# Painful Scrotum

Disclaimer

## Contents



## Red flags

- Strangulated inguinal hernia
- Testicular torsion

# Assessment

1. Consider the ***patient age***

## Patient age

- *Torsion of the spermatic cord is typically seen in patients aged 12 to 20 years, but can occur at any age.*
- *Torsion of a testicular appendage is typically seen in patients aged 6 to 12 years.*
- *Infection is usually seen in either young sexually active adults or elderly patients with voiding problems.*

2. Take the ***history of the pain*** e.g., severity, duration, and speed of onset.

## History of the pain

- *Pain caused by torsion of the cord is usually severe, starts suddenly, and is not relieved by lying still. Patients usually present soon after the onset of pain.*
- *Those with torsion of a testicular appendage have mild pain and often present after the pain has been present for a day or longer.*
- *Pain caused by infection is usually mild to moderate severity, starts gradually, and is relieved by bed rest.*

3. Consider ***associated symptoms***

## Associated symptoms

- If *symptoms include:*
  - *nausea or vomiting, consider torsion.*
  - *fever or rigors, consider epididymo-orchitis.*
  - *abdominal pain, consider testicular torsion.*
  - *parotid swelling, consider mumps orchitis.*
- *Always ask about the patient's sexual history. Urethral discharge or dysuria are often absent in epididymo-orchitis.*

4. Perform ***examination***

## Examination

- *Take temperature:*
  - *Patients with epididymo-orchitis are usually febrile.*
  - *Those with torsion are usually afebrile, but occasionally have low grade fever.*
- *Identify the testis and epididymis:*
  - *In epididymitis, the pain and swelling are mainly in the epididymis.*
  - *In torsion, the testis usually sits high in the scrotum and the normal orientation (epididymis posterior) is lost.*
- *If examination abnormality and acutely painful scrotum of < 24 hours duration, refer for immediate urology referral or admission.*

5. Determine the most likely cause, based on the history and examination.
    - ***Epididymo-orchitis***

### Epididymo-orchitis

- *Gradual onset of unilateral pain, fever, swelling, and inflammation of the epididymis with or without swelling of the testes.*
- *Can be due to infection either from urethra (usually an STI), bladder, or prostate.*
- *Can be associated with recent instrumentation or significant lower urinary tract symptoms.*

- Strangulated inguinal hernia
- ***Torsion of testes***

### Torsion of testes

- *Most common between ages 10 to 25 years, rare in patients aged > 30 years.*
- *Usually presents early with severe abdominal pain of < 12 hours.*
- *Intermittent torsion can cause episodes of severe pain.*
- *May have nausea and vomiting, and clear urine.*
- *Testis initially tender with swelling and erythema developing late.*
- *Absent cremasteric reflex.*
- *Testes may be elevated or lying transversely.*

- ***Torsion of testicular or epididymal appendage***

### Torsion of testicular or epididymal appendage

- *Often hard to differentiate from testicular torsion, typically presents with 1 to 2 days of less severe pain than torsion of testis, with a local area of tenderness anterosuperiorly, that in some cases may appear discoloured (the blue dot sign).*
- *Most common in patients aged 6 to 12 years.*

- Trauma or haematoma – usually obvious as there will be a history of trauma but the swelling may occur several weeks later.

6. Investigations:
    - If torsion is possible, arrange immediate urology referral or admission without community investigation as viability of the testis requires surgery within a few hours.
    - Acute scrotal conditions do not usually require ultrasound in the community setting.
    - For scrotal pain or ache that has been present for days or weeks, an ultrasound performed in the community is appropriate.
    - Arrange MSU.
    - If epididymo-orchitis, arrange an STI check.

## Management

1. Arrange immediate urology referral or admission if:
    - strangulated inguinal hernia.
    - torsion of testes.
    - torsion of testicular or epididymal appendage.

2. If intermittent pain suggestive of intermittent testicular torsion, phone to arrange an urgent urology referral.

3. If epididymo-orchitis:
    - and sexually active, test and ***treat empirically for STI*** – chlamydia or gonorrhoea is the most likely cause.

### Empiric treatment for STI

*Treat with:*

- *either:*
    - *ceftriaxone 500 mg in 2 mL of 1% lignocaine intramuscularly, or*
    - *ceftriaxone 500 mg IV as a single dose*
- *plus, azithromycin 1 g orally as a single dose*
- *plus either:*
    - *doxycycline 100 mg orally twice daily for 14 days, or*
    - *a second dose of azithromycin 1 g orally a week later.*

*For men who engage in insertive anal sex, if poor response to above treatment regimen, consider coliform bacteria as causative pathogen.*

- and not sexually active, ***treat empirically for UTI or prostatitis*** – the more likely cause. rest, analgesia, scrotal support, and NSAIDs are important components of treatment.

### Empiric treatment for UTI or prostatitis

- *Norfloxacin 400 mg or ciprofloxacin 500 mg twice a day for 14 days.*
- *If not settling, may need longer course.*

- review at 48 hours. If no improvement, consider admission for IV antibiotic therapy.

4. If trauma or haematoma, suggest rest, scrotal support, and analgesia. If large haematoma, consider urology referral.

## Referral

- Arrange immediate urology referral or admission if:
    - acutely painful scrotum of < 24 hours duration with any examination abnormality.
    - strangulated inguinal hernia.
    - torsion of testes.
    - torsion of testicular or epididymal appendage.
    - epididymo-orchitis with systemic sepsis.

- If intermittent pain suggestive of intermittent testicular torsion, phone to arrange an urgent urology referral.
- If non-STI-associated epididymo-orchitis in patient with lower urinary tract symptoms, arrange urgent urology referral.

# Information

## For patients

Better Health Channel:

- Epididymitis
- Testicle Injuries and Conditions

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