

Short Communication

Isolated Metastasis of Renal Cell Carcinoma into the Spermatic Cord

Sistla Bobby Viswaroop, Ganesh Gopalakrishnan
Department of Urology, Christian Medical College, Vellore, Tamilnadu, India

Kuwait Medical Journal 2004, 36 (3):199-200

ABSTRACT

Renal cell carcinoma is known as a ubiquitous tumor because of its unusual presentation and metastatic

profile. We report an isolated metastasis of clear cell renal cell carcinoma into the spermatic cord.

KEY WORDS: metastasis, renal cell carcinoma, spermatic cord

INTRODUCTION

Metastasis of renal cell carcinoma into the spermatic cord is uncommon. In this short communication, we report such a case.

CASE REPORT

A 43-year old gentleman was found to have a mass lesion in the left kidney when he underwent an ultrasound evaluation for abdominal pain. Subsequently, CT scan was done which showed 20 x 8 x 11 cm heterogeneous high-density mass lesion in the left kidney with tumor thrombus into the left renal vein. He underwent a left radical nephrectomy. Biopsy confirmed a clear cell renal carcinoma (Fuhrman's nuclear grade-2) infiltrating the perinephric fat. Perinephric lymph nodes and hilar blood vessels were free of the tumor. Two months later, he presented with a swelling in the left iliac fossa and a 6 x 5 cm ovoid swelling in the left inguinal region. The latter was continuous with the cord contents. Both testes were normal on

examination. CT scan at this point of time showed heterogeneously enhancing mass lesion in the left iliac fossa extending to the groin (Fig. 1). An ultrasound evaluation of the spermatic cord showed the upper pole of the testis and a hypoechoic mass in the cord (Fig. 2) Fine needle aspiration cytology of the groin swelling was reported as metastatic renal carcinoma to the spermatic cord. No specific treatment was offered as the patient was unwilling.

DISCUSSION

Renal cell carcinoma is known to metastasize to protean sites, with 25% having secondaries at the time of presentation. Metastatic tumor of the spermatic cord from renal cell carcinoma (RCC) is unusual. Most of them present as a painless mass or swelling. A total of six cases of metastasis into the spermatic cord from RCC are reported in the English literature^[1-5]. The spread possibly occurs either directly or via lymphatics, spermatic vein



Fig. 1: Contrast enhanced axial CT scan of the pelvis showing an irregular, peripherally enhancing mass lesion in the region of the spermatic cord (Arrow)

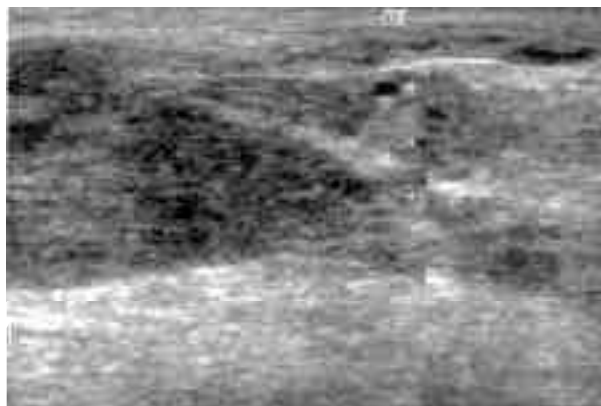


Fig. 2: Ultrasound evaluation of the cord showing the upper pole of the testis and hypoechoic mass in the cord

Address correspondence to:

Dr. Ganesh Gopalakrishnan, Professor and Head of Urology, Christian Medical College and Hospital, Vellore 632 004, Tamilnadu, India.
Email: ganeshgopalakrishnan@yahoo.com

and Batsons plexus of veins. Direct seeding of the spermatic cord via spermatic vein seems to be the likely mechanism in ipsilateral metastasis^[2]. This is the most likely mechanism in our case as there was evidence of tumor thrombus in the renal vein. This case merits reporting because of its rarity.

REFERENCES

1. Markovic B, Opric M, Prica V, Mandic R, Jeremic A. Metastasis to the funiculus spermaticus as the first sign of renal cell carcinoma. *World J Surg* 1983; 7:669-671.
2. Daniels GF Jr, Schaeffer AJ. Renal cell carcinoma involving Penis and Testis; Unusual initial presentations of metastatic disease. *Urology* 1991; 37:369-373.
3. Fallick ML, Long JP, Ucci A. Metachronous renal cell carcinoma metastasis to spermatic cord and penis. *Scand J Urol Nephrol* 1997; 31:299-300.
4. O'Dea MJ, Horst Zinck, David C. Utz, Philip E Bernatz. The treatment of renal cell carcinoma with solitary metastasis. *J Urol* 1978; 120:540-542.
5. Lioe IF, Biggart JD. Tumours of the spermatic cord and paratesticular tissue. A clinicopathological study. *BJU* 1993; 71:600-606.