Hydrocoele



Ref.no.: MP2109

ERLER ZIMMER
MEDICAL

Hydrocoele

Clinical History

with a history of diabetes and previous myocardial infarctions. On examination bilateral pleural effusion, peripheral pitting oedema and a swollen scrotum were noted. Transillumination of the swelling transmitted red light. Chest x-ray showed radiological features of congestive cardiac failure. He was commenced on appropriate treatment for heart failure but later died during this admission.



Pathology

The specimen is a testis and its coverings, sliced to display the cut surface. The cavity bounded by the visceral and parietal layers of the tunica vaginalis is distended due to the accumulation of serous fluid. This is an example of a hydrocoele, secondary to generalised oedema due to congestive cardiac failure.



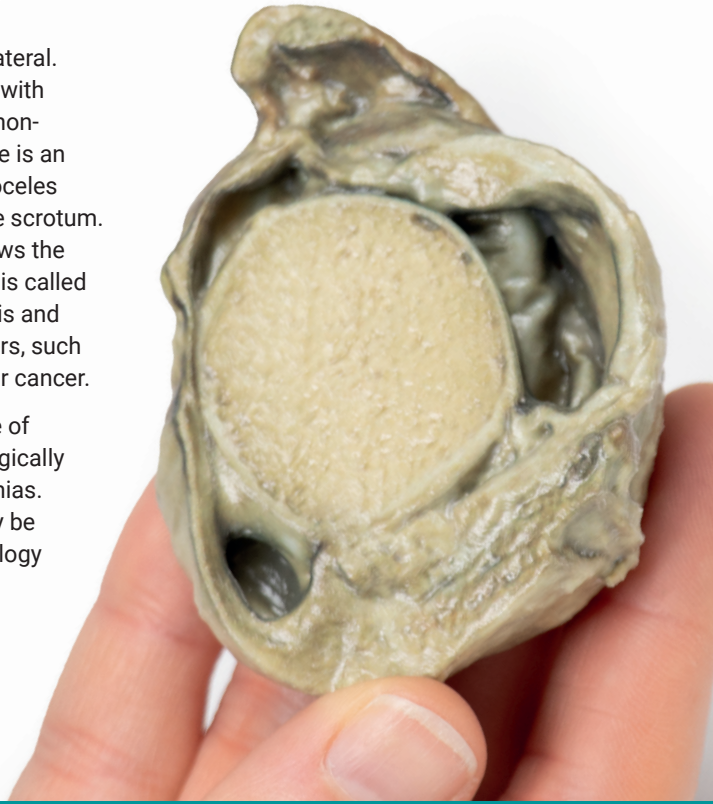
Further Information

A hydrocele is an accumulation of serous fluid between the parietal and visceral layers of the tunica vaginalis around the testes. Hydroceles can be described as communicating with the peritoneal cavity or non-communicating with the peritoneal cavity.

Communicating hydroceles develop as a result of failure of the processus vaginalis to close after the descent of the testes into the scrotum. These may present after birth as a congenital hydrocele or may present later in life due to increase in intra-abdominal pressure, such a cardiac failure in this case. Non-communicating hydroceles are caused by imbalances in fluid secretion and reabsorption e.g. orchitis, epididymitis, testicular tumour, physical trauma (e.g. hernia, testicular torsion) or defective lymphatic drainage (e.g. filariasis, elephantiasis).

Patients present with a scrotal mass. The mass may be uni- or bilateral. Communicating hydroceles may be reducible and increase in size with raised intra-abdominal pressure. Non-communicating are usually non-reducible swellings. The swelling is usually non tender unless there is an underlying infection or torsion causing the hydrocele. Larger hydroceles may be cumbersome and cause erosion and skin infections on the scrotum. Diagnosis can be made on physical examination. Serous fluid allows the passage of light shined through the scrotum when examined: this is called transillumination. Ultrasound may be used to consolidate diagnosis and exclude other testicular pathology. Testicular cancer serum markers, such as alpha fetoprotein and B-HCG, may be taken to exclude testicular cancer.

Many congenital hydroceles resolve spontaneously before the age of 2. If communicating hydroceles persist beyond 2 year they are surgically repaired in order to reduce the risk of developing incarcerated hernias. Surgical repair of communicating hydroceles in older patients may be offered if they are symptomatic. Treatment of the underlying aetiology of reactive hydrocele may cause them to resolve.



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