

Testicular torsion is characterized by an acute onset of generally unilateral, severe testicular or scrotal pain, usually less than 12 hours in duration, which may radiate to the lower abdomen. The pain is constant unless the testicle is torsing and detorsing.

Abnormal Testicular Position

Abnormal Testicular Breakdance Position

Diagnosis is mainly clinical, therefore physical examination in these patients is of great importance. Clinical findings include an edematous and erythematous scrotum. The affected testis is usually tender, swollen, and slightly elevated because of shortening of the cord from twisting, known as a high-riding testis. The testis lie vertically or tranverse depending on the twisting. The cremasteric reflex (elevation of the testis in response to stroking of the upper inner thigh) is absent and normally there is a negative Prehn sign (pain relief with elevation of scrotal contents which would otherwise suggest epididymitis).

Nausea and Vomiting

Vomiting

90% of patients present with nausea and vomiting.

Diagnosis

Doppler Ultrasound of the Scrotum

DJ Dope Ultra Beat

Imaging with Doppler ultrasound of the scrotum is not routinely indicated but may be considered in patients with inconclusive clinical findings. It may show decreased testicular perfusion or twisting of the spermatic cord. However, due to the significant risk of infertility from loss of testicular blood flow, diagnostic workup should never delay the management of suspected testicular torsion.

Treatment

Emergent Surgical Intervention

Emergency surgeon

Prompt surgical exploration is crucial to manage testicular torsion, ideally within 6 hours of symptom onset. Surgical management with detorsion and bilateral orchiopexy (fixation of the testicles) in case of viable testes is essential. In case of non-viable testes, orchiectomy should be performed with contralateral orchiopexy.

Manual Detorsion

Manually Untwisting Testicles

Manual detorsion should be attempted if surgery is not immediately available. This involves grasping the testicle and twisting it medially to laterally (like 'opening a book') to attempt to unwind the twisting. If this fails, an attempt at twisting in the opposite direction can be attempted.

Considerations

Testicular Infarction

Testicular Infarction-fart

The main complication of testicular

torsion is the ischemic process which ends up in a non-viable, infarcted and later necrosed testis, which has to be removed from the scrotal sac. This dramatic outcome has serious reproductive and psychologic consequences.

Infertility in Males

Infertile Male-plant

A testicular torsion ending in a non-viable testis, significantly increases the risk of infertility. Therefore it is mandatory to surgically fix the contralateral testis to the tunica vaginalis in order to prevent a future contralateral testicular torsion.