
COMMENTARY

Testis torsion: recent lessons

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The acute scrotum is one of the most common emergency room consultations encountered in pediatric urology. While the differential diagnosis is not very long, management differs markedly based on the diagnosis selected, particularly testis torsion. In the review "Management of acute scrotum in children: a 25-year single center experience on 558 pediatric patients," Pogorelić and colleagues performed a robust analysis of their overall experience with the acute scrotum and testicular torsion over a very long period of time. The incidence of torsion as the cause of acute scrotum, decreased salvage rates of torsion presenting after 6 hours, and increased incidence during the winter months are consistent with the existing literature.¹ A bimodal incidence of testicular torsion was demonstrated with a peak in the more commonly recognized post-pubertal years, along with infants within their first year of life. While the "days of life" data were not available, this may represent cases of either neonatal torsion or children so susceptible to torsion that they present early in life. The increased incidence during cold weather could also explain why higher rates of torsion were found in undescended testicles, with the theory that a higher cremaster muscle tone can predispose to torsion.²

The authors were able to salvage only 72% of the testes explored. The delay in presentation among those patients who suffer testis loss is always disconcerting. While there are several potential reasons for the delay, the lack of knowledge by the majority of parents as to the entity of testicular torsion³ and reticence of adolescents to bring such complaints to the attention of their parents leads to delays in diagnosis and potential testis loss. Even in families where torsion has been seen in other relatives, delay in diagnosis can occur.⁴ The authors calculated a median of 360° (range of 90°-1080°) of twisting when torsion was surgically explored in 142 patients; however, the significance of this finding in relation to time of pain onset was not determined.

Importantly, the authors point out that testicular torsion cases are a common cause of malpractice lawsuits. While the history and physical examination may spur the likely diagnosis of the acute scrotum to be testis torsion, a failure to make the diagnosis commonly leads to legal action. The authors emphasize the importance of scrotal examination in any male patient presenting with an acute abdomen, as undescended testes and referred pain from descended testes can mimic other etiologies, and some practitioners may elect to avoid the more awkward genitourinary evaluation. They found torsion to be associated with a higher number of specific physical exam findings and patient symptoms which have been seen in other series.⁵ The authors did not include sonographic data in their evaluation due to this not being available to them until the last few years. While immediate exploration should be performed when the diagnosis of torsion is suspected, immediate scrotal ultrasound with Doppler upon presentation is recommended for any institution with such readily available resources and where no delay to the operating room would occur. Sonographic findings cannot only help to determine the diagnosis, but may predict testicular prognosis and thus management.⁶ □

References

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