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Friday, August 12, 2016

(Room 6)

16:30 - 18:30 WS #52: Paediatric Forum (120mins - not repeated)

Undescended testes

Professor Spencer W Beasley
Paediatric surgeon and paediatric urologist
Children's Specialist Centre
58 Colombo Street

Learning objectives

- Be able to diagnose undescended testis, and distinguish from retractile testes
- Know the timing and management of undescended testes
- Know when to refer boys with testicular conditions to a specialist
- Be able to distinguish an undescended testis from a strangulated hernia
- Be able to diagnose testicular torsion

Disclosures:

No conflict of interest

Except blatant promotion of
text



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Descent of the Testis

Second Edition

John M. Hutson
Jørgen M. Thorup
Spencer W. Beasley



Springer

Undescended versus retractile testes

- Undescended testes do not reside spontaneously in scrotum
- If manipulated into scrotum will not stay there unassisted
- Often smaller than normal contralateral testis
- Should be fully descended by 3 months post-term



What to ask in history

Were they down or noticed at birth?

- Parents' recollections
- Recorded
- Examined and no mention of a problem

Have you ever seen them?

- If so, in which situation/when?
- Has anyone else seen them down?

Ascending testes are never absent at birth, and do not become impalpable



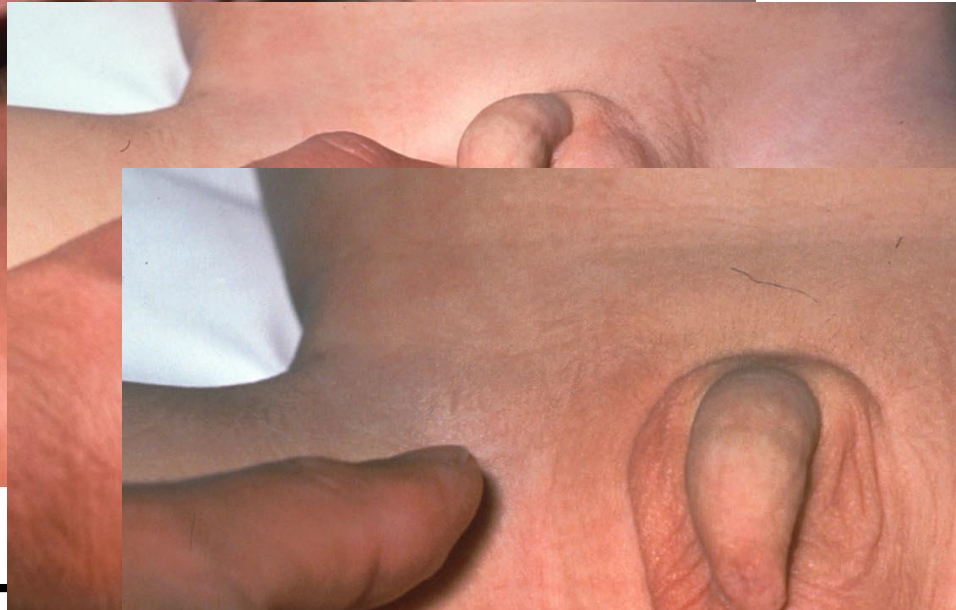
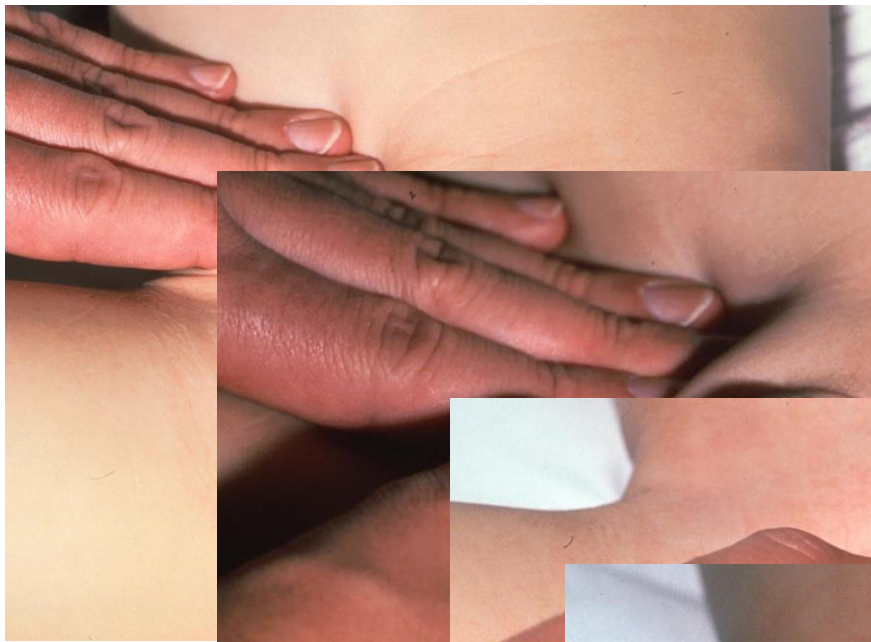
Examination for suspected
undescended testis



Examination for
undescended testis



Examination for
undescended testis



Exa
unde

Strangulated inguinal hernia with undescended testis



Role of imaging

Almost none

- USS: best for palpable and intracanalicular testis, but no indication
- CT: radiation, unnecessary, not used
- MRI: expensive, unnecessary

Surgery for undescended testes

- Optimal age 9-18 months
- Older if present later
- Justification: to maximize fertility potential
- If infant has hernia and co-existing UDT repair fix both at same time
- Impalpable testes: specialist paediatric surgical procedure, often involves initial laparoscopy

The Impalpable Testis

10% of UDT

- 1/3 - in abdomen
- 1/3 - in canal
- 1/3 - absent



Explanations for no testis palpable

Don't assume that because you cannot feel it that it is not there

1. Testis palpable but missed

- Retractable (active cremasteric reflex)
- Child fat
- Testis ectopic

Ectopic testis



Explanations for no testis palpable

2. Testis emergent canalicular

- Requires good examination technique to “milk” it out of the canal



Explanations for no testis palpable

1. Testis palpable but missed
2. Testis emergent canalicular
- 3. Testis truly not palpable**

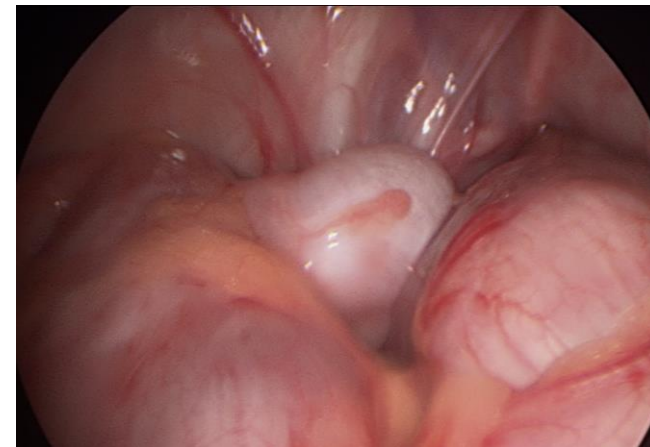
3. Explanations for truly impalpable testis

No testis

- Never been one
- Perinatal torsion with atrophy and involution

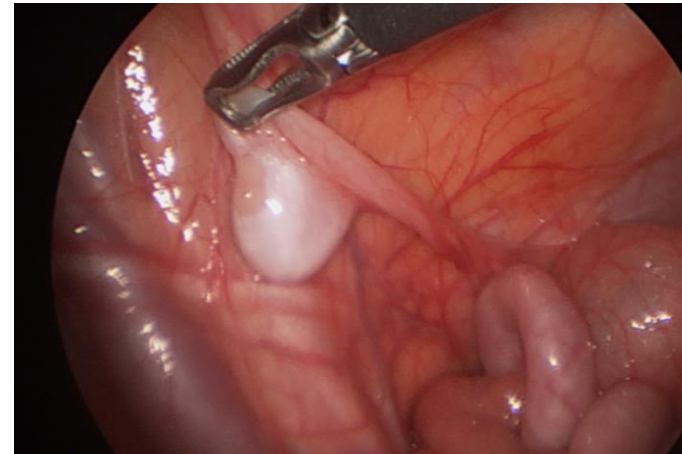
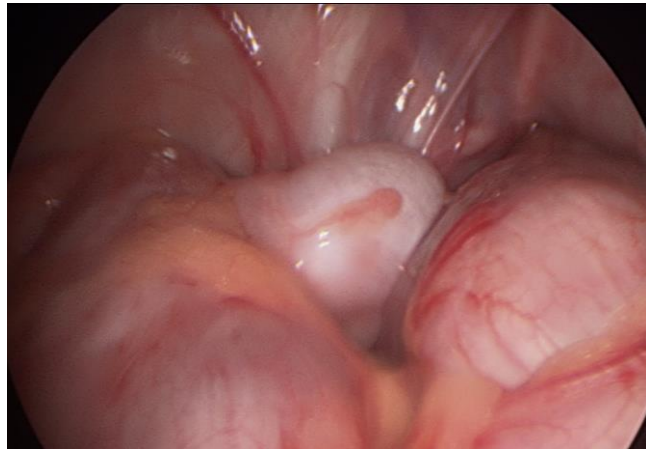
High undescended testis

- Intracanalicular (not demonstrable on examination)
- Intra-abdominal



Surgery for impalpable testis

Initial laparoscopy, and proceed according to operative findings

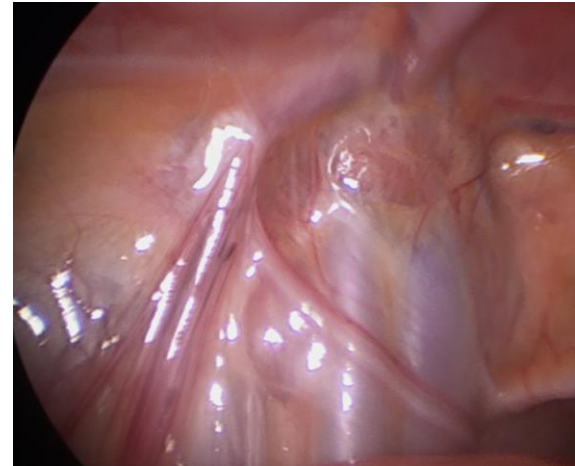


What to look for at laparoscopy

Key: follow vas and vessels to internal ring

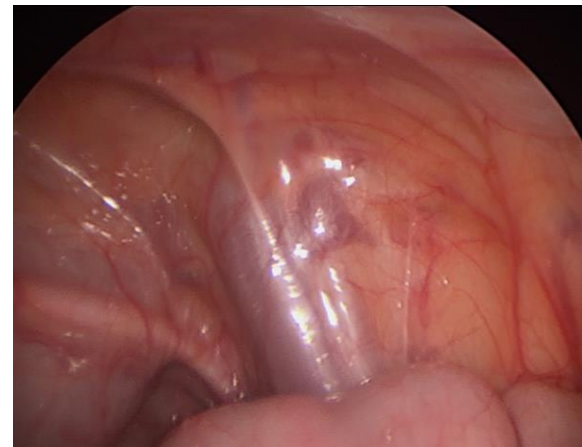
If vas disappears into internal ring:

- Intracanalicular testis
- Perinatal torsion with atrophy



If vas does not enter internal ring:

- High intra-abdominal testis
- Testicular agenesis



Causes of the acutely painful scrotum in children

- Torsion of testis - most important
- Torsion of an appendix testis - most common 80%
- Epididymitis very rare except in first year of life



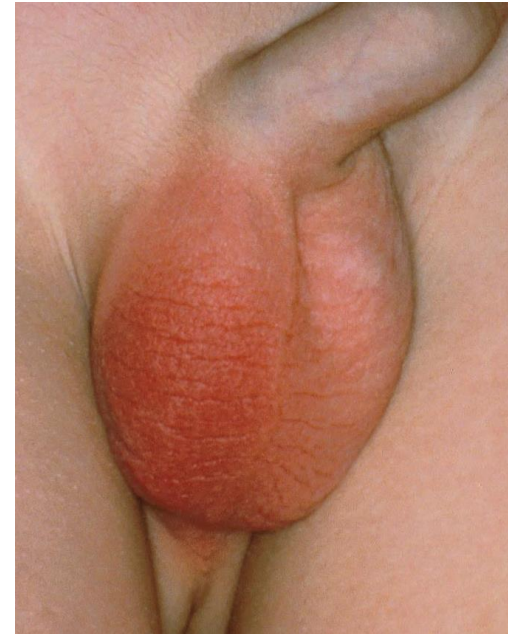
Acutely painful scrotum



- Mumps orchitis does not occur in children
- Epididymitis very rare between 6 months and adolescence
- May be hard to tell difference between torsion of testis and appendix testis

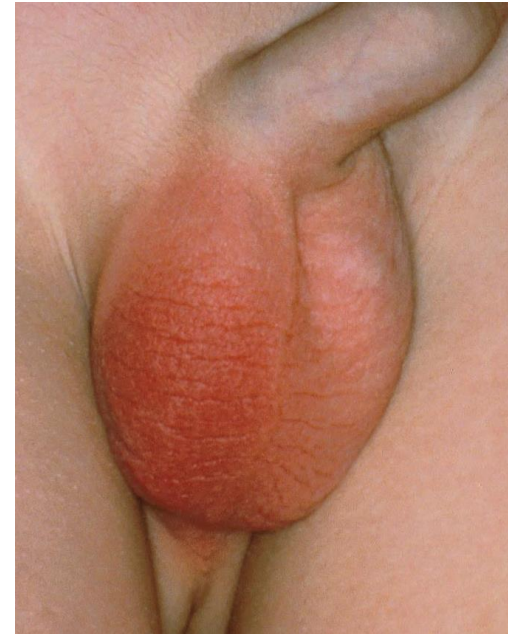
Torsion suspected

- OPERATE
- Torsion of appendix testis most likely diagnosis
- Torsion of testis most important diagnosis: risk - dead testis
- May be difficult to distinguish them clinically
- Virtually no indication for imaging/radiology

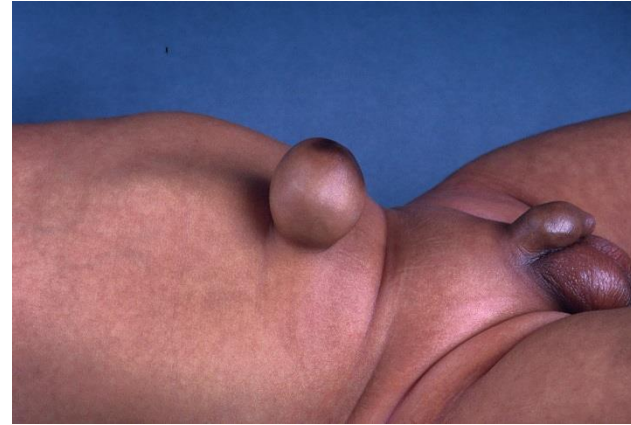


Torsion suspected

- OPERATE
- Torsion of appendix testis most likely diagnosis
- Torsion of testis most important diagnosis: risk - dead testis
- May be difficult to distinguish them clinically
- Virtually no indication for imaging/radiology
- **Any doubt: then operate**



Umbilical hernia



- Harmless and painless during childhood
- Virtually never strangulate
- 90% resolve by 3 years of age
- Treatment: umbilical hernia repair after 3 years
- Day case surgery under GA