

Images

# Acute scrotal idiopathic edema: A misleading erythema

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A previously healthy, nonfebrile 9-year-old boy presented with a 3-hour history of moderately painful right scrotal swelling and erythema. On examination, the right scrotum was swollen with erythema extending to the perineum and right inguinal region (Figure 1). His testes were normal on palpation. The left hemiscrotum was normal. White blood cell count and urinalysis were normal. Ultrasound showed thickening of scrotal skin and subcutaneous tissue. There was markedly increased Doppler color flow seen throughout the scrotal skin. Both testes and epididymis were morphologically normal.

We diagnosed acute idiopathic scrotal edema, a benign self-limited disease mostly found in children under 10 years of age.<sup>1</sup> It is characterized by the rapid development of subcutaneous scrotal edema, erythema, and minimal pain or itchiness, without involvement of testes or epididymis. The swelling and erythema extend to the anterior abdominal wall and perineum.



**Figure 1.** Acute idiopathic scrotal edema showing right scrotal swelling with erythema extending to the perineum and right inguinal region and a normal left scrotum.

The patient usually is afebrile with a normal urinalysis and a normal white blood cell count. Occasionally, eosinophilia is present. This condition usually resolves in 1 to 4 days, and no treatment is required.

The etiology is uncertain. Suggested causes include angioneurotic edema and allergy. Diagnosis is mainly clinical and may help rule out testicular pathologies.<sup>2</sup> Thickening and edema of the scrotal wall, hypervascularity of the scrotum, and normal appearance of the testes are the characteristic ultrasound findings of this condition.<sup>2-4</sup> Physicians should consider this underrecognized diagnosis, because correct diagnosis can prevent unnecessary surgical exploration. If clinical diagnosis and ultrasonography findings are uncertain, scrotal exploration is necessary to exclude testicular torsion.

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