Case (739) A rare cause of acute scrotal pain: acute idiopathic scrotal

edema.

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## **CASE PRESENTATION**

A 13-year-old male who came to the emergency department complaining about a fourhour history of scrotal pain. Physical examination revealed an enlarged and erythematous left hemiscrotum. Cremasteric reflex was not clearly present.

Testicular ultrasound study was performed. Scrotal wall was markedly thickened with hypervascularity at Doppler color interrogation. Both testes and epididymi were symmetric in size, had a normal morphology and parenchyma with normal vascular flow at Doppler color interrogation. Mild bilateral hidrocele was observed. No abnormalties of spertmatic cords were found.?

## DISCUSSION

An acute idiopathic scrotal edema (AISE) diagnosis was consistent with imaging findings. AISE is a non-common cause of acute scrotal pain. It is characterised by marked edema of the skin and dartos fascia without involvement of the deeper layers, testes, or epidydimi. Is a self-limiting condition.

The ethiology of AISE is not exactly known. Some studies suggest that it represents an hypersensitivity reaction related to angioneurotic edema.

Swelling and erythema in the scrotal wall is seen as typicial clinical presentation of AISE. Occasionally it can extend to the perineum or inguinal region. In some cases pain is not present.

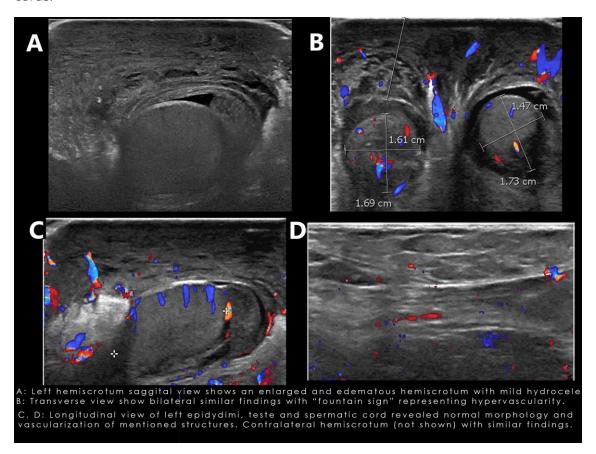
Ultrasound findings consist of thickening and edema of the scrotal wall, hypervascularity of the scrotum, and normal appearance of the testes, epidydimi and spermatic cord. "Fountain-sign"is described as a highly suggestive sign on transverse color Doppler interrogation and it is due increased vascularization of pudendal arteries. A mild hydrocele or enlarged inguinal lymph nodes can be observed an it is considered as reactive with no pathologic significance.

The differential diagnosis of acute scrotal pain also include epididymitis, testicular torsion, torsion of the testicular and epididymal appendages, inguinal hernia, hydrocele and lymphatic malformations of the scrotum. As AISE only requires symptomatic treatment, is important to keep in mind AISE in the differential diagnosis of acute scrotal pain in order to avoid unnecessary surgery exploration.?

## CONCLUSION

To conclude, it is important to identify AISE as a cause of benign acute scrotal pain with a self-limiting clinical course and correctly differentiated from other conditions that could

require emergent surgery such as testicular torsion. Imaging findings are thickened and hypervascvular scrotum, "Fountain sign" with normal testes, epididymis and spermatic cords.



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