

Late Testicular Metastasis From Renal Cell Carcinoma

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Citation

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Abstract

Testicular metastasis from renal cell carcinoma is very rare with 15 cases being identified in the literature. A 61-year old white male was admitted to our clinic with a past history of left kidney nephrectomy for renal cancer in 1993 elsewhere. In 1994 a CT-scan showed adrenal metastasis which had been resected. In 1997 2 lung metastases had been detected. The patient was referred to the oncological department. He responded very well to immunotherapy with interferon gamma, GM-CSF and interleukin and is still in stable disease of lung metastases. He now presents with a suspected carcinoma of the left testis. After left inguinal orchiectomy the histological findings showed metastasis from a clear-cell carcinoma. Late intrascrotal metastasis is a rare event in the course of the disease.

INTRODUCTION

Testicular metastasis from renal cell carcinoma is very rare with 15 cases being identified in the literature [1] and accounts for approximately 0.9% of all testicular neoplasms.[2] 153 cases of testicular metastases have been reported so far in a large literature analysis[1], with the common primary sources originating from the prostate, lung and the gastrointestinal tract.

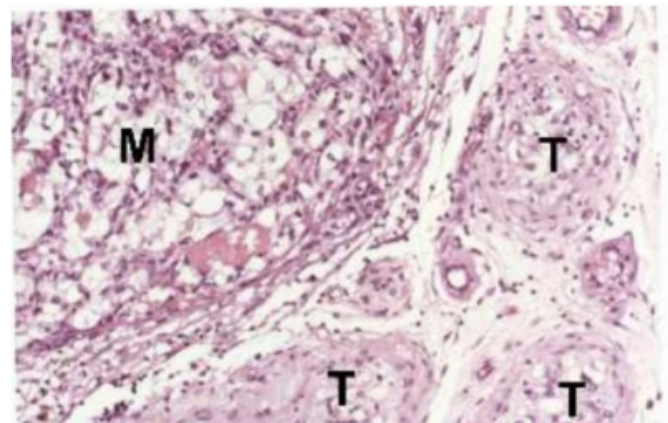
Approximately one third of patients with renal carcinoma have haematogenous metastases at the time of diagnosis and an additional 25% of patients develop metastases sometime after having a nephrectomy. The common sites for distant metastatic disease are the lung (50%), bones (30%), liver (30%) brain and thyroid (25%).[3]

CASE REPORT

A 61-year old white male was admitted to our clinic in August 1999 with a suspected carcinoma of the left testis. Physical examination revealed normal external genitals with the exception of swelling and induration of the left testis. Ultrasound examination resulted in high suspicion for testicular tumor. Therefore, left inguinal orchiectomy was carried out. The histological findings demonstrated metastasis from a clear cell carcinoma.

Figure 1

Figure 1: Clear cell renal cell carcinoma metastatic to testis (HE, X 400); T: atrophic seminiferous tubule, M: Metastasis of clear cell cancer.



Exploring the patient's past history revealed that he had undergone a left kidney nephrectomy in 1993 elsewhere. That nephrectomy specimen demonstrated a solid clear cell carcinoma of the kidney with infiltration to the perirenal fat and the renal vein. There were no positive lymph nodes. A year after surgery a CT scan revealed adrenal metastasis that was subsequently resected. In 1997, chest x-ray examination and CT scan demonstrated two lung metastases, one in the left upper lobe and one in the right middle lobe. The patient was referred to the oncological department where he received immunotherapy with interferon gamma, GM-CSF and interleukin. The patient responded very well to the therapy and presents now with stable disease of lung metastases after continuous, systemic immunotherapy.

DISCUSSION

Survival of patients with metastatic renal cell carcinoma is poor, the majority dying within one or two years after diagnosis. However, patients with solitary metastasis and /or late onset of metastatic disease may have better survival outcomes. Intrascrotal metastasis is seen as a rare event in the course of the disease. The present case may support the hypothesis that left renal cell carcinoma involved the testis via the spermatic vein. In only 5 cases, the symptoms from the intrascrotal involvement preceded the diagnosis of a renal tumor.^[1]

As far as diagnosis is concerned, differential diagnosis of a scrotal mass in a patient who has had previous nephrectomy for carcinoma should always include metastatic disease. Diagnosis, as well as treatment, is established by inguinal semicastration. Recently, Lauro et al. reported a case of

successful treatment of testicular metastasis with interferon therapy, antedating renal cell carcinoma and after radical surgery.^[1] Long-term cure in patients with solitary intrascrotal metastasis as well as either significant palliation or even stable disease in patients with lung metastases can be achieved due to the improvements of current immunotherapy treatments.

References

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