Title
19-Year-Old with Sudden Onset Left Testicular Pain

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Journal
Clinical Practice and Cases in Emergency Medicine, 0(0)

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Publication Date
2022-10-24

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Peer reviewed
**Case Presentation:** A previously healthy 19-year-old man presented to the emergency department with severe, sudden onset of left testicular pain. Physical exam revealed a left high-riding, horizontally oriented testicle without cremasteric reflex. Point-of-care ultrasound was used to confirm the diagnosis of testicular torsion, as well as to guide manual detorsion, verifying return of blood flow after reduction.

**Discussion:** Testicular torsion is a urologic emergency in which testicular viability is time dependent. Point-of-care ultrasound can be an important and helpful tool to not only confirm suspicion but help guide adequacy of blood flow return after manual detorsion in conjunction with comprehensive ultrasound. [Clin Pract Cases Emerg Med. XXXX;X(X):X–X.]

**Keywords:** point-of-care ultrasound; testicular torsion; testicle pain.
What do we already know about this clinical entity?
Testicular torsion is a time-sensitive emergent condition for which point-of-care ultrasound has emerged as a potential tool for both identification and management.

What is the major impact of the image(s)?
These images illustrate classic ultrasound findings of testicle edema, and absence of Doppler flow and demonstrate return of Doppler flow after attempted detorsion.

How might this improve emergency medicine practice?
Depending on resources, providers should consider point-of-care ultrasound, paired with comprehensive studies, to identify testicular torsion and confirm detorsion.

Classic history and exam features include sudden onset of pain, and a firm, horizontally oriented testicle with absent cremasteric reflex. Conventional teaching invokes early urologic consultation in highly suspicious cases prior to comprehensive ultrasonography.

POCUS has emerged as an important diagnostic tool, with up to 100% sensitivity reported in small-sample studies for both fellowship- and non-fellowship trained emergency physicians. Ultrasonographic features can include the following: an enlarged edematous hypoechoic testicle without Doppler flow; a whirlpool sign (spiral twist of the spermatic cord at the external inguinal ring or scrotal sac); and epidydimal enlargement without hyperemia. This patient underwent bedside manual detorsion with return of flow after approximately two lateral rotations. Comprehensive ultrasound demonstrated a hyperemic testicle consistent with recent detorsion. Depending on availability of resources and timing, POCUS can be an important tool in identifying testicular torsion and helping guide adequacy of reduction in conjunction with comprehensive ultrasonography.
The authors attest that their institution does not require Institutional Review Board approval. Patient consent has been obtained and filed for the publication of this case report. Documentation on file.

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Conflicts of Interest: By the CPC-EM article submission agreement, all authors are required to disclose all affiliations, funding sources and financial or management relationships that could be perceived as potential sources of bias. The authors disclosed none.

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REFERENCES