Testis metastasis in advanced melanoma

Clinical History:

A 63-old-man presented with a 5-month history of pain and swelling of the left testis. Subsequently he reported lower limbs paresis and bladder distension. Three years before his current presentation, the patient had a history of superficially spreading 8 mm Breslow thickness malignant melanoma involving the left lumbar region.

Imaging Findings:

Scrotal ultrasound (Philips ; L12-5 transducer – testicular setting) demonstrated multiple, irregular and hypoechoic lesions throughout both testes, left epididymis and scrotal wall. All of these lesions showed hypervascularity on colour Doppler imaging (Fig. 1). He had a progression of the disease, two years later, with metastatic cutaneous nodules, axillary, mediastinal and hilar adenopathy, pulmonary and left adrenal nodules. An MRI of the spine showed a medullary compression between C7 and D3 with suspicious findings of meningeal carcinosis (Fig. 2).

Discussion:

Melanoma is an aggressive neoplasm that can involve any organ of the body. Metastatic tumours involving the testis are extremely rare [1]. The most common primary site are the prostate gland, lung, skin, kidney and colon. The incidence of testicular melanoma vary widely, but are reported to be between 2% and 41 % [1, 2]. Malignant melanoma metastasizing to the testis are known to be among the most aggressive and life-threatening tumours and are usually found as an incidental finding at autopsy than as the presenting metastatic site [3]. The commonest history and clinical presentation are a rapidly growing testicular mass [4].

Unlike the primary disease, testicular metastasis of malignant melanoma occur in a late presenting age varying between 43 to 80 years [2]. Differential diagnosis is of immense importance between primary and secondary neoplasm because the primary disease may be curable [4]. Ultrasound of malignant testicular lesions has a wide range of appearances and usually a histopathological analysis is required [3]. In our particular case, the imaging features were thought to be indicative of the suspected malignancy with their disseminated and infiltrating type.

The prognosis is usually very poor and the treatment will depend on the patient's life expectancy [5]. In our case, the patient died 2 years after the initial ultrasound.

Differential Diagnosis List: Disseminated metastasis of melanoma, Testicular primary neoplasm, Testicular
tuberculosis, Granulomatous orchitis

**Final Diagnosis:** Disseminated metastasis of melanoma

**References:**


**Figure 1**

**Description:** Images of testicular involvement by melanoma metastasis of bilateral testis (a), epididymal involvement (b) and hypervascular feature of the lesions (c). **Origin:** Department of Radiology, Geneva University Hospital
Description: The images show meningeal carcinomatosis (arrowhead) with medullary compression (long arrow) between C7 and D3; note the subcutaneous and muscular locations of metastases as shown in axial T1 post Gadolinium (double arrows). Origin: Department of Radiology, University Hospital of Geneva