STANDARD TREATMENT WORKFLOW (STW)

Undescended Testis (Cryptorchidism)

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CITATION
DOI: https://doi.org/10.56450/JEFI.2024.v2i1Suppl.076
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Agrawala S, et al.: Undescended Testis (Cryptorchidism)

Standard Treatment Workflow (STW)

UNDESCENDED TESTIS (CRYPTORCHIDISM)

ICD-10-Q5.3.9

WHAT IS CRYPTOCHIDISM?
- Absence of one or both testis in the scrotum.
- Cryptorchidism can be:
  - True undescended: testis arrested along normal line of descent.
  - Ectopic testis: arrested outside normal line of descent.

WHAT TO ASK?
- Testis palpable anywhere along normal line of descent?
- Testis palpable outside the normal line of descent?
- Any history of hormonally induced testis descent or treatment?
- Testis not palpable (impossible undescended testis)?

RED FLAGS REQUIRING SPECIAL MANAGEMENT
- Undescended testis with torsion - red, painful testis in the undescended testis.
- Undescended testis with large inguinal hernia.
- Possibility of Disorders of Sexual Differentiation (DSD) to be considered if:
  - Bilateral undescended testis with hypoplasia.
  - Unilateral undescended testis with severe hypoplasia.

ESSENTIAL INVESTIGATIONS
- No investigation is essential for diagnosis or localisation of testis.
- Routine blood and urine investigations are required for anaesthetic fitness.

OPTIONAL INVESTIGATIONS
- Hormonal studies (HCG stimulation test, pituitary stalk test) in cases suspected to be DSD.
- Laparoscopy in impalpable UDT can be combined with therapeutic procedure.

SPECIAL SITUATIONS
- USG, Genitalia, gonadotropins, spermatozoid count.
- Undescended testis with torsion USG Doppler.

MANAGEMENT

Guiding Principle: Diagnosis made at birth and reconfirmed at 3 and 6 months. Further management if descent has not occurred.

MANAGEMENT AT
- District hospital
- Tertiary care hospital

UNDESCENDED TESTIS MANAGEMENT FLOWCHART

<table>
<thead>
<tr>
<th>Undescended testis</th>
<th>Palpable</th>
<th>Impalpable tests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Red Flags - S/DQ</td>
<td>Torsion - SCD</td>
</tr>
<tr>
<td></td>
<td>Palpate under GA</td>
<td>Still Impalpable</td>
</tr>
<tr>
<td></td>
<td>Laparoscopy/open Orchiopexy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Open orchiopexy at 1 year by Paediatric Surgeon</td>
<td></td>
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<tr>
<td>Radiological, genetic and hormonal investigations</td>
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<td></td>
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<tr>
<td>Procedure with orchiopexy or orchidectomy and other procedures as per local guidelines</td>
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</tbody>
</table>

| Surgery (orchiopexy) between 6 months - 1 year (monthly 1st year) |
| Palpable testis - open orchiopexy under general anaesthesia (may be done as day care procedure) |

| Follow up |
| Tertiary care hospital |
| Open orchiopexy, Discharge same day/next day |
| Laparoscopic orchiopexy, Discharge within 48 hours |
| Follow up |
| Further F/U |
| 1st week local and haematological examination |
| 1st, 3rd month: ensure testis position in scrotum and normal size |
| Annual examination - ensure position and adequate growth |
| Adult FU for fertility status |

ABBREVIATIONS
- UDT: Undescended testis
- DSD: Disorders of sexual differentiation
- F/U: Follow up
- GA: General anaesthesia

KEEP A HIGH Threshold for INVASIVE PROCEDURES

The STW has been compiled by national experts in the field of paediatric urology and has been peer reviewed for accuracy. These guidelines are advisory and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on his/her specific condition, as decided by the treating physician. Stakeholders are advised to follow the guidelines. The Ministry for Health, Family Welfare and Child Development of India can be contacted for more information. (MoHFW www.india.gov.in) for more information.

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