

Orchitis: don't forget about immunoglobulin A vasculitis

Orquite: a não esquecer a vasculite por imunoglobulina A

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Keypoints

What is known

- IgAV is the most common vasculitis in children.
- Skin involvement with the development of palpable purpuric lesions is usually the first manifestation.
- Although most cases are benign, gastrointestinal bleeding and kidney involvement are important complications to be aware of.

What is added

- Scrotal involvement as the first clinical sign in IgAV is atypical but should be kept in mind.
- It can be misdiagnosed as a testicular torsion, causing the patient to undergo unnecessary surgery, so ultrasound is important to the differential diagnosis.
- Since IgAV is usually a self-limiting condition, its accurate diagnosis is essential to avoid any unnecessary procedures.

A previously healthy seven-year-old boy presented with transient arthralgias and acute scrotal pain following treatment with amoxicillin-clavulanic acid for acute tonsillitis. Over the course of three days, he developed sudden testicular pain and swelling (Fig. 1A), prompting his hospital visit. He denied trauma, fever, gastrointestinal (GI), and urinary symptoms. Following unremarkable blood tests and imaging studies ruling out surgical emergencies, he was discharged with symptomatic treatment. However, during a subsequent evaluation, purpuric lesions appeared (Fig. 1B), leading to the diagnosis of an atypical presentation of immunoglobulin A vasculitis (IgAV). Over the course of three weeks, his clinical manifestations resolved completely without the need for pharmacological intervention.

IgAV, the most prevalent form of systemic vasculitis in children¹, often follows upper respiratory tract infections². Its classic triad includes purpura, arthralgia, and abdominal pain, although renal disease, GI bleeding,

and occasionally scrotal involvement can occur^{1,2}. These manifestations may develop over the course of days to weeks and may vary in their order of presentation². Purpura and arthralgia are usually the presenting symptoms, but this is not always the case². In the absence of the classic purpuric rash, the diagnosis of IgAV may not be obvious. Rarely, orchitis may be the presenting symptom, mimicking testicular torsion since unilateral involvement is more common^{1,3}. Scrotal involvement was first described by Allen et al. in 1960, with subsequent studies reporting a prevalence between 2% and 38%^{3,4}. Clinical findings include pain, tenderness, and swelling of the involved testicle and/or scrotum^{1,5}. The main causes of acute scrotal pain in children are testicular torsion, incarcerated inguinal hernia (both of which are surgical emergencies), torsion of the appendix testis, and epididymitis. Additional causes include trauma, IgAV, and referred pain⁵. Hence, Doppler ultrasonography is crucial, showing

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Figure 1. Findings at physical examination, depicting erythema and swelling of the scrotal wall and left testis, suggesting localized inflammatory process (A) and palpable purpuric skin lesions over the lower limbs, indicative of cutaneous vasculitis (B).

normal results in IgAV but indicating ischemia in cases of torsion⁵.

Male genital involvement as the sole initial sign of IgAV is rare, complicating the diagnostic process^{3,6}. As it usually resolves on its own⁶, accurate diagnosis is crucial to avoid unnecessary procedures.

Author contributions

R. Craveiro de Costa: Analysis or interpretation of data either from patients, research studies, or literature; Final approval of the version to be published. R. Marchante Pita: Analysis or interpretation of data either from patients, research studies, or literature; Final approval of the version to be published. I. Costa Farinha: Drafting the article; Agreement to be accountable for the accuracy or integrity of the work. M. Salgado: Critical review of the article for important intellectual content; Final approval of the version to be published; Agreement to be accountable for the accuracy or integrity of the work.

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Conflicts of interest

None.

Ethical considerations

Protection of humans and animals. The authors declare that no experiments involving humans or animals were conducted for this research.

Confidentiality, informed consent, and ethical approval. The authors have followed their institution's confidentiality protocols, obtained informed consent from patients, and received approval from the Ethics Committee. The SAGER guidelines were followed according to the nature of the study.

Declaration on the use of artificial intelligence. The authors declare that no generative artificial intelligence was used in the writing of this manuscript.

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