Acute spontaneous scrotal haematoma presenting with haemorrhagic shock: a case report

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ABSTRACT

We report an unusual case of acute spontaneous scrotal haematoma presenting with haemorrhagic shock requiring resuscitation.

KEYWORDS

Scrotal haemorrhage – Shock – Spontaneous

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Case history

A 78-year-old man presented to the accident and emergency department with a 12-hour history of sudden onset, rapidly progressive swelling of the scrotum followed by collapse. He was clammy (temperature: 36° Celsius), tachycardic (110/min) and hypotensive (90/60mmHg). There was no history of trauma to the scrotum. The patient was on anticoagulants for a metallic valve replacement but the international normalised ratio (INR) on admission was only 1.08.

A pelvic x-ray did not show a fracture or any other bony pathology but only mild degenerative joint changes. Ultrasonography showed a large haematoma in the scrotum. Post-contrast computed tomography (CT) revealed a large (15.0cm x 12.2cm x 9.7cm) right-sided haematocoele of mixed attenuation consistent with acute haemorrhage and evidence of extravasation of contrast (sign of active bleeding) at the superior pole of the haematocoele (Fig 1A). There was no evidence of any abdominal, pelvic or testicular pathology. The left testicle was displaced further laterally along with displacement of the posterior urethra (Fig 1B). The right testicle could not be visualised on either CT or ultrasonography.

Emergency scrotal exploration was carried out on account of an expanding tense scrotal haematoma (Fig 2A), a significant drop in haemoglobin levels (from 12g/dl to 8g/dl) on serial monitoring over six hours and signs of haemorrhagic shock. There was an extensive haematoma in the layers of the scrotal wall, septum and tunica vaginalis. There was minimal reactive hydrocoele of the tunica with a non-traumatised testis but considerably contused cord structures. A litre of haematoma was evacuated and an inguinal orchidectomy was performed because of the contused cord structures (Fig 2B), thereby removing any pos-

sible or potential source of intrascrotal bleeding. Histology revealed normal cord structures, epididymis and testis with no evidence of malignancy.

Discussion

Acute scrotal haemorrhage with haematoma formation is a rare phenomenon and a non-traumatic scrotal haematoma presenting with haemorrhagic shock is even rarer. Scrotal haemorrhage is characterised by sudden onset of pain, swelling and mass in the scrotum. It has been misdiagnosed as torsion of the testis, a spermatic cord tumour and an incarcerated hernia.^{1–6}

Spontaneous haemorrhage can occur in all organ systems and is frequently the cause of diagnostic difficulties. Scrotal haematomas caused by haemorrhage in the spermatic cord,¹ varicoceles² and adrenals⁵ have been reported in the literature. Within the spermatic cord, bleeding has been associated with Henoch–Schönlein syndrome,⁴ trauma and, occasionally, anticoagulant therapy.⁵ Sometimes other conditions such as lipomas⁶ masquerade as scrotal haematomas. A non-traumatic, acutely expanding scrotal wall haematoma leading to haemorrhagic shock has not been described previously.

This case report also highlights that although CT can be a very useful diagnostic tool, it does have limitations. In this instance, CT suggested a right haematocoele, raising the possibility of testicular rupture, but in fact the clinical findings and histology revealed the cord structures, epididymis and testis on that side to be normal.

Scrotal haematomas do not often need surgical intervention but can be managed conservatively and over time resolve spontaneously but the overwhelming clinical circum-

Figure 1 Computed tomography showing extravasation of contrast at superior aspect of haematocoele (A) and large right scrotal haematoma displacing left testicle (red arrow) and posterior urethra (B)

Figure 2 Tense expanding haematoma exceeding the marked margins (A) and the right testis with contused cord structures (B)

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stances in our case demanded urgent surgical exploration for evacuation of haematoma and to control bleeding.