



PROCEDURE	
Testes examination	
<b>Scope (Staff):</b>	Community health staff
<b>Scope (Area):</b>	CACH, WACHS

### Aim

To identify deviations in testicular descent for timely management and referral.

### Risk

If undescended testes (UDT) are not detected and treated effectively, there is a risk of long term sequelae including subfertility, infertility or testicular malignancy.

### Background

Undescended testes (UDT), also referred to as cryptorchidism, is defined as the failure of the testes, or testis, to descend into the scrotum. The migration of testes involves the trans-abdominal passage of the testes through the inguinal canal between 25-30 weeks gestation and the descent to the scrotum at about the time of birth. This process occurs under the influence of the androgen hormone.<sup>1</sup> Spontaneous testicular descent occurs most commonly prior to 6 months of age.<sup>2</sup>

UDT may be congenital or acquired. In cases of acquired UDT, the child initially has testes situated in the scrotum but one or both become extra-scrotal.<sup>1</sup> The incidence of UDT is estimated at 1-6% in full term infants and greater than 30% in preterm infants.<sup>2-4</sup> Unilateral UDT is four times more common than bilateral UDT and is the most common congenital malformation in boys.<sup>3</sup>

Risk factors for congenital UDT include<sup>2, 3, 5</sup>:

- Prematurity
- Low birth weight for gestational age
- Family history
- Maternal alcohol and/or tobacco use
- Placental insufficiency.<sup>5</sup>

The definitive management for UDTs is surgical intervention (orchidopexy) between 6 months (corrected age) and 18 months of age for congenital UDTs, or as diagnosed for acquired UDT.<sup>3, 6</sup> Refer to Appendix A for information on different conditions of the testes.

### Key Points

- Physical examination to be performed by staff with appropriate training.

- UDT may be:
  - palpable elsewhere in the normal descending pathway, either incompletely descended or retractile
  - palpable outside the descending pathway (ectopic)
  - non-palpable
  - absent
  - unilateral or bilateral.
- Community health staff are to observe infection control procedures and perform hand hygiene in accordance with WA Health guidelines at all appropriate stages of the procedure.

## Process

Steps	Additional Information
<p><b>1. Informed consent</b></p> <ul style="list-style-type: none"> <li>• Explain the procedure to the parent/caregiver (and the child where relevant).</li> <li>• Obtain verbal consent to proceed.</li> </ul>	<p>Allow sufficient time for discussion of parent concerns.</p> <p>For parents with children aged 2 years, enquire about testicular descent.</p> <p>If parental concerns and consent has been given proceed with examination.</p> <p>If the parent has concerns but does not consent to the examination refer to medical practitioner.</p>
<p><b>2. Positioning<sup>7</sup></b></p> <ul style="list-style-type: none"> <li>• Lay the infant on his back with legs in frog-leg position.</li> <li>• Older children can be examined lying, standing or squatting or sitting cross-legged.</li> </ul>	<p>Frog-leg position with foot soles together may help to locate retractile testes.</p> <p>A squatting position also helps the cremaster muscle to relax enabling the testes to drop into the scrotum.</p>
<p><b>3. Inspection<sup>7</sup></b></p> <ul style="list-style-type: none"> <li>• Perform visual inspection of the scrotum. Observe for size, colour and position.</li> </ul>	<p>A normal scrotum appears loose and wrinkled.</p> <p>If the scrotum is small and flat, the testis or testes are not in scrotal sac.</p> <p>An enlarged scrotum may indicate a hydrocele, inguinal hernia or enlarged testes.</p>
<p><b>4. Palpation<sup>7</sup></b></p> <ul style="list-style-type: none"> <li>• Palpate the scrotum on each side to assess the position and mobility of each testis.</li> <li>• Begin above the scrotum at the</li> </ul>	<p>The examiner must have warm hands and a gentle touch.</p> <p>A normally descended testis should be located well down in the scrotum.</p> <p>A retractile testis may stay in the scrotum for a short time once down, only</p>

Steps	Additional Information
<p>superior anterior iliac crest.</p> <ul style="list-style-type: none"> <li>• Apply consistent downward pressure while moving the hand obliquely towards the symphysis.</li> <li>• Maintain a downward pressure towards the sacrum and use the opposite hand to palpate the scrotum.</li> <li>• Maintain the position of the testis in the scrotum for a minute, so that the cremaster muscle becomes fatigued.</li> <li>• Release the testis - if it remains in place for a short time but then retracts, it is considered retractile.</li> <li>• A truly ascended testis that cannot be manipulated into the scrotum <b>requires prompt medical review.</b></li> </ul>	<p>disappearing when the cremasteric reflex is activated.</p> <p>The cremasteric reflex is activated by lightly stroking the superior and medial part of the thigh.</p> <p>The normal response is an immediate contraction of the cremaster muscle that pulls up the testis ipsilaterally.</p> <p>An undescended testis will return to the undescended position after being released.</p>

### Documentation

Community health staff will document relevant findings accordingly to local processes.

### Referral pathway

Refer to a medical practitioner for:

- Infants with absent or incompletely descended testes after 4 months of age<sup>3, 6, 8</sup>
- Any child where previously descended testes become either high-scrotal, retractile, or non-palpable<sup>2, 8</sup>
- Scrotal hydrocele in a child, which has enlarged or remains unresolved by 6 to 9 months of age<sup>2, 7</sup>
- **An urgent surgical referral** should be initiated for any child presenting with acute scrotal pain, with or without swelling or abdominal pain.<sup>2, 7</sup>

Related internal policies, procedures and guidelines
<p>The following documents can be accessed in the Community Health Manual via the <a href="#">HealthPoint</a> link or the <a href="#">Internet</a> link</p>
<p>Child health services</p>
<p>Physical assessment 0-4 years</p>
<p>Universal contacts</p>

**Useful external resources**

Brief overview on UDT from Royal Melbourne Children's Hospital  
[http://www.rch.org.au/kidsinfo/fact\\_sheets/undescended\\_testes/](http://www.rch.org.au/kidsinfo/fact_sheets/undescended_testes/)

Facts and diagrams on descent of testes  
<http://www.embryology.ch/anglais/ugenital/diffmorpho04.html>

## Appendix A - Conditions of the testes<sup>1</sup>

### Acquired Undescended Testis

Acquired undescended testis is thought to be due to failure of the spermatic cord to elongate as the child grows. The testis may appear to have been present in a stable scrotal position at birth, but re-ascends in early or middle childhood (1- 10 years). As the cord is too short it pulls the testis back up into the groin. The testis may be located in the high-scrotal area initially, but eventually become inguinal.

- The re-ascended testis is not able to be manipulated back into a stable scrotal position, immediately retracting out of the scrotum after manipulation, often with associated pain – this is a distinguishing feature from retractile testes.
- A truly ascended testis that cannot be manipulated into the scrotum requires referral for medical review.

### Retractile Testes

A retractile testis will remain intrascrotal after being manipulated into the scrotum until the cremasteric reflex is stimulated, whereas an UDT will not.

Retractile testes are more prone to ascent; therefore the child should have an annual testicular examination.

### Congenital hydrocele

Congenital hydrocele is a collection of fluid in the scrotum. It presents as a painless, enlarged scrotum, which may resolve spontaneously but may require repair if it persists beyond 18 to 24 months of age.

### Testicular torsion

Testicular torsion is a rotation of the testis with resultant strangulation of its blood supply. It most common occurs in infancy and between 12 and 18 years of age, and is most commonly found in the left testis. Symptoms include acute scrotal pain and swelling, nausea and vomiting, followed by scrotal oedema.

Treatment for acute scrotal pain involves an **urgent surgical review**.

### Bilateral non-palpable testes

Infants presenting with bilateral non-palpable testes require additional assessment for disorders of sexual development. Infants who appear to be phenotypically male but have bilateral non-palpable gonads should be investigated for congenital adrenal hyperplasia.

References	
1.	Hack W, Goede J, van der Voort-Doedens L, Meijer R. Acquired undescended testis: putting the pieces together. International journal of andrology. 2012;35(1): 41-5.
2.	Kurz D. Current Management of Undescended Testes. Pediatric Urology. 2016;2(1):43-5.
3.	Fantasia J, Aidlen J, Lathrop W, Ellsworth P. Undescended Testes: A Clinical and Surgical Review. Urol Nurs. 2015;35(3):117-26.
4.	Radmayr C, Dogan HS, Hoebeke P, Kocvara R, Nijman R, Silay, et al. Management of undescended testes: European Association of Urology/European Society for Paediatric Urology Guidelines.[Erratum appears in J Pediatr Urol. 2017 Apr;13(2):239; PMID: 28341426]. Journal of pediatric urology. 2016;12(6):335-43.
5.	Brouwers MM, de Bruijne LM, de Gier RP, Zielhuis GA, Feitz WF, Roeleveld N. Risk factors for undescended testis. Journal of pediatric urology. 2012;8(1):59-66.
6.	Bajaj M, Upadhyay V. Age at referral for undescended testes: has anything changed in a decade? N Z Med J. 2017;130(1457):45-9.
7.	Duderstadt K. Pediatric physical examination: an illustrated handbook: Elsevier Health Sciences; 2013.
8.	Kolon TF, Herndon CA, Baker LA, Baskin LS, Baxter CG, Cheng EY, et al. Evaluation and treatment of cryptorchidism: AUA guideline. The Journal of urology. 2014;192(2):337-45.

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