Metastatic teratoma from a regressed impalpable testicular primary

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Summary: A young man presented with a perineal tumour which despite intensive investigation, remained of unknown origin and required radical excision. It was subsequently shown to be a metastasis from a primary regressed testicular teratoma. It is important to exclude a testicular origin in these patients wherever possible because such tumours are often chemosensitive.

Introduction

The majority of germ cell tumours in the male present as a scrotal swelling but a significant minority present in an unorthodox fashion. With the present ability to cure over 70% of patients with metastatic germ cell tumours,¹ a knowledge of the unusual manifestations is of practical importance.

Case report

A man of 29 presented with a 9-month history of haematuria and slow urinary stream. There was no history of testicular maldescent. He did not have gynaecomastia and both testicles were normal but pelvic examination revealed a tender perineal mass. Urethroscopic biopsy showed an infiltrating poorly differentiated carcinoma of uncertain origin. There was no clinical, radiological or biochemical evidence of tumour in other sites. Testicular tumour markers alpha-feto protein (AFP), beta human chorionic gonadotrophin (HCG) and alkaline phosphatase (ALP) were normal. He underwent total emasculation and formation of an ileal conduit because of the position of the mass.

Histology of the resected tumour revealed malignant teratoma undifferentiated. In addition, a dense fibrous scar was present in the upper pole of the left testis. The perineal mass clearly represented a metastatic deposit from a regressed primary malignant teratoma originally sited in the upper pole of the left testis. This testis also showed extensive *in situ* seminoma.

Following discharge he developed pulmonary

metastases but these resolved after a course of chemotherapy. He remains well with no further evidence of recurrence three years after treatment.

Discussion

The significance of testicular scars as sites of primary gonadal tumours in patients presenting with metastatic testicular teratomas is well recognized. Most of the secondary tumours are chorio-carcinomas but all forms of malignant teratoma have been described. Similarly the presence of seminoma or *in situ* seminoma adjacent to the scar have also been reported.² These lesions are impalpable and, when not associated with an elevated tumour marker, cannot be diagnosed unless testicular biopsies are performed. Even then some cases will be missed. Gynaecomastia is often associated with these tumours but was not present in our patient. In a series of 16 patients with extragonadal germ cell tumours,³ the authors suggested that germ cell malignancy should be considered in any young men with metastatic disease of unknown primary origin and that serum levels of AFP, beta HCG and ALP should be estimated. Further, the testis should be carefully examined in a man presenting with large lymph nodes and an abdominal mass or mediastinal shadows.² It is also reported that there is an association between occult primary malignancy and testicular atrophy and/or testicular pain.⁴ All these tests were performed in our patient, but did not contribute to his diagnosis or management.

Every effort should be made to exclude a testicular neoplasm in a male presenting with an unknown primary. These tumours are sensitive to chemotherapy and radical surgery may be unnecessary.

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