Management of the Undescended Testicle
What is an undescended testicle?

- Cryptorchidism is the most common genital abnormality in boys, affecting approximately 30% of baby boys born prematurely and about 4% born at term.

- Absence of one of both testicles from the scrotum
At what age should a UDT be referred to a specialist?

A. 1 month
B. 3 months
C. 6 months
D. 12 months
E. 18 months
Which of the following are true re an UDT:

A. Need to do orchidopexy before age 6 months
B. Improved paternity if orchidopexy is before 7 yrs age vs after
C. UDT may spontaneously descend by age 6 months
D. An UDT has a significantly increased risk of malignancy

1. All of the above
2. B, C, D
3. C, D
4. C
5. D
6. A, D
An 8yrs old has no right testicle on palpation or USSC. What would you advise next?

A. CT of abdomen + pelvis
B. Conservative management. No Investigation until puberty
C. Diagnostic laparoscopy
D. MRI of abdomen + pelvis
E. Surgical exploration of the inguinal canal
What would be the most appropriate action if parents of a 6 month old with a left UDT seek advice?

A. Delayed orchidopexy until puberty
B. Monthly examination of the right testicle
C. Obtain baseline tumour marker levels
D. Orchidopexy before age 12 months
E. Ask if the baby was born premature
Testicular Descent

- **Abdominal**
- **Inguinal**
- **Prescrotal (prepubic)**

**Anatomical Areas**
- Internal inguinal ring
- Inguinal canal
- External inguinal ring
- Normal position
Why do we care?
Why do we care?
Consensus Statements
Examination
Inspection
Inspection
Palpation

True
- abdominal
- inguinal
- suprascrotal

Ectopic
- prepenile
- superficial
- ectopic
- transverse
- scrotal
- femoral
- perineal

cryptorchidism
Imaging
Options

- Orchidopexy
- Laparoscopy
  - 1 stage
  - 2 stage
- Orchidectomy
Orchidopexy
Laparoscopy
Laparoscopy
Laparoscopy

- Left atrophic vessels
- Left closed ring
- Left Vas
Laparoscopy
Exception
Exception

- Retractile testicle
  - Can be manipulated into scrotum
  - Does not immediately ping back out of scrotum on release
  - Differentiate from ascending testicle over serial examinations
Complications
Complications

- Need for re-orchidopexy
Complications
TESTICULAR ATROPHY AND CATCH-UP GROWTH RATES FOLLOWING PAEDIATRIC PRIMARY ORCHIDOPEXY: A PROSPECTIVE STUDY

Aim

- To evaluate prospectively the outcome of primary paediatric orchidopexy at a tertiary UK centre in relation to testicular atrophy.
Methods

- A prospective database was established from August 2008 – December 2012
- Assessment of intra-operative and post-operative testicular volumes by palpation
- Comparison to the contralateral testicle
Methods

- Testicular atrophy was defined as:
  \[ \geq 50\% \text{ loss of testicular volume} \]

- Patients were excluded for incomplete data, need for bilateral or staged orchidopexy, and follow-up less than six months
## Results

<table>
<thead>
<tr>
<th>Classification of undescended testicle</th>
<th>Age at operation in years (median)</th>
<th>Length of follow up in months (median)</th>
<th>Atrophy Rate</th>
<th>Volume increase (25%)</th>
<th>Volume increase (25-50%)</th>
<th>Volume increase (50-75%)</th>
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<tbody>
<tr>
<td>Overall (n=234)</td>
<td>2.2</td>
<td>6.9</td>
<td>6 (2.6%)</td>
<td>39 (16.7%)</td>
<td>7 (3.0%)</td>
<td>1 (0.4%)</td>
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<td>1.8</td>
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Complications

- 3% incidence
- Keloid, wound infection, haematoma
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Conclusion

- We report an overall 2.6% risk of undergoing testicular atrophy.
- Approximately 20% of cases demonstrated testicular catch-up growth.
- Although assessing testicular volume by palpation alone is not ideal, the results are consistent with recent studies.
- No statistical difference between consultant or trainee as primary surgeon
- This data may help with counselling for orchidopexy.