Clinical Guideline

UNDESCENDED TESTES

SETTING	Primary and Secondary Healthcare Institutions in the Western Cape which refer to Red Cross War Memorial Children's Hospital (RCWMCH)
FOR STAFF	Primary and Secondary Doctors and Nurses who refer patients to RCWMCH
PATIENTS	Patients under the age of 13 years old with undescended testes

Introduction

Undescended testes present in boys when they undergo their newborn head-to-toe examination or later in life when the parents notice that the scrotum is empty on one (or both) sides.

There are many reasons why this can be: It may be that the testis failed to descend and is somewhere along the path it would have followed. It may be that the testis is in the wrong place somewhere else in the groin or that the testis has been damaged and has disappeared. In very rare cases, undescended testes may be the presenting problem in a patient with differences of sexual differentiation.

Undescended testes are never an emergency unless they are acutely (suddenly and severely) painful which might be a sign that they have undergone torsion (twisted). This is a relatively rare occurrence but is an emergency requiring urgent referral.

Although it is not an emergency, it is important that the patient is reviewed at the paediatric surgery outpatients department. If the testis is undescended the surgeon will do an operation (sometimes more than one) called an orchidopexy. This is to find the testis and then put it in the scrotum if possible. This is important for 3 reasons: appearance, fertility and to allow for cancer screening when the child is an adult.

Background

When a foetus is developing, their gonads start out inside the abdomen. In most boys the testes will come down before the baby is born and go into the scrotum. The passageway through which the testes exit the abdomen is called the inguinal canal.

The descent of the testes is controlled by several different factors, including hormones, abdominal pressure, traction and foetal growth patterns.

Males with undescended testes have a higher risk than normal of developing cancer in the testis between the age of 20 - 40 years. This risk is more than normal, but not very high (less than baseline female risk of breast cancer for instance). This is because the baseline risk of cancer in testes is relatedly low to start with.

By undergoing the orchidopexy the patient will be able to notice if their testis develops a growth and then can present for assessment. These patients present early, and this means the cancer is easier to cure than if they had presented after the cancer had already spread.

Important details on history

Was the patient born premature?

Did the patient have an abdominal wall defect at birth, such as gastroschisis?
Was the testis ever seen in the scrotum before?
Is there a history of previous severe testicular pain or trauma?
Does the testis move in and out of the scrotum at times?
Has the patient had any previous surgery in the groin before?

Important details on examination

Does the penis appear normal?
- Is the foreskin normal?
- Is the urethral meatus on the tip of the penis?
- Is the shape of the penis normal

Does the scrotum appear normal?
- Is the scrotum symmetrical?
- Is the scrotum bifid?
- Is the scrotum very small?

Palpate for the testes:
- Using warm hands, gently smooth the fingers down from the inguinal ring towards the scrotum and feel for the testes. Sometimes you will only feel a small “popping” feeling as your fingers pass over the testis.
- If you can milk the testis down into the scrotum, then let is go and see if it remains in the scrotum or if it immediately goes back up.

Describe your findings according to the following table:

Clinical Description	Clinical findings
Impalpable testis	Cannot feel the testis in the groin or scrotum
Undescended testis	Testes are felt in the groin, but cannot be milked down into the scrotum
Retractile testis	Testes are found in the groin, but then can be milked down into the scrotum. The testis stays in the scrotum after 5 seconds of traction
Normal descended testes	Testes palpated in the scrotum at the start of the examination
Possible difference of sexual differentiation	Abnormal penis appearance or abnormal scrotum appearance with undescended or impalpable testes

Management and referral pathways

Undescended testes are never an emergency unless there is sudden onset, severe pain in the groin. If there is pain, consider the possibility of torsion and contact the paediatric surgeon on call to arrange urgent referral.

Clinical Description	Referral guideline
Impalpable testis	Non-urgent surgery OPD appointment after the age of 6 months.
Undescended testis	
Retractile testis	Reassure the patient that this is normal. Reassess the testes in 12 months. If the testis is undescended when you reassess, then make a non-urgent surgery OPD appointment.
Normally descended testes	Reassure the patient and their parents. No referral is needed.
Possible difference of sexual differentiation	Referral to surgery OPD for assessment

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