

DEFINITION

1. The **epididymis** is a convoluted tube connecting the testis to the vas deferens. Its function is the storage and transport of spermatozoa. Any inflammatory condition affecting this tube is known as **epididymitis**. If the process includes the body of the testis the condition is known as **epididymo-orchitis**.

CLINICAL MANIFESTATIONS

2. Epididymitis may be acute or chronic. It is mostly unilateral but may be bilateral.
3. In the **acute** case the main symptoms are fever, and pain and swelling of the scrotum. The epididymis is swollen and tender and there may be a localised accumulation of fluid (hydrocoele). The inflammation may spread to involve the testis. The clinical picture may resemble torsion of the testis.
4. The acute inflammatory process usually clears within a few weeks without permanent damage; in some cases suppuration develops, with a risk of stenosis of the epididymis and possible sterility if bilateral.
5. In **chronic** cases there is a dull ache in the scrotum, and the epididymis appears as a hard and craggy swelling. The chronic state may follow an acute attack or may be present from the outset.

AETIOLOGY

6. In at least 50% of patients with epididymitis no underlying cause can be identified.
7. **Bacterial infection** is the likeliest cause of **acute** epididymitis, and is usually secondary to infection elsewhere in the genito-urinary tract. The infection reaches the epididymis by spread along the vas deferens, or less commonly via the blood stream. The type of primary infection and the age of the patient determine the likeliest causative bacterium:
 - 7.1. **Chlamydia trachomatis**. This organism is usually sexually transmitted, and most of these patients have demonstrable urethritis. Most patients are adults under about 35.
 - 7.2. **Escherichia coli**. This causes epididymitis secondary to urinary tract infection or to procedures such as catheterisation. It is usually found in males of an older age range than those with chlamydia infection.
 - 7.3. **Neisseria gonorrhoeae**. This occurs less often now than in previous generations, and is thought to account for about 4% of cases of epididymitis.
 - 7.4. **Tuberculosis**. This remains an important cause of **chronic** epididymitis, though less common than in pre-antibiotic times. It is usually secondary to tuberculous infection elsewhere in the genito-urinary tract; haematogenous spread may also occur from remote sites (eg lung).

8. **Viral infection.** Acute inflammation of the testis (acute orchitis) may complicate a number of viral illnesses including mumps, infectious mononucleosis, rubella and Cocksackie virus. The epididymis is not involved initially but may become inflamed by direct spread from the testis.
9. **Trauma.** Direct trauma to the scrotum is not a cause of epididymitis. However the effects of such trauma may be similar to the signs of epididymitis and may be mistaken for it.

CONCLUSION

10. Epididymitis is the name given to any inflammatory condition affecting the epididymis. The commonest identifiable cause is bacterial infection secondary to a focus within the genito-urinary tract, but in at least half of cases the cause is unknown.

REFERENCES

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