

# Metástase do Cordão Espermático como Apresentação de Carcinoma de Células Renais

*Spermatic Cord Metastasis as Initial Presentation of Renal Cell Carcinoma*

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## Abstract

*Renal Cell Carcinoma (RCC) is a ubiquitous entity due to its atypical metastatic profile at presentation. Thirty percent of these tumors may be accompanied by synchronous metastatic disease at diagnosis. The organs most affected by metastatic spread are: bone, lung, liver, brain and adrenal glands. However, other structures are also reported to be secondarily affected: eyes, mouth, neck and thyroid, heart, breast, rectum abdominal muscle, intra-scrotal structures and vagina<sup>1,2,3</sup>. The authors intend to publish an unusual case of intra-scrotal metastasis that preceded the diagnosis of RCC in a 68 year old patient.*

**Keywords:** *Renal cell carcinoma, metastatic disease, intrascrotal mass, sunitinib, partial response.*

## Resumo

O carcinoma das células renais (CCR) é uma entidade ubíqua devido ao seu perfil metastático atípico no momento do diagnóstico. Cerca de 30% destes tumores podem vir acompanhados por doença síncrona metastática no diagnóstico. Os órgãos normalmente mais afectados pela proliferação metastática são: o osso, o pulmão, o fígado, o cérebro e as glândulas adrenais. No entanto, outras estruturas podem também ser secundariamente afectadas como os olhos, a boca, o pescoco e a tiróide, o coração, a mama, o músculo abdominal do recto, as estruturas internas

do escroto e a vagina<sup>1,2,3</sup>. Os autores pretendem publicar um caso pouco comum de metástases nas estruturas internas do escroto que antecederam o diagnóstico de CCR num doente com 68 anos.

**Palavras-chave:** Carcinoma das células renais, doença metastática, massa das estruturas internas do escroto, sunitinib, resposta parcial.

## Introduction

Renal Cell Carcinoma (RCC) is a ubiquitous entity due to its atypical metastatic profile at presentation. Thirty percent of these tumors may be accompanied by synchronous metastatic disease at diagnosis. The organs most affected by metastatic spread are: bone, lung, liver, brain and adrenal glands. However, other structures are also reported to be secondarily affected: eyes, mouth, neck and thyroid, heart, breast, rectum abdominal muscle, intra-scrotal structures and vagina. The authors intend to publish an unusual case of intra-scrotal metastasis that preceded the diagnosis of RCC. This rare case is compared with those already described in literature found through searching PubMed.

## Clinical Case

A 68 year old male patient presented at our outpatient clinic complaining of right scrotal discomfort that had started 2 months previously and that was

## Casos Clínicos

associated with a 2.5 cm nodule of a hard consistency at the spermatic cord, completely independent from the testis. Chest radiography showed multiple secondary lesions all over both lungs. Given the clinical and radiological features suggestive of malignancy and suspected spermatic cord leiomyosarcoma, the patient underwent a right radical orchidectomy (figure 1). Pathology revealed a RCC metastasis in the spermatic cord that was positive for CD10 on immunohistochemistry (figure 2). Abdominal CT located a clinically silent 5.5 cm neoplasia in the middle of the right kidney. It was a heterogeneous mass with infiltration of the renal sinus (figure 3). Thoracic CT confirmed several small solid nodular formations at the level of the lungs, with radiological characteristics of metastatic disease. The patient underwent an open right radical nephrectomy (figure 4). During surgery we found that the right spermatic vein drained directly into the distal renal vein (anatomic variation). The kidney that had been removed contained in its middle third a clear cell carcinoma that measured 5.5 cm x 4.5 cm x 3.5 cm, nuclear grade 3/4 with invasion of perinephric fat and renal vein, pT3bNxM1 (Stage IV). With an ECOG Performance Status Grade 0 and favorable risk according to Motzer/MSKCC criteria, the patient started therapy with Sunitinib 4 weeks after surgery. Currently he is undergoing his fifth cycle and is tolerating the daily 50 mg dose of Sunitinib very well. According to the RECIST Criteria Version 1.1 he is achieving a Partial Response (PR = At least 30% decrease in the sum of diameters of target lesion, taking as reference the baseline sum diameters)<sup>4</sup>.

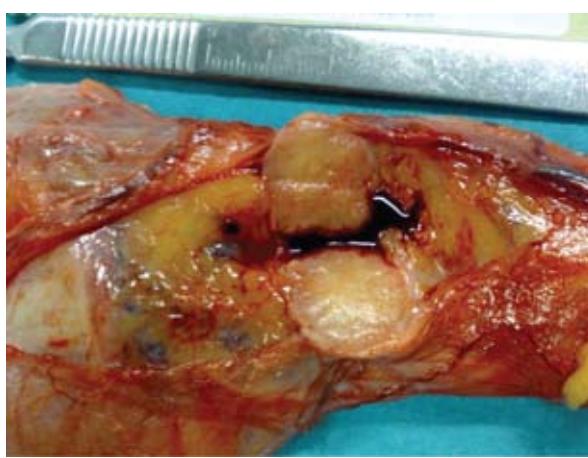


Figura 1) Right radical orchidectomy showing a spermatic cord nodule

## Discussion

Spread to the spermatic cord through the spermatic vein appears to be the most likely mechanism in cases of ipsilateral metastasis. The evidence of renal vein invasion by the RCC and the anatomical variation

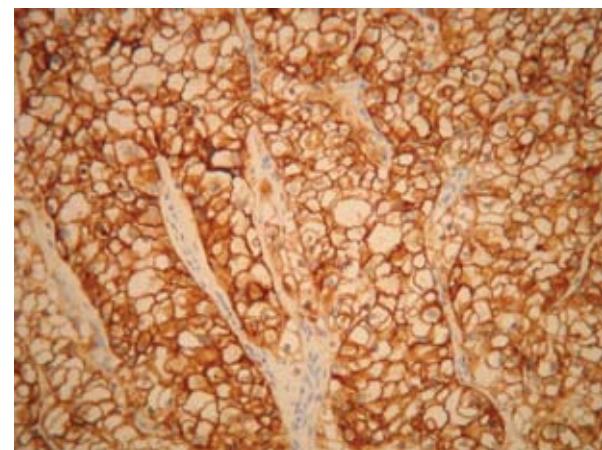


Figure 2) spermatic cord nodule with positive reaction to CD10 on immunohistochemistry (400x)

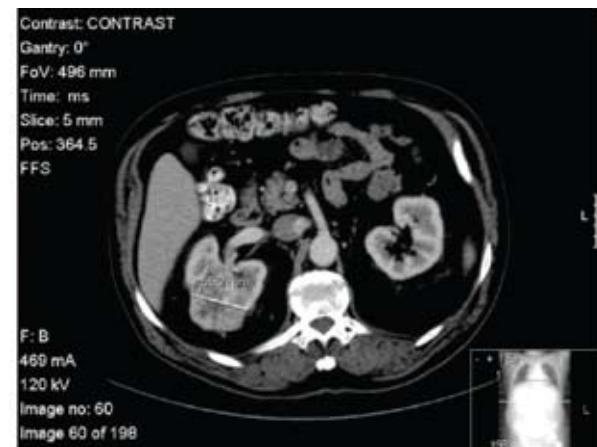


Figure 3) CT scan showing a 5.5 cm mesorenal mass

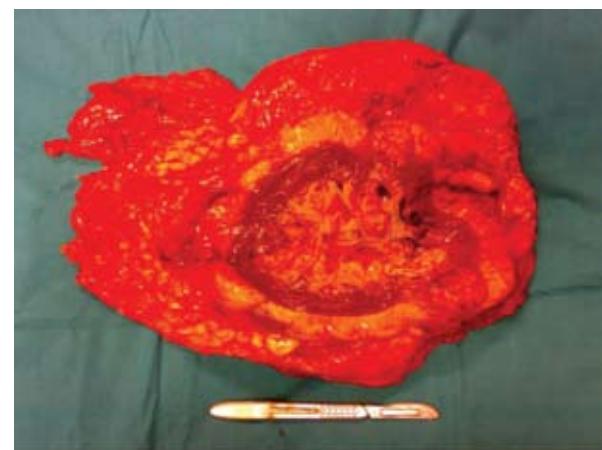


Figure 4) Right radical nephrectomy showing the renal mass

of the drainage of the right spermatic vein reinforce the hypothesis of retrograde hematogenous spread. The clinical case reported is extraordinarily rare – a search on PubMed revealed only 10 similar cases reported in 6 published articles. In 5 cases (50%) the discovery of the spermatic cord node preceded the diagnosis of renal cell carcinoma<sup>1,2,3</sup>. In the presence of an intra-scrotal extra-testicular mass we must consider the hypothesis of RCC metastatic disease.

## References

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