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LETTER TO THE EDITOR: METASTASES FROM RENAL CELL CANCER TO THE THYROID GLAND: A SYSTEMATIC REVIEW OF 175 CASES BETWEEN 1964 AND 2016

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Dear Editor,

We read with great interest the paper by D'Angelo et al[1], recently published on WCRJ and titled ''Metastases from renal cell cancer to the thyroid gland: a systematic review of 175 cases between 1964 and 2016".

Authors reported the cases published in the literature and their clinical experience about a patient affected by metastases from renal cell cancer and treated with the surgery approach and the oral therapy with sunitinib after thyroidectomy[2].

In the last decades, the treatment of metastatic Renal Cell Carcinoma (mRCC) has become more and more complex due to the approval of a great number of effective systemic treatments. An increasing knowledge of the genetic aberrations and the molecular pathways alterations that underlie RCC have promoted the development of several novel agents, known as target therapies (TTs)[3]. TTs are not curative and all patients eventually progressed, so adequate sequencing of these drugs can provide a significant benefit in terms of progression-free survival (PFS) and, hopefully, overall survival (OS)[4,5].

It remains uncertain what is the best strategy in case of oligometastatic recurrent disease, because in these cases, the surgery may play an important role and should be eventually followed by the systemic therapy[1].

Although clinically evident metastases of non thyroid malignancies (NTMs) to the thyroid gland are uncommon, it is important to suspect them in patients who present with a new thyroid mass and a history, however far back, of prior malignancy. An isolated renal tumor metastasis to the thyroid gland appears as a solitary "cold" nodule on a scan or may be diagnosed by ultrasonography. The long latency can make the diagnosis difficult, especially if the previous renal history is neglected and the metastasis is the only presenting sign of renal adenocarcinoma. Metastases from NTMs to the thyroid gland have been reported in 1.4%-3% of all patients who had surgery for suspected cancer in the thyroid gland. The mean and median intervals between diagnosing NTMs and their metastases to the thyroid gland are 69.9 and 53 months, respectively. In 20% of the cases, the diagnosis of the NTM and its metastases to the thyroid was synchronous[6]. The surgical resection of an isolated metastases might result in a prolonged disease-free survival. The fine-needle aspiration biopsy (FNAB) of thyroid masses is useful in the diagnosis of thyroid metastases but this requires information about the NTM so that the proper antibodies can be used for immunohistochemical analysis[7]. In patients with preexisting thyroid pathology, the FNAB diagnosis can be more difficult due to more than one lesion being present so it is important to take into account that there is the possibility to discover a possible metastatic site. In patients with thyroid lesions and a history of malignant disease, regardless of time elapsed since the initial diagnosis of the primary neoplasm, disease recurrence or progression of malignancy must be considered until proven otherwise[8].

In this review, it is notably that the result of the cytological exam, performed before the thyroidectomy, resulted positive for "an adenomatous follicular proliferation". We think that on the basis of the cytologic exam the authors decided for surgery approach[1]. We think that is important to underline that one because many patients can develop metastases, also after many years from

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the diagnosis. Metastases to thyroid cancer is a rare event but more than half originate from renal cells. For this reason, nodules or other modifications not usual for classical presentation for thyroid tumor that appear in patients with a history of kidney cancer, may be considered as possible metastases. We agree with the Authors to suggest improving the current post-surgical RCC follow-up program with an ultrasound scan of the neck to detect new nodules or other modifications of the thyroid gland early. Also, we agree with the idea that a thyroid scan should be prolonged for at least ten years after surgery.

Unluckily little information is available on ultrasonographic features of metastatic carcinoma in the thyroid but the strategic value of ultrasound in the preoperative surgical planning for patients with thyroid nodules has become increasingly appreciated. A paper by Kobayashi et al[9] described some of the principal ultrasonographic features of these carcinomas. They were more likely solitary, irregular, and solid, without calcifications with prominent intratumoral vascularity and tumor thrombus in the vein. These patients tended to be older, and to have a relatively late recurrence in the thyroid, RCC in the right kidney as the primary site, and relatively low serum thyroglobulin levels. These ultrasonographic features combined with cytological findings and previous medical history of RCC can provide the optimal process for the preoperative diagnosis of these patients.

Authors Disclosure

The Authors declare that they have no conflict of interests.

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