therapeutic particularities of a maxillary located brown tumor secondary to a HPT in a young woman.

Case report

36-year-old female presented to our department complaining about a 6 months history of an asymptomatic, expansive mass in the right side of the face causing facial disfigurement. She had a 6-year history of hemodialysis dependent anuric renal failure of undetermined cause.

Physical examination: bilaterally enlarged jaw, more to the right associated with facial asymmetry and deletion of the right nasolabial fold. The oral examination revealed a hardened, expansive exuberant lesion in the right palate, causing multiple diastemas in maxillary teeth and transverse and anterior expansion of the maxilla, extending from anterior region to posterior right side. This expansive lesion measured 5 cm* 3 cm. The overlying mucosa was intact (figure 1).

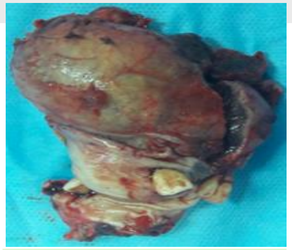

Figure 3: Macroscpic view of the specimen showing a tan to brown tumor

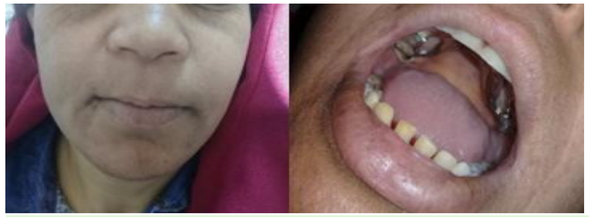

Figure 4: Patient's appearance one year after surgery: no facial deformities with dental prosthetic reconstruction

Résultats

Biology: high level of creatinine, urea and parathormone (PTH) level of 1237 pg/dl, total serum calcium level was normal.

Scintigraphy showed hyperfixation in the four parathyroid gland. Facial computer tomography found an expansive well limited lesion on the left maxilla associated with a thinning of the bony cortex sized 44x54x34 millimeters (figure 2). A generalized demineralization of the facial bones was noted. Fine needle aspiration cytology of the maxillary mass showed a giant cell lesion.

Treatment : subtotal parathyroidectomy associated to a partial hemi-maxillectomy using the Caldwell-Luc approach (figure 3). The post-operative course was unremarkable. The oral diet was restored on the second postoperative day.
Histological sections confirmed the diagnosis of a brown cell tumor associated with parathyroid hyperplasia.
Post-operative PTH levels decreased towards normal values and the patient benefited from an obturator prothesis.
Four years after the surgery, no noticeable bone changes were observed in the patient (figure 4).

Conclusion

The bony complications of HPT have declined over a period of time, due to early diagnosis and multidisciplinary follow-up. Appropriate management of hyperparathyroidism is the first option to treat brown tumors; however, in the case of larger growing lesions or those causing incapacity, surgical management should be considered.

Références

- *Aravindhan R, Magesh KT, Vivek N, Saravanan C. Maxillary brown tumor due to secondary hyperparathyroidism in a Hemodialysis patient: A case report and literature review. J Oral Maxillofac Pathol. 2021;25(3):527-32.*
- *Belkouchi L, Aourarh B, Saouab R, El Fenni J. Massive brown tumors of the jaw: A case report. SAGE Open Medical Case Reports. 2023;11:1-4*
- *Diacinti D, Cipriani C, Biamonte F et al. Imaging technologies in the differential diagnosis and follow-up of brown tumor in primary hyperparathyroidism: Case report and review of the literature. Bone Reports 14 (2021) 100745*