

# An unusual lump in the groin

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A 13-year-old girl presented to the surgical clinic at Ngwelezane Hospital with a 6-year history of a slowly growing, painless mass in her right groin. Her mother associated the growth of this mass with an earlier sharp injury to the child's groin. She had no significant previous medical history.

On examination the child had an 8x6 cm firm mass in the right groin (Fig. 1). It was subcutaneous, and slightly rubbery, smooth and non-tender. It moved little in any direction but did not appear to be deeply fixed. There was a small scar next to the mass, and there was transmitted pulsation but no bruit and it did not empty on pressure. The rest of the examination was unremarkable.

A computed tomography (CT) angiogram of the groin showed the mass blushing with contrast (Fig. 2) and, with the prior history of trauma, it was initially reported as a possible false aneurysm. This was at variance with the clinical findings and raised a diagnostic conundrum.

At operation a smooth mass was found with an associated relatively large feeding vessel (Fig. 3).

Histological examination of the mass showed giant follicular lymph node hyperplasia, otherwise known as Castleman's disease (Fig. 4).

## Discussion

Castleman first reported this rare condition in 1954 and went on to report a series of 13 cases.<sup>1</sup> It is a lymphoproliferative disorder known as angiofollicular or giant lymph node hyperplasia. There are two distinct histological subgroups, a more common hyaline vascular picture (as in our case) with

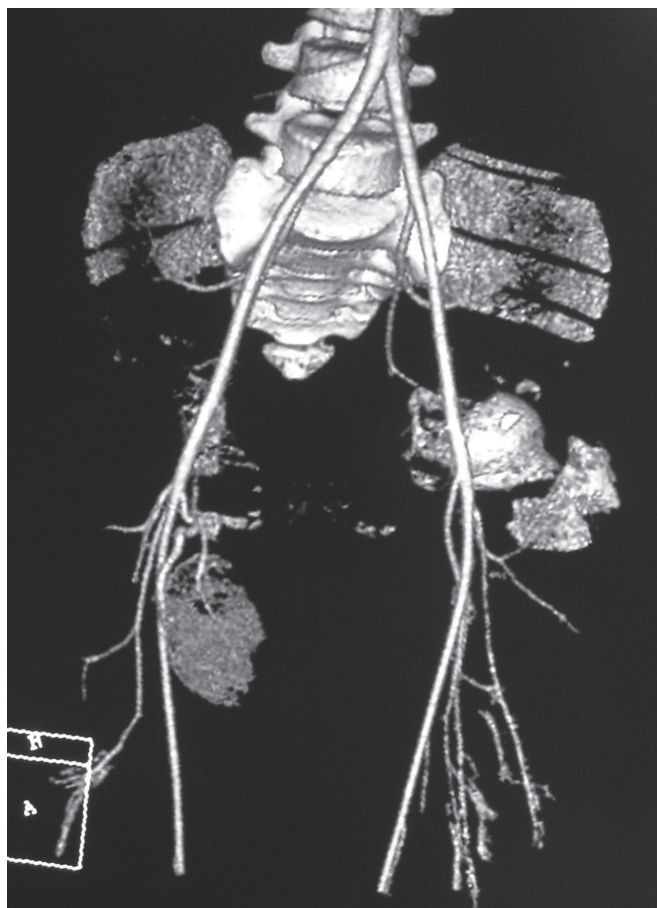


Fig. 2. Digital subtraction CT angiography.



Fig. 1. The lump in the right groin.

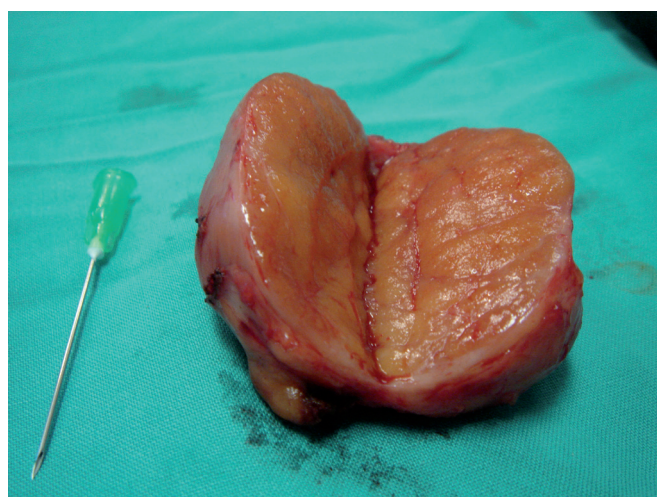
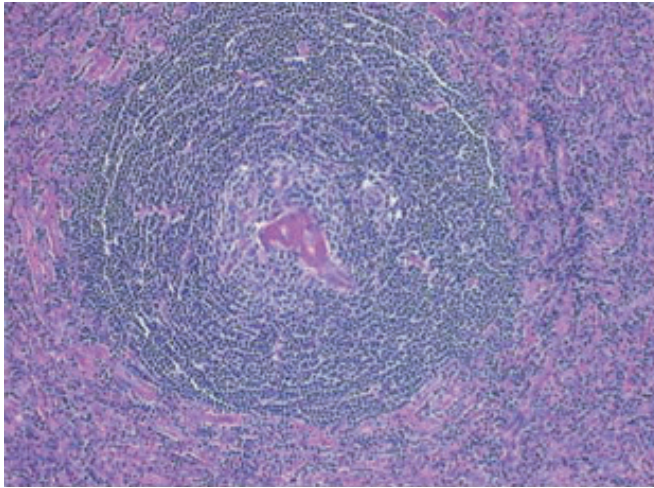


Fig. 3. The excised lump at surgery.



## CASE REPORT



**Fig. 4.** *H and E-stained slide (×10) demonstrating germinal centre with hyaline-vascular changes surrounded by a tight concentric arrangement of lymphocytes.*

lymphoid follicles and penetrating capillaries, which is more often associated with the localised form of the disease, and a plasma cell type characterised by sheets of plasma cells between germinal centres, which is more often associated with the multicentric form of the disease. The multicentric form of the disease is often associated with constitutional symptoms, whereas localised disease as in the case presented is usually

asymptomatic. The most common site of localised disease is mediastinal, neck and abdominal. Castleman's disease, like Kaposi's sarcoma, is usually associated with human herpesvirus 8 infection, which may explain its very vascular nature.<sup>2</sup>

Surgical excision is the treatment of choice for localised disease and is usually curative, while treatment of the multicentric form associated with HIV infection is more difficult. No randomised trials of treatment have been undertaken owing to the rarity of the disease. Etoposide and vinblastine are often used, and starting patients on antiretroviral therapy is recommended.

Our case illustrates a rare cause of a lump in the groin. Malara *et al.* have previously described imaging techniques in Castleman's disease including angiographic appearances.<sup>3</sup> It is important to consider Castleman's disease in the differential diagnosis of vascular masses.

### References

1. Castleman B, Iverson L, Menendez VP. Localized mediastinal lymphoid hyperplasia resembling thymoma. *Cancer* 1956; 9: 822.
2. Soulier J, Grollet L, Oskenhendler E, *et al.* Kaposi's sarcoma-associated herpesvirus-like DNA sequences in multicentric Castleman's disease. *Blood* 1995; 86: 1276-1280.
3. Malara FA, Prince P, Fabiny R. Mesenteric Castleman's disease: ultrasound, computer tomography and angiographic appearance. *Australasian Radiology* 2000; 44: 109-111.