Painful Scrotum

Disclaimer

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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

Last Reviewed: October 2017

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