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Thyroid Metastases From Renal Cell Carcinoma (A Case Report With Review Of The Literature)

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I. Introduction :

Not all thyroid nodules are necessarily primary; the thyroid, like any other organ, can be the site of metastases. Thyroid localization of renal cancer is rare and has a poor prognosis.
Common metastatic sites for renal cell carcinoma are lung, lymph node, liver and bone.
Clinical diagnosis of thyroid metastasis from malignancy is difficult. [1]

Observation:
74-year-old patient with the following **history:**

Post-traumatic nephrectomy 18 years ago, suprisingly the systematic anatomo-pathological examination of the surgical specimen found a clear-cell renal cell carcinoma, which was put on chemotherapy but the patient didn't show up to further check-up.

History Of The Disease:

Dates back 08 months with the apparition of a neglected right cervical adenopathy evolving in a context of dyspnea and weight loss quantified at 20 kg**.**

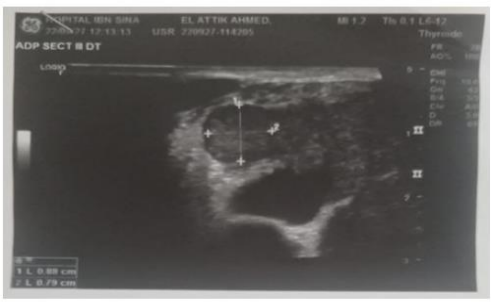
Clinical Examination:
General examination
Patient in fairly good general condition; weight = 80 Kg Height = 1.76 m BMI = 26 kg/m2

Cervical examination :

Right heterogeneous stony hemi-goitre with presence of a huge right jugulo-carotid lymphadenopathy of hard consistency, painless and immobile in relation to the superficial and deep planes.

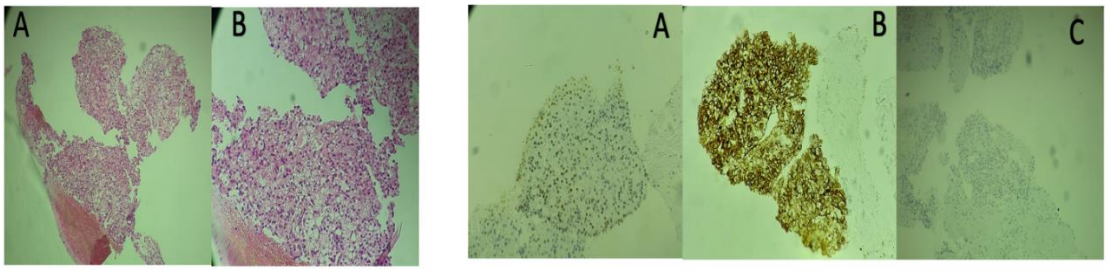
Pleuropulmonary examination:
Left pleural effusion syndrome

Paraclinic :
o Biology : Biological euthyroidism
Thyroglobulin, LDH and haptoglobin normal
o Morphology:
- *Cervical ultrasound* : voluminous plunging goiter at the expense of the right lobe + 2 suspicious lymphadenopathies in sector 3 the largest measuring 24x23 mm.



- *CT scan* : plunging nodular heterogeneous right hemi goiter, necrotic cervical and hilar mediastinal lymph nodes, secondary left supramesocolic intraperitoneal mass, bilateral pulmonary nodules with copious pleural effusion and lesions of the right iliac bone confirmed as suspicious by bone scintigraphy.

Anatomopathological examination of thyroid cytoponction : morphological appearance of a poorly differentiated carcinomatous process whose immunohistochemical profile first points to a renal origin.



II. Discussion :

The prevalence of thyroid metastases unrelated to thyroid malignancies ranges from 1.9% to 24% in cadaveric series [2]. In a recent review of the literature [3], renal cancer gave rise to thyroid metastases in 48.1% of cases, followed by colorectal cancer (10.4%), then lung cancer (8.3%), breast cancer (7.8%) and sarcomas (4%).

It has been reported that metastases can occur 10-20 years after the diagnosis of renal cell carcinoma [2]. Our patient had a thyroid metastasis 18 years after the diagonctic of a Grawitz. The usual symptoms of thyroid metastasis of renal origin are those of a cervical mass, palpable thyroid nodules, dyspnea, dysphonia, or dysphagia but most secondary thyroid metastases are asymptomatic.

The distinction between a metastasis and a thyroid malignancy on imaging is difficult [4], appearing as a cold nodule on non-injected cervical CT scan, of heterogeneous echo-structure. Kobayashi et al have reported that thyroid metastases from clear-cell renal cell carcinoma are characterized by predominant intra-tumoral vascularization, anarchic with thrombi, but non-specific to the disease [5]. The diagnosis of these metastases is confirmed by histology. Histologically, metastatic nodules contain atypical epithelial cells with clear cytoplasm and large nuclei, differentiating them from well-differentiated primary thyroid carcinomas such as follicular carcinoma or papillary carcinoma. In addition, immunohistochemistry (thyroglobulin, TTF-1 and calcitonin negative) and clinical history help differentiate clear-type variants from primary thyroid carcinomas and metastatic nodules. Abundant clear cytoplasm with irregularly enlarged nuclei with dense chromatin and visible nucleoli should suspect metastasis of clear cell renal cell carcinoma.

Surgical treatment of solitary thyroid metastases is recommended, with an average 5-year survival rate of 30-60% for localized forms [6]. However, our patient was treated with chemotherapy in view of the presence of distant metastases.

III. Conclusion :

Renal metastases from thyroid cancer are rare. The increasingly common use of ultrasound and, above all, computed tomography (CT) in the surveillance of cancer patients has enabled this type of lesion to be detected more frequently.

Bibliography :

[1] Mohammadi A, Toomatari S, Ghasemi Rad M. Metastasis From Renal Cell Carcinoma To Thyroid Presenting As Rapidly Growing Neck Mass. Int J Surg Case Rep. 2014;5:1110-2 .
[2] Ramarez Plaza C, Domãnguez Lã3pez M, Blanco Reina F. Thyroid Metastasis As Initial Presentation Of Clear Cell Renal Carcinoma. Int J Surg Case Rep. 2015;10:101-3
[3] Chung A, Tran T, Brumund K, Weisman R, Bouvet M. Metastases To The Thyroid: A Review Of The Literature From The Last Decade. Thyroid. 2012;22:258-68
[4] Mirallie E, Rigaud J, Mathonnet M, Gibelin H, Regenet N, Hamy A, Et Al. Management And Prognosis Of Metastases To The Thyroid Gland. J Am Coll Surg. 2005;200:203-7
[5] Kobayashi K, Hirokawa M, Yabuta T, Fukushima M, Masuoka H, Higashiyama T, Et Al. Metastatic Carcinoma To The Thyroid Gland From Renal Cell Carcinoma: Role Of Ultrasonography In
[6] Preoperative Diagnosis. Thyroid Res. 2015;8:4
[7] Koul H, Huh J, Rove K, Crompton L, Koul S, Meacham R, Et Al. Molecular Aspects Of Renal Cell Carcinoma: A Review. Am J Cancer Res. 2011;1:240-254