

# Scrotal Pain or Swelling

Scope (Staff):	All Emergency Department Clinicians
Scope (Area):	Emergency Department

This document should be read in conjunction with this DISCLAIMER <u>http://kidshealthwa.com/about/disclaimer/</u>

# **Scrotal Pain or Swelling**

Any child with acute scrotal swelling or pain requires urgent assessment to identify or exclude two surgical emergencies: torsion of the testis and incarcerated inguinal hernia.

- Minor scrotal trauma may be reported, but beware of assuming that this is the cause of pain. Obvious severe blunt trauma to the scrotum may result in rupture of the testis or epididymis, and requires **urgent** surgical referral.
- Doppler ultrasound, nuclear scans and blood tests are **not** reliable in confirming/excluding the diagnosis of testicular torsion and often delays definitive treatment.

# Acute Painful Swelling of Scrotum

- Clinical distinction between the conditions below are very difficult, and the policy at PMH is not to spend time on investigations, but to refer for surgical opinion to consider immediate scrotal exploration for both diagnosis and treatment.
- Urgent referral to general surgeon
- Keep child fasted until surgical review

## **Torsion of Testis**

- Sudden onset of testicular pain and swelling
- Pain may refer to abdomen
  - Associated nausea
  - In pre-verbal younger boys, vomiting may predominate the presentation
- Swollen, discoloured scrotum
- Testis extremely tender, +/- high-riding +/- abnormal lie
- Absent cremasteric reflex

### Torsion of Hyatid of Morgagni

- Difficult to distinguish from testicular torsion
- Usually more gradual onset of pain
- Focal tenderness at upper pole of testis
- Necrotic hydatid may be seen through scrotal transillumination (blue dot sign)

#### Epididymoorchitis

- Uncommon in prepubertal boys, unless there is an associated underlying abnormality of the genitourinary tract
- Onset more insidious, with low grade fever, dysuria and vomiting
- Tender, swollen, red hemiscrotum
- May be tender over posteriolateral aspect of testicle
- Usually have associated pyuria, but rarely urethral discharge

#### **Incarcerated Inguinal Hernia**

- Refer to Inguinal Hernia guideline
- Painful, tender inguinoscrotal swelling

• Distinguished from previous three conditions by presence of associated inguinal swelling +/- signs of bowel obstruction

#### Trauma

- Fall astride, sporting injuries
- Tender, swollen testis +/- bruising, haematoma

#### Henoch-Schönlein Purpura

- Refer to Henoch-Schönlein Purpura
- · Rarely, HSP may present with an acute scrotum resembling torsion of the testis
- In this situation there is usually other features of HSP
- Unless the diagnosis of HSP can confidently be made, surgical consultation is indicated

# **Painless Scrotal Swelling**

- The most common cause of painless scrotal swelling in infants is hydrocoele
- Neonatal torsion may present with painless scrotal swelling
- Other causes are reducible inguinal hernia, varicocoele and idiopathic scrotal oedema
- Rare causes include tumour and leukaemia/lymphoma

#### Seek surgical opinion to confirm.

#### Hydrocoele

- Generally seen in neonates and young infants
- Present as a painless swelling of a hemiscrotum (may be bilateral)
- Testes may not be palpable as the hydrocoele surrounds it
- Scrotum transilluminates brightly
- It is possible to get above the swelling on palpation
- Simple hydrocele can be observed for 24 months. Most undergo spontaneous resolution.
- If persisting beyond 24 months of age, a patent process vaginalis may be surgically repaired to reduce the risk

#### **Idiopathic Scrotal Oedema**

- May present acutely, but the child is not distressed
- There is obvious oedema (which may have a purplish discolouration) of the scrotal skin
- $\bullet$  This oedema is uniformly bilateral and may also involve the skin of the penis or perineum
- Testes are not enlarged or tender

# References

• Brenner JS, Aderonke O (2013) Causes of scrotal pain in children and adolescents. UpToDate. Accessed at www.uptodate.com

This document can be made available in alternative formats on request for a person with a disability.

File Path:			
Document Owner:	Dr Meredith Borland HoD, PMH Emergency Department		
Reviewer / Team:	Kids Health WA Guidelines Team		
Date First Issued:	2 July, 2015	Version:	
Last Reviewed:	2 July, 2015	Review Date:	2 July, 2017
Approved by:	Dr Meredith Borland	Date:	2 July, 2015
Endorsed by:	Medical Advisory Committee	Date:	2 July, 2015
Standards Applicable:	NSQHS Standards: 🔍 🥝 🔤		
Printed or persona	lly saved electronic copie uncontrolle		t are considered