



**Emergency
Care Institute**
NEW SOUTH WALES



ACI NSW Agency
for Clinical
Innovation

THROWN A CURVEBALL

Learning from our Incidents:
RED FLAGS in the Emergency Department



The case

17yo male presented to ED with 30-minute history of sudden onset right iliac fossa pain and associated vomiting.

At triage, observations:

- *T35C*
- *HR 94/min, regular*
- *BP 128/81*
- *SaO2 97% RA*

The case

Abdomen soft with mild guarding.

Given triage category 4.

What are your differential diagnoses?

The case

30mins after presentation, patient did not answer a call from nursing staff.

Officially documented as “Did not wait for treatment” two hours after presentation.

The case

12 hours after initial presentation, patient re-presented with vomiting, severe right iliac fossa and right testicle pain.

Given triage category 2.

What would you do now?

The case

Reviewed by medical officer, ultrasound arranged and Urology Registrar informed of patient's arrival.

An ultrasound was completed, demonstrating poor right testicular blood flow.

The case

Proceeded to OT for scrotal exploration +/- orchidectomy.

*In theatre, patient found to have **necrotic R testicle with 720 degree torsion.***

Right orchidectomy was performed.

What is the lesson here?

Always examine the scrotum for testicular torsion in the young male with abdominal, groin or penile pain.



Patients with testicular torsion do not always present with the pathognomic history of “acute excruciating scrotal pain of relatively short duration”¹.

Testicular torsion should always be included in differential diagnosis when evaluating lower abdominal pain in young males. The external genital organs should be examined in every child or adolescent with acute abdominal pain².

Presenting with only abdominal or inguinal pain is not an uncommon presentation for testicular torsion, with abdominal pain often preceding and exceeding scrotal pain³. Cass et al.⁴ reported that 12.5% of patients with testicular torsion presented with only abdominal or inguinal pain, while a 25-year review of testicular torsion cases in Bristol found that 6% of cases presented with inguinal pain alone³.

Nausea and vomiting have also been found to have strong positive predictive values for torsion⁵.

Timely assessment and investigations are crucial in ED management of testicular torsion. There is increasing evidence that a significant number of testicles remain viable beyond the commonly-held belief of a 6-hour limit¹. Lewis *et al*⁶ state that a testis should not be presumed unsalvageable if less than 48 hours have elapsed since the onset of symptoms. The most important factors determining testicular salvage after torsion are duration and degree of rotation⁷.

References

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4. Cass A.S., Cass B.P., Veeraraghavan K. *Immediate exploration of the unilateral acute scrotum in young male subjects*. Journal of Urology, 1980. 124 (6): pp. 829-832.
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