

SPERMATIC CORD HEMATOMA MIMICKING SPERMATIC CORD TORSION IN A NEONATE

ALI SHAMSA, M.D.

From the Department of Urology, Ghaem Medical Center, Mashhad University of Medical Sciences,
Mashhad, I.R. Iran.

ABSTRACT

Acute scrotal swelling is an urgent urologic condition, and its failure in diagnosis is "one of the litigious issues in urologic practice."¹⁻² Although acute scrotal pain is due to spermatic cord torsion in 25-35% of cases, the urologist should either rule it out or treat it immediately.² We operated a case of acute scrotal edema in a two-day-old boy who had, according to clinical results and color Doppler imaging, been diagnosed as having spermatic cord torsion. Operation, however, confirmed that the cause was spermatic cord hematoma, not torsion. *MJIRI, Vol. 14, No. 1, 101-102, 2000*

CASE REPORT

A two-day-old male infant was referred to us as a case of acute scrotal swelling. We encountered dark brown, right hemi-scrotal swelling and a right testicular mass upon examination. He had been born with cephalic presentation after a difficult full term vaginal delivery. An APGAR score of 4 indicated breathing difficulties. It was not revealed to the pediatrician until after the operation that the midwife had slapped the neonate's buttocks in an upside down position to start breathing. Body weight was 3700 g, body temperature 37°C, and pulse rate 135. Urgent color Doppler sonography of the scrotum revealed a vascular area in the right testis (Fig. 1). A diagnosis of spermatic cord torsion was made, but operation confirmed that he had spermatic hematoma, and his testes were normal. He was discharged three days post-operation with little scrotal edema.

DISCUSSION

Spermatic cord hematoma is a rare entity. Its etiology is different, i.e. anticoagulant therapy, retroperitoneal hemorrhage, trauma,³ and rupture of varicocele secondary to abdominal trauma.⁴

Spermatic cord (testicular) torsion is an urgent urologic disease. In this condition time is very important. Differential diagnoses include torsion of epididymal appendage,

epididymitis, orchitis or epididymo-orchitis, and trauma. In neonates, the differential diagnosis of testicular torsion is hydrocele, hemocele, inguinal hernia, infection, infarction, ectopic or adrenal rests, meconium peritonitis and tumor. It is necessary to emphasize that trauma not only does not rule out testicular torsion, but may also initiate testicular torsion.² History, physical exam, and urinalysis can differentiate these conditions.

It is sometimes necessary to use ancillary diagnostic

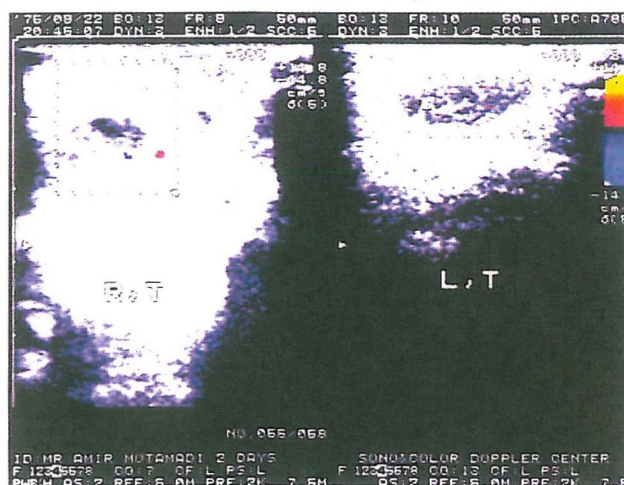


Fig. 1. Color Doppler view of both testes. A vascular area is present in the right testis. The left testis is normal.

tools to help in diagnosing or ruling out testicular torsion. Testicular isotope scan with technetium 99m pertechnetate, if available, is very accurate²; but it involves ionizing radiation. Color Doppler sonography is another tool that gives information about blood flow and intrascrotal anatomy and perfusion. It is said that this technique is highly accurate, noninvasive, and takes less time than isotope scanning to perform with no risk of ionizing radiation. It is more accurate than isotope scan; and when it is available it is the diagnostic study of choice.⁵⁻⁶ But this case study showed that there are false positive results which should be kept in mind.

In conclusion, color Doppler imaging is the most convenient diagnostic tool for differentiating the causes of acute scrotal edema; but as Hollman et al. believe, it has some false positive results.⁵ More experience with CDI will help us to better diagnose and prevent unnecessary operation.

ACKNOWLEDGEMENT

I would like to thank my colleague, Dr. Behrooz Zandi, Radiologist, for his kind assistance, and Mrs. C. Taheri for

typing the manuscript.

REFERENCES

1. Rozansi T, Bloom DA, Colony A: Surgery of the scrotum and testis in children. In: Walsh P, et al, (eds.), Campbell's Urology. 7th ed., Philadelphia: W.B. Saunders, pp. 2193-2209, 1998.
2. Rabinowitz R, Hulbert WC: Acute scrotal swelling. Urologic Clinics of North America 22: 101-105, 1995.
3. McKenney MG, Fletsam R Jr, Glover JL, Villalba M: Spermatic cord hematoma: case report and literature review. Am Surg 62(9): 768-9, 1996.
4. Gordon JN, Aldorotv RA, Stone NN: A spermatic cord hematoma secondary to varicocele rupture from blunt abdominal trauma: a case report and review. J Urol 149(3): 602-3, 1993.
5. Hollman AS, Ingram S, Carachi R, Davis C: Color Doppler imaging of the acute pediatric scrotum. Pediatric Radiology 23: 83-7, 1993.
6. Horstman W, Middleton WD, Melson GL, Siegel BA: Color Doppler US of the scrotum. Radiographics 11: 941-57, 1991.