GIANT-CELL TUMOR: HYPERPARATHYROIDISM IS NOT ALWAYS INVOLVED A CASE REPORT

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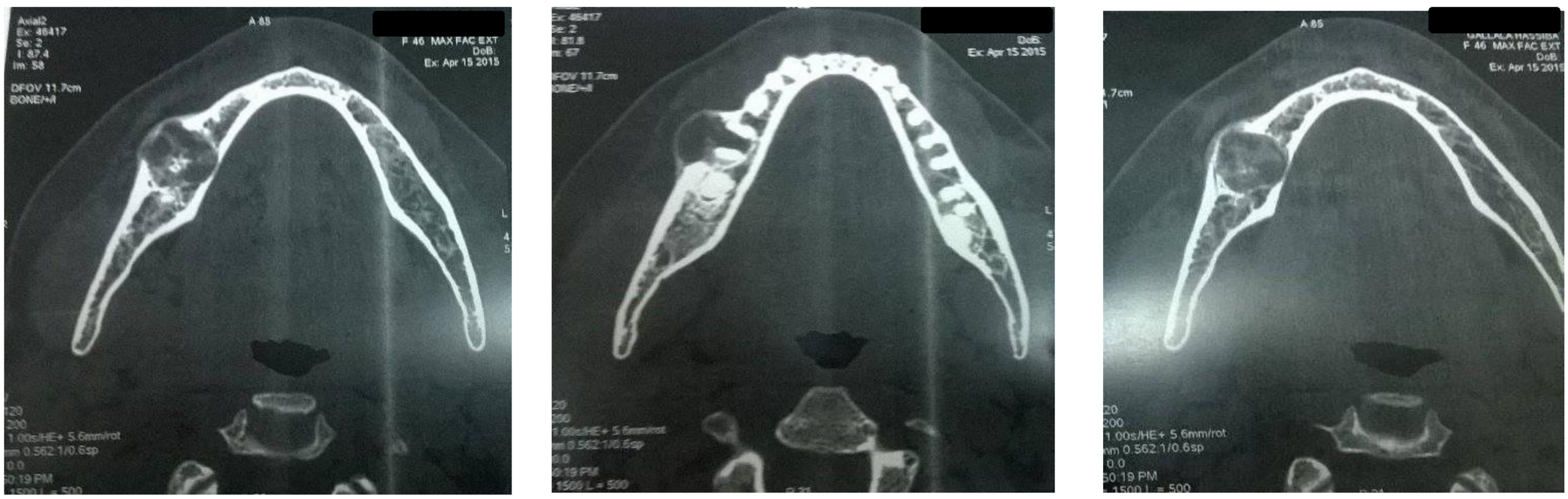
OBJECTIVES

Giant-cell tumor is a skeletal disorder that occurs secondarily to hyperparathyroidism and is caused by long-term stimulation of parathyroid hormone (PTH) excess. The overactivity and proliferation of osteoclasts stimulated by PTH breaks down bone and leads to replacement of bone matrix and thinning of the cortex. True giant-cell tumor is a rare jaw osteolytic benign tumor belonging to the larger family of giant-cell tumors.

CASE REPORT

We report the case of a **47 years** old **female** patient without significant personal history. The patient was referred to our department for hyperparathyroidism after being operated in maxillofacial surgery department for a **right mandibular tumor** progressing from 1 year associated with muscle cramps and fatigue. The pathology exam found a **giant-cell tumor**.
Blood exams showed: **PTH** = 81.5 pg / ml, **Serum Calcium** = 2.5 mmol / L, **serum phosphorus** = 1.3 mmol / L and **creatinine** = 63 mmol / L.
Cervical ultrasound showd a left lower pole parathyroid adenoma. **The para- thyroid scintigraphy** showed no parathyroid or ectopic tumor. No other bone lesions were found on **bone scintigraphy**.
Since the calcium rate was normal (2,5 mmol/L), we investigated the 25 (OH) Vitamin D3 level. Our patient had a **vitamin D deficiency**.
Thus the diagnosis was a secondary hyperparathyroidism caused by a vitamin D deficiency associated to a giant cell tumor. The jaw tumor syndrome was eliminated due to the lack of hyperparathyroidism in the family history and to the absence of uterine fibroids and renal cysts in our patient.



Axial computed tomography scan revealing an expansile tumor eccentrically located, involving the right mandibular body with bone destruction and cortical thinning. There is neither periosteal reaction nor soft-tissue extension.

CONCLUSIONS

-This case illustrates the simultaneous combination of a mandibular giant cell tumor and a normocalcemic hyperparathyroidism. The vitamin D dosage rectified the diagnosis.
-The giant cell tumors designate the true giant cell tumor , reparative giant cell granuloma and hyperparathyroidism brown tumor.
- In hyperparathyroidism , giant cell tumors is associated with hypercalcemia .
-Conservative treatment of the true giant cell tumor can have the disadvantage of letting up quotas cell that can be source of recurrent disease or metastasis.
-The vitamin D dosage must be requested in any normocalcemic hyperparathyroidism to eliminate a secondary hyperparathyroidism even in presence of bone giant cells tumor because they are not always linked to hyperparathyroidism.

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