Undescended Testicle

Occasionally, a young boy is found to have an undescended testicle. This sometimes requires correction by surgery.

Follow-up

Your urologist will see your son several weeks after his surgery to ensure that healing is well underway. Your child will then be discharged to the care of his family doctor or pediatrician. It is important to remember that he is still at risk of developing a testicular tumour despite a successful operation. Your family doctor or pediatrician will check your son’s testicles periodically, and, when he is a teenager, testicular self-examination should be instructed.

Surgery is successful in over 90% of cases. In some cases, damage to the testicular blood supply may cause the testicle to shrink or fail to grow. Occasionally, a testicle brought into the scrotum surgically will slide back up into the groin, usually in the first few weeks after the operation. A second procedure may be necessary to correct this problem.

In some cases, hormone treatment may be appropriate. HCG, given by injection into the buttocks, stimulates the production of male sex hormone (testosterone) promoting testicular descent. HCG may also cause reversible hormone-related effects such as growth of the penis and downy pubic hair, more frequent erections and scrotal skin reddening. Several different injection schedules may be used, but, usually, six to eight injections given over three to four weeks are required to bring about testicular descent. This therapy is only occasionally effective.
Your child has been found to have an undescended testicle (cryptorchidism). This condition affects about 4% of newborn boys. The testicles, where male hormones and sperm are produced, begin their development in the abdomen next to the kidneys. With growth before birth, they normally descend through the groin into the scrotal sac.

**Associated Problems**

Infertility (difficulty fathering children) has been associated with undescended testicles. The risk of infertility is minimal if only one testicle is undescended and more significant if both are affected. Fertility potential may be improved when the testicle is brought down to the scrotum before two years of age.

Undescended testicles are often associated with hernias, which may allow bowel to move from the abdomen through the groin into the scrotum. These hernias are routinely repaired when the testicle is brought into the scrotum surgically.

An undescended testicle increases the risk of testicular tumour development after puberty. These rare cancers are more common in men who have had an undescended testicle. Bringing the testicle into the scrotum does not decrease the risk of cancer developing, but it does allow its earlier detection by examination of the testicle. The earlier such a tumour is detected, the greater the chance of cure.

An undescended testicle is more prone to injury, particularly when located in the groin. Finally, the normal appearance of two testicles in the scrotum may be important for a boy’s self-esteem, particularly at puberty. For all of these reasons, it is important that an undescended testicle be corrected.

**Investigations**

When physical examination locates an undescended testicle, usually in the groin, no other investigation is normally necessary. If the testicle cannot be located, it must be determined whether or not it is present. In some boys, a testicle does not develop at all; in others, it may shrivel up before birth often due to a disruption of its blood supply.

Ultrasound examination may identify a testicle in the groin or abdomen. In some cases, the abdominal cavity is inspected with a visualizing instrument passed through the navel under anesthesia (laparoscopy) to localize a testicle undetectable by other means.

**Treatment**

Surgical correction of an undescended testicle (orchiopexy) is usually recommended before two years of age. This outpatient operation requires a general anesthetic (the child is put to sleep). A small incision is made in the groin and the testicle is freed up from its tethering attachments. Occasionally, the testicle is found to be poorly developed in which case it is best removed. An artificial testicle may be placed in the scrotum, if appropriate, to produce a more normal appearance.

When encountered, a hernia is repaired. The surgeon then makes a small incision in the scrotal sac to make room for the testicle. After the testicle is placed in the scrotum, the two incisions are closed with dissolving sutures. A dressing may be placed over the incisions, and your child will be discharged from hospital once he recovers from the anesthetic.