

key points

SELECTED BY

Dr Peter Saul

GP, Wrexham and Associate GP Dean for North Wales

Epididymitis and orchitis normally co-exist with isolated epididymitis being more common than an isolated orchitis. Epididymo-orchitis (EO) can be acute (less than six weeks' duration), sub-acute, or chronic if persisting for more than three months and typically presents with testicular pain and swelling. Sexually transmitted infection (STI) is the most common cause in younger men and urinary tract pathogens are the more common culprits in older men. Acute testicular torsion is the most important differential diagnosis of acute testicular pain especially in younger men.

The most common pathogens in the under 35s are *Neisseria gonorrhoeae* and *Chlamydia trachomatis* and *Escherichia coli* is the most common cause of acute epididymitis in the over 35s. Isolated orchitis is rare and tends to occur in prepubertal boys with mumps. Other rarer infective causes of chronic EO include: TB, and fungal and parasitic infections and tend to be associated with HIV and immunosuppression.

Evidence of torsion includes sudden onset unilateral severe testicular pain and scrotal swelling associated with vomiting with an absent cremasteric reflex and an abnormally lying, very tender testis on examination. Examination of a patient with acute EO classically reveals a swollen, tender testis with swelling of the epididymis which starts at the lower pole and moves up towards the head of the epididymis at the upper pole of the testes. UTI in men is very often associated with bladder outflow obstruction. So it is important to examine the abdomen for a palpable bladder and to perform a digital rectal exam to check for benign prostatic hyperplasia, prostate cancer, constipation and prostatitis which can also cause EO.

A urine dip is a sensitive and very useful test for diagnosing UTI and should be done on all patients presenting with symptoms of EO. Urine microscopy, culture and sensitivity can then confirm the urinary bacterium and guide treatment. If there is any suspicion of testicular torsion, the patient should be referred to secondary care immediately as surgery is required within four to six hours. Patients who are in severe pain or systemically unwell should be referred to secondary care for analgesia, intravenous antibiotics and hydration.

Antibiotic treatment should be started before microbiological confirmation of the pathogen. If an STI is suspected the BASHH guidelines recommend a 500 mg intramuscular injection of ceftriaxone. For those with risk factors for *N. gonorrhoeae* infection doxycycline 100 mg bd for two weeks is recommended. If a UTI with an enteric organism is suspected, ciprofloxacin 500 mg bd or ofloxacin 200 mg bd for two weeks is recommended.