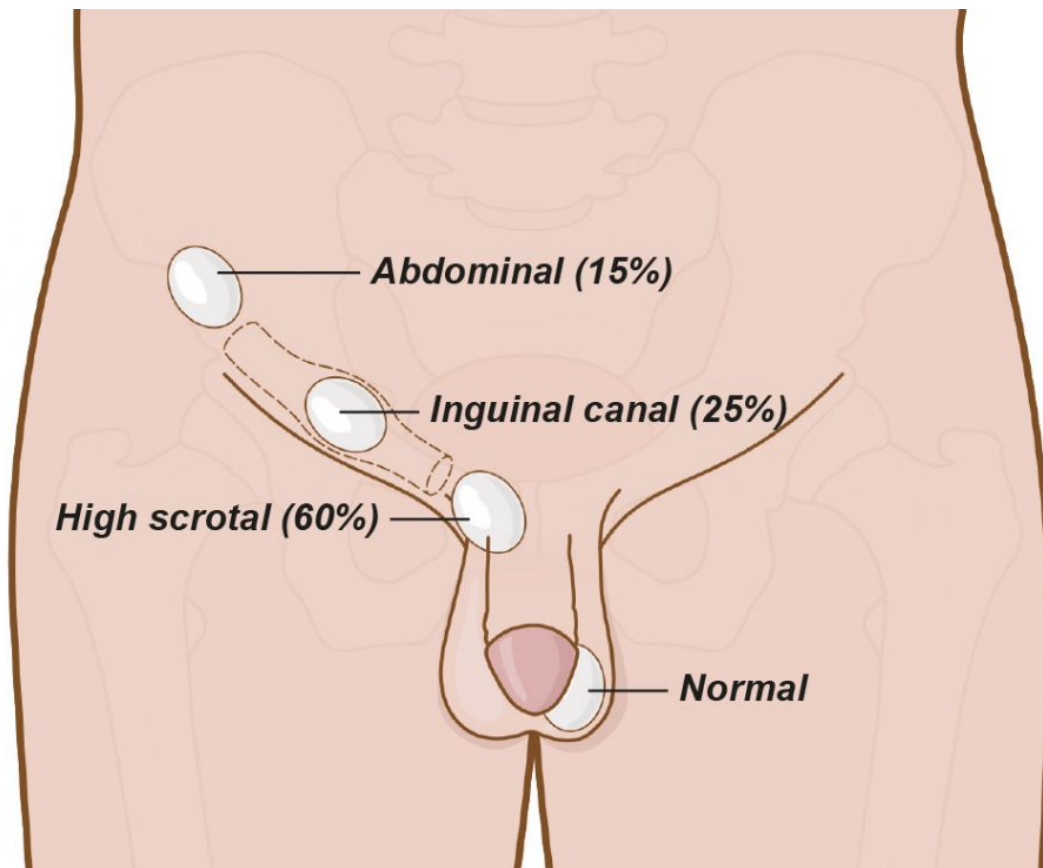

Undescended Testis

A basic information for the parents

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What Are Undescended Testicles?

Undescended testis (or testicle) is a condition where one or both of the testes do not appear in its normal place in the scrotal sac. It is easy for the parents to observe and notice the difference.

What is the underlying cause of undescended Testis?

Normal testes develop inside the abdomen and before birth descend down to the scrotal sac shortly before birth. Sometimes this does not happen. Usually it involves one side but can occur on both the sides. It is more common if the baby was born premature. A undescended testis can move down in the first six months of life in almost half of the boys who were diagnosed at birth. If they don't descend then it is important to get treatment. The primary job of testes is to make male hormone (testosterone) and make sperms. The sperm making function can get seriously affected if testis is not brought down in to scrotal sac.

What stops the testis to descend?

These boys are otherwise normal. The only known strong associations are prematurity or hereditary where father of the child also had same problem. The exact cause is not known.

How Is an Undescended Testis Diagnosed?

In children who have the opportunity of detailed examination at birth, undescended testis can be easily diagnosed. However in Pakistan many children are diagnosed later. Mostly observant parents bring their child with the observation of only one visible testis in the scrotal sac. Many a times it is an incidental finding at examination by a doctor for some other presentation. Most undescended testes can be palpated outside the abdomen by a paediatric surgeon (85%). However there is a small percentage of patients (15%) with undescended testis where it is not palpable outside the abdomen. In some of these the testis may be actually inside the abdomen..

Some boys may have **retractile testes**. This is a normal condition in which the testicles can appear to be outside of the scrotum from time to time, raising the concern of an undescended testicle. The testes usually are in the scrotum, but sometimes temporarily pull back up into the groin. A retractile testicle doesn't require treatment because it's a normal condition. But a paediatric specialist might need to do an exam to distinguish it from an undescended testicle. This may then require an annual serial examination until puberty to make sure that testis always stays down in scrotum.

Are there any radiological investigations necessary?

As discussed earlier, in majority of boys it is easy to diagnose undescended testis simply by palpating by hand. In a small percentage where testis is not palpable outside the abdomen, some paediatricians have routinely recommended ultrasound examination. However ultrasound can easily miss the presence of a testis inside abdomen. There are some more physicians who recommend CT scan, which again is not 100% sensitive. Although MRI

scan has a better sensitivity, it needs general anaesthetic for a young child. Therefore it is not practical.

The best test in this case is laparoscopic exploration. Although this is an operation but the advantage is that both diagnosis and treatment can both be performed in the same sitting.

How Are Undescended Testicles Treated?

If a testicle has not descended on its own by the time a baby is 6 months old, he should be checked by a paediatric surgeon and have treatment if the condition is confirmed. This usually involves surgically repositioning the testicle into the scrotum.

Treatment is necessary for several reasons:

- Being up in the body means the undescended testicle is at a higher temperature than usual (testicles need to be below regular body temperature to produce sperm). The higher temperature may harm the testicle's development and its ability to make sperm in the future. This could possibly lead to infertility (the inability to father children).
- Undescended testis is more prone to trauma while playing and contact sports as it is located in a more fixed position.
- An undescended testicle is more likely to form a tumour than a normally descended testicle.
- The undescended testicle may be more at risk for injury or testicular torsion.
- An asymmetrical or empty scrotum can cause a boy worry and embarrassment.
- Sometimes boys with undescended testicles develop inguinal hernias.

If surgery is done, it's likely to be an **orchidopexy**. In this procedure, a small cut is made in the groin and the testicle is brought down into the scrotum, then fixed in place. Doctors usually do this as a day case surgery (with no overnight stay in the hospital), and most boys recover fully within a week.

In circumstances where testis is not palpable outside the abdomen, a laparoscopic surgery may be required to locate the testis in the abdomen. Many parents come with an ultrasound or CT of the abdomen which has been recommended by another doctor. These tests are mostly not required because many a times they even misguide. The best test which is both for final diagnosis and also treatment is to proceed with Laparoscopic surgery. In this surgery a camera is inserted inside the abdomen to locate testis while child is asleep. If testis is found it is Brough down and fixed inn the scrotum in single stage or two stages.

Most doctors believe that boys who've had a single undescended testicle will have normal fertility and testicular function as adults, while those who've had two undescended testicles might be more likely to have reduced fertility.

Boys who've had undescended testicles should have regular follow-up appointments with a urologist to make sure that no problems develop.

All boys - even those whose testicles have properly descended - should learn how to do a **testicular self-exam** when they're teens so that they can find any lumps or bumps that might be early signs of medical problems.