# Bilateral primary testicular lymphoma

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#### **DESCRIPTION**

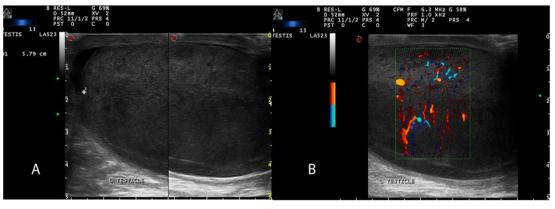
A 56-year-old man presented to his general practitioner with a painless, rapidly growing left testicular mass over a period of 3 months. The patient was a known case of type II diabetes mellitus and hypertension with no relevant surgical history. He did not report any dysuria, fever or weight loss. On examination, there was bilateral diffuse, non-tender testicular enlargement without regional lymphadenopathy.

Sonographic assessment revealed an enlarged left hypoechoic testicle measuring approximately 5 cm in width and 8 cm in length. It demonstrated a diffusely heterogenous infiltrative pattern (figure 1A) and increased internal Doppler flow (figure 1B). The right testicle measured 5 cm × 6 cm with otherwise similar sonographic findings (figure 2A,B). These features are non-specific and the differential diagnosis includes orchitis, primary testicular tumours,

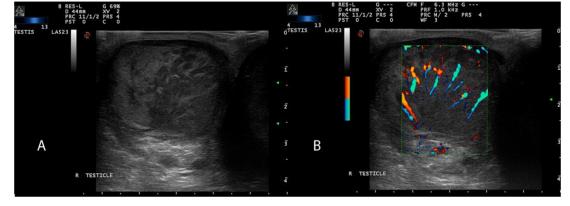
leukaemia, testicular torsion and sarcoidosis. Histology is thus warranted to confirm the diagnosis.

The patient underwent a left inguinal orchidectomy and was diagnosed with diffuse primary large B-cell non-Hodgkin's lymphoma. A right orchidectomy was performed 1 month later. Bone marrow aspirate and trephine biopsy were normal and he was started on a dedicated chemotherapeutic regimen.

Primary testicular non-Hodgkin's lymphoma accounts for 1–2% of all non-Hodgkin's lymphomas and 5% of testicular cancers. It affects older men (mean age 67 years) and the most common histological subtype is diffuse large B-cell lymphoma. Presentation is usually with a unilateral testicular mass and up to 90% have stage I/II disease at diagnosis with bilateral testicular involvement occurring in 35% of cases. Relapse and extranodal infiltration is common.



**Figure 1** (A) B mode ultrasound image demonstrates an enlarged left testicle with a diffusely heterogenous echotexture suggestive of an infiltrative process. (B) Colour Doppler interrogation reveals marked generalised hyperaemia.



**Figure 2** (A) Ultrasound scan of the right testicle demonstrates findings similar to those on the left with diffuse swelling and an abnormal infiltrative intraparenchymal pattern. (B) There is increased internal flow at Doppler interrogation.



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## **Learning points**

- Primary testicular lymphoma is rare accounting for 1% of non-Hodgkin's lymphomas and usually occurs in older men.
- ➤ Treatment for early stage disease comprises of orchidectomy followed by chemotherapy and prophylactic scrotal radiotherapy with/without iliac, para-aortic lymph node radiotherapy.
- ▶ Ultrasound usually reveals a diffuse infiltrative heterogenous process with increased vascularity on Doppler interrogation.
- Clinical data and inputs from a multidisciplinary team are important for effective patient management.

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**Contributors** EV was involved in literature research. EV, RP and RG were involved in manuscript preparation. RG and AM were involved in manuscript editing.

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#### **REFERENCES**

- Zouhair A, Mirimanoff RO, Ozsahin M. Primary testicular lymphoma. Management of Rare Adult Tumours, 2010:255–9.
- 2 Ahmad SS, Idris SF, Follows GA, et al. Primary testicular lymphoma. Clin Oncol 2012;24:358–65.

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