

Carcinoma En Cuirasse of Scrotum—Metastatic Malignancy from A Lung Primary

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Abstract: A 69 year old male who presented with painful, swollen and inflamed scrotum is presented as a unique case report. He was initially treated as a case of infection and was subject to further investigation due to poor response to antibiotics. CT scan showed thickened scrotal wall and an incision biopsy revealed metastatic ‘carcinoma en cuirasse’ of the scrotal wall with the primary foci in the lung. There has been one other such case reported in literature, presenting as generalised swelling of scrotum with the whole of the scrotal wall being involved.

Keywords: cancer, metastasis, scrotum, urology

Full Case Report

Introduction

A wide range of malignancies are known to metastasise to the scrotum. Although infection would always be the initial impression when the swelling is inflamed and painful but metastatic disease should be considered as a differential diagnosis.

Case report

A 69 year old male, known smoker for over 30 years presented with an 8 week history of scrotal swelling which was painful and tender. He was otherwise well and did not have any signs of sepsis. The scrotum appeared uniformly swollen with no pitting or obvious inflammation (Fig. 1). The whole scrotum seemed to be encased and fixed (absence of laxity or movement). There were associated oedema of the penis and tightening of perineal skin. Inflammatory markers were marginally elevated. Ultra sound scan showed thickened scrotal wall with no collections. In view of worsening pain and swelling in spite of broad spectrum antibiotic cover, an exploratory incision was made under general anaesthesia. The scrotal wall was very hard and leathery, described as ‘gritty’ on incision with the consistency of an unripe pear. There were no signs of purulence. There were no significant bacterial growths from cultures and antibiotics were broadened to cover Fournier’s gangrene.

Histology of the tissue taken from the scrotal wall showed fibro muscular tissue infiltrated by moderately differentiated adenocarcinoma with neuro-endocrine features (Positive for neuro-endocrine markers—Synaptophysin and CD 56. Negative for Chromogranin). The tissue stained positive for CK 7 (Cytokeratin) and focally positive for PLAP (Placental-like Alkaline Phosphatase—germ cell marker). Subsequent Computed Tomography scan revealed primary in lung with other metastatic foci in pleura, adrenals and omental nodes. Additional relevant immuno histochemistry tests were performed but were not conclusive (Negative for TTF—1 and SPT 24).

Discussion

Metastatic malignancies in the scrotal wall have been reported but are rare. Adenocarcinoma of lung metastasising to the scrotum has been reported in 2 patients. One presented as diffuse scrotal wall thickening¹ (carcinoma en cuirasse) and the other was described as left scrotal mass² in the inner layers of the scrotal wall, separate from the left testicle, epididymis, and spermatic cord. The phrase ‘en cuirasse’ was used to describe hard thickening of the scrotal wall (armour like).

Renal cell carcinoma,³ transitional cell carcinoma,^{4,5} gastric carcinoma,⁶ adenocarcinoma of prostate,⁷ desmoplastic small cell tumour,⁸ colorectal carcinoma⁹ and signet ring cell carcinoma¹⁰ are some of the

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Figure 1. Metastatic carcinoma en cuirasse of scrotum.

other malignancies with reported metastases to the scrotal wall. Metastatic disease should always be suspected in scrotal swellings which are atypical in presentation and refractory to treatment. In this patient's case, the biopsy was diagnostic. NCAM, a neuro endocrine marker might have been helpful in addition to synaptophysin and chromogranin. An MR scan might have provided the differential but would not have been conclusive.

Disclosure

The authors report no conflicts of interest.

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