Testicular mass with intracerebral lesions: malignancy or infection?

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DESCRIPTION

A 59-year-old previously healthy man of Vietnamese origin presented to the urology one-stop-clinic with a 2-week history of painless left testicular swelling. Examination revealed a non-tender, firm, lobulated testicular lump. Initial ultrasound findings were highly suspicious of a testicular neoplasm (figure 1).

A staging CT revealed bilateral adrenal hypodense lesions (figure 2). In view of the suspicious clinical and imaging findings, the patient underwent a radical orchiectomy.

Histology revealed multiple caseating granulomas with presence of acid-fast bacilli (AFB). A CT-guided adrenal biopsy also demonstrated multiple granulomas. No specimen revealed malignancy. Hence, a diagnosis of tuberculosis (TB) was confirmed.

This was unusual as there was no history of cough, breathlessness, night sweats or weight loss. His chest radiograph was unremarkable. Sputum was negative for AFB and serum negative for HIV.

In the postoperative period, the patient developed isolated left sixth nerve palsy. Gadolinium-enhanced MRI of the brain (figure 3) revealed multiple ring-enhancing lesions. In view of positive histology results from the testis and adrenal gland, these were felt to represent tuberculomas.

His symptoms improved following antituberculous treatment and a repeat MRI of the brain demonstrated significant regression of lesion burden.

Isolated testicular TB without epididymal involvement is extremely uncommon.¹ Testicular TB can masquerade as testicular malignancy.² The adrenal glands are affected in up to 6% (invariably with bilateral involvement and hypoadrenalism), while

Figure 2 Axial contrast-enhanced CT image of the abdomen showing bilateral enlargement of adrenal glands with uniform low attenuation.

central nervous system involvement is seen in approximately 5% of patients with TB.³ Recognition of its varying presentations is vital in the backdrop of a worldwide resurgence of TB.

Learning points

- ▶ Tuberculosis (TB) should be considered in the differential for a painless testicular mass, especially in men over 50 years of age.
- ▶ In these cases, if a full diagnostic workup can identify TB, this may prevent the need for radical orchiectomy and the associated morbidity.
- ▶ Multiple tuberculomata are a cause of ring enhancing brain lesions. Others include pyogenic abscesses, metastases, multiple sclerosis and glioblastoma multiforme.

Figure 1 Ultrasound examination of the left testis. (A) heterogenous lobulated mass replacing most of the testicular parenchyma, (B) focal areas of increased vascularity on Doppler ultrasound.

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Figure 3 Contrast-enhanced MR brain T1-weighted sequence coronal image showing multiple intracerebral ring-enhancing lesions.

Contributors SG performed the ultrasound, gave the idea to formulate the case report, was involved in the bulk of writing and chose and acquired images. JS was involved in script editing, in patient consent and in image quiz questions. KM was involved in script editing and gave advice regarding the overall report.

Competing interests None.

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REFERENCES

- 1 Madeb R, Marshall J, Nativ O, *et al*. Epididymal tuberculosis. *Urology* 2005;65:798.
- 2 Shashi KS, Bhandari G, Rajput P, *et al*. Testicular tuberculosis masquerading as testicular tumor. *Indian J Cancer* 2009;46:250–2.
- 3 Burrill J, Williams CJ, Bain G, *et al*. Tuberculosis. A radiologic review. *Radiographics* 2007;27:1255–73.

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