

Orbital Secondary Lesion from Renal Cell Carcinoma

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Received date: February 17, 2017; Accepted date: February 24, 2017; Published date: February 25, 2017

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Abstract

The most common sites of metastasis of renal cell carcinoma are lungs, locoregional lymph nodes, bone and liver. Renal cell carcinoma rarely metastasizes in head and neck sites. We have reported a case of a patient of 47-year-old man who presented with unilateral blepharoptosis and blurred vision due to metastatic renal cell carcinoma to the orbit. The imaging techniques used have been fundamental for the diagnosis, staging and of the choice of the cytological sampling site.

Keywords Blepharoptosis; Kidney cancer; Orbital magnetic resonance imaging; Ptosis; Renal cell carcinoma

Short Communication

Kidney cancer constitutes the 2-3% of all malignant tumors in adults and the third most frequent cancer of the urinary tract [1-3]. Male-Female ratio is about two to one (M/F: 2:1), and the mean age at diagnosis is in the early 60 years [2,4].

From 25 to 33% of patients with renal cell carcinoma (RCC) present metastasis at first diagnosis [5]; the most common localizations of metastatic sites are lungs (75%), regional lymph nodes (65%), bone and liver (both 40%). Cases with metastatic localization in the head and neck region are 15% [6].

From 1% to 13% of orbital tumors is metastasis [7]. Studies conducted in different countries demonstrate as from 3% to 10% of the orbital metastasis (OM) derived from the kidney [8-11].

We have presented a case of a 47-year-old patient with unilateral left blepharoptosis and blurred vision, due to an OM from RCC [12].

Brain magnetic resonance imaging (MRI) showed an expansive solid lesion located at the left orbit roof likely to be extraconal bone origin (diameters of 23 × 15 × 25 mm). This lesion was isointense on T1 and T2-weighted images, showing contrast enhancement and intra-orbital expansion at the upper-outer quadrant level. The lesions incorporated the lacrimal gland and were not visible cleavage planes from the upper rectus, lateral rectus and the upper eyelid muscle in (Figure 1).

Total body computed tomography (CT) showed in many secondary mediastinal lymphadenopathies, a partially exophytic lesion located in the upper pole of the left kidney (diameters 72 × 56 × 70 mm) with necrosis in context that marks the upper caliceal group (Figures 2), two metastases at the body and medial arm of the left adrenal gland, a nodulation in the right adrenal gland, loco regional lumbar-aortic

lymphadenopathy and many bone metastases in the skeletal portions studied. Consequently, cytology in specimens taken at the lymph-node stations 7 and 11 L through endoscopic ultrasound has placed diagnosis of RCC [12].

Orbital metastasis, generally, comes as orbital mass, exophthalmos, lid edema, ptosis, diplopia and/or cranial nerve paralysis [13].

In this case, symptoms such as blurred vision and unilateral ptosis hid a systemic malignancy. MRI and CT are very importance for the diagnosis, the staging of the disease and for the choice of the site where you can make the cytological or histological specimen. In our case the cytology confirmed the diagnosis of renal cell carcinoma [12].



Figure 1: Magnetic resonance imaging: Coronal T2 TSE sequence showing expansive, isointense lesion of probable bone origin with intraorbital growth.

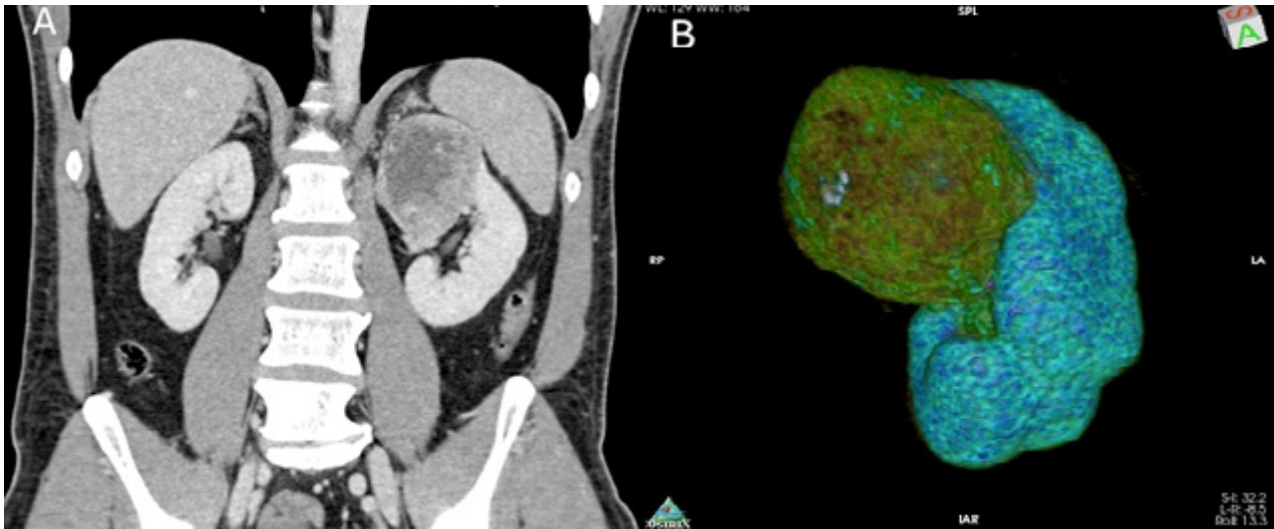


Figure 2: Computed tomography: Coronal scan during venous phase of the abdomen (A) and volume rendering reconstruction (B), show expansive lesion, partially exophytic, situated in the upper pole of the kidney with intralesional necrosis.

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