

## **TESTICULAR TORSION**



Intravaginal torsion: longitudinal rotation of the spermatic cord due to "bell-clapper deformity". This results in the <u>absence of testicular blood flow</u> and is a <u>surgical emergency</u>.



scrotal sac. Often bilateral.

### PRESENTATION

#### Pain

- Sudden onset
- Deep / visceral
- Unilateral
- Testicular / scrotal
- May radiate to inguinal or lower abdominal areas
- Potential prior Hx of intermittent pains

- Nausea
- May have associated trauma
- Peak incidence: 12-16 y/o, unlikely before puberty
- May be awakened from sleep due to pain

#### PHYSICAL EXAM

#### Scrotum

- Early presentation: may be normal
- Late: edematous, indurated, erythematous

#### **Affected testis**

- Tender
- High riding
- Horizontal lie
- Cremasteric reflex absent

#### **DIAGNOSIS**

Primarily a **clinical diagnosis**. History and P/E often sufficient to bring straight into OR.

□ U/A generally not indicated and not needed for diagnosis

#### **Colour Doppler Ultrasound**

If Dx is in question, U/S to determine presence or absence of blood flow:

- Decreased testicular perfusion
- Twisting of spermatic cord

Usefulness limited in small prepubertal testes with ↓baseline flow DO NOT delay surgical management for imaging studies if clinical findings are strongly suggestive.

# TWIST Score

Symptom	Points
Testicular swelling	2
Hard testicle	2
Absent cremasteric reflex	1
Nausea/vomiting	1
High riding testis	1

≤2 Points: 3-4 Points: low risk medium risk

≥5 Points: HIGH risk

Detorsion within	Testis viability
4-6 hours	97-100%
>12 hours	20-61%
>24 hours	0-14%

**GOAL**: **early surgical consultation** with surgeon and in operating room **within 6 hours from onset of symptoms** 

**NEVER** delay surgery on assumption of nonviability based on clinically estimated duration of torsion



#### SURGICAL EXPLORATION

Is the torsed testicle viable?

yes

Surgical detorsion and orchiopexy (fixation)

Orchiectomy (removal)

Contralateral testicle exploration and orchiopexy

bell-clapper often bilateral

- Average recovery time: 1-2 weeks
- One functional testicle is sufficient for normal fertility