Pack of ice: grey scale sign of testicular torsion

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DESCRIPTION

A 21-year-old man presented to the emergency department because 2 days prior to presentation, he was with pain and enlargement of right scrotum. He had no remarkable clinical history. On physical examination, he was afebrile, oedema and redness of right scrotum. Laboratory tests showed leucocytosis up to 14 000 with a left shift. Ultrasound (US) of the right scrotum (figure 1) showed enlarged, oedematous and heterogeneous testis.

At surgery he was found to have torsion of 360°, the testis had some viable tissues and therefore orchiopexy was performed.

This sonographic finding 'heterogeneous testis' in our case merits the name of 'pack of ice' to its resemblance to the polar pack of ice (figure 2).

The US plays an important role in helping differentiate acute epididymo-orchitis from testicular torsion, which is a surgical emergency. Both manifest with acute pain and swelling.

The role of colour Doppler and power Doppler US in the diagnosis of acute testicular torsion is well established with sensitivity and specificity of 96.8% and 97.9%.¹ On the other hand, grey scale ultrasound findings vary with the duration and degree of rotation of the spermatic cord,² they are non-specific for testicular torsion and often the testis appear normal if the torsion has just occurred.³ In our case, the heterogeneity 'pack of ice' represents varying degrees of ischaemia: the

Figure 2 Picture of pack of ice in Antarctica.

hypoechoic lesions represent infarcted tissue and the hyperechoic parts represent the viable tissue.

Because grey-scale US findings of torsion are often non-specific, the sign of 'pack of ice' when present could be a hallmark of torsion.

Learning points

- ▶ Heterogeneity of the testes in ultrasound was described in the literature as a potential sign of torsion and is an add on to the value of the diagnosis.
- ▶ This sign merits the name of pack of ice.
- ▶ Pack of ice is a sign of testicular torsion.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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Figure 1 Grey scale ultrasound of the right scrotum showing heterogeneity of the scrotum 'pack of ice' sign.

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