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Tough Decisions on Parathyroid Surgery

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1. Abstract

Rarely, a parathyroid carcinoma (PC) is the cause of primary hyperparathyroidism. The difficulty to achieve a definitive preoperative diagnosis and guide appropriate treatment makes parathyroid carcinoma a formidable challenge [1].

2. Clinical Image

A 71-year-old male patient with severe hypercalcemia (Ca: 23.03 mg/dl) due to primary hyperparathyroidism (PTH: 2140 pg/ml, ur and cr within normal limits) was treated by the endocrinologists. On neck ultrasonography and computed tomography, a 43 × 39mm solid nodule with cystic degeneration posterior to the right lobe of thyroid was detected (Figure 1). Clear margins and regular shape, as well as absence of neck lymphadenopathy led to the misinterpretation of a benign lesion. Sestamibi scintigraphy showed focal uptake in the inferior pole of the right thyroid lobe on initial (10 minutes), delayed (2 and 4 hours), and subtraction images.

The surgical team recommended inferior right parathyroidectomy with an en block right thyroid lobectomy in case of tumor malignancy (Figure 2). Postoperative serum calcium and PTH were normalized. (PTH: 17.8 ng/ml, Ca: 8.65 mg/dl). The patient was discharged on the 2nd postoperative day with no signs of hungry bone syndrome but with a supplementation regimen. Pathology (Figure 3) confirmed the presence of PC consisted of neoplastic chief cells, without any significant atypia which invaded the capsule and extended to the neighboring thyroid pole. No vascular invasion was detected. Ki67/Mib1 proliferative index showed positivity in up to 5%.

The follow-up till currently reveals no residual or recurrent disease.

Maybe, establishing reliable PC molecular markers plus achieving novel imaging technologies results in PC management could be improved [2, 3].

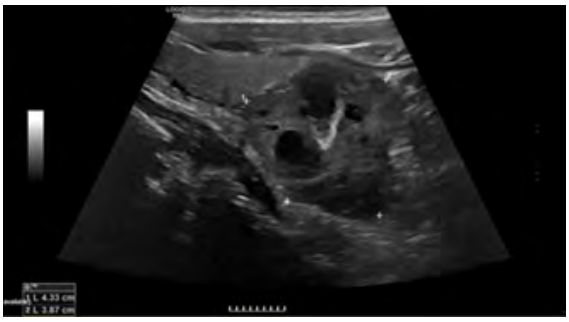

Figure 1: US of the suspicious nodule.

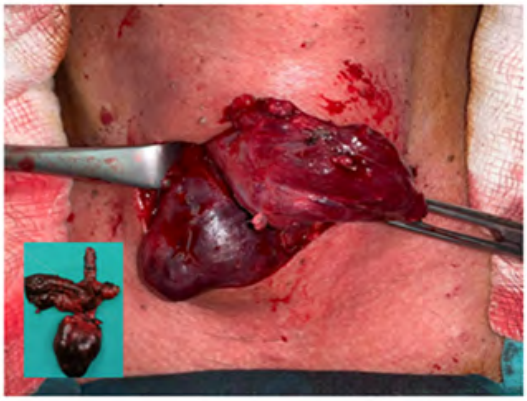

Figure 2: Intraoperative image of the en block resection

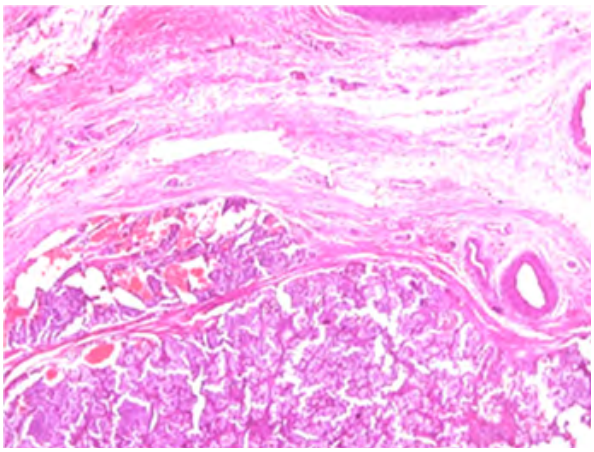

Figure 3: Neoplastic invasion beyond the parathyroid gland

References

1. Ferraro V, Sgaramella LI, Di Meo G, Prete FP, Logoluso F, Minerva F, et al. Current concepts in parathyroid carcinoma: a single Centre experience. BMC Endocr Disord. 2019; 46.
2. Fingeret AL. Contemporary Evaluation and Management of Parathyroid Carcinoma. JCO Oncol Pract. 2021; 17(1): 17-21.
3. Kristin L Long, Rebecca S Sippel. Current and future treatments for parathyroid carcinoma. International Journal of Endocrine Oncology. 2018; 5: 1.