

Undescended Testicles Patient Guide



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Kenny's Story



When our son Kenny K* was born, we were so happy! He was absolutely beautiful. We were in love at first sight. He had all of his fingers and toes and looked like an angel. However, at three months old, we noticed that his genitals didn't look right. We took him to his doctor and the pediatrician said he had an undescended testicle.

Kenny's pediatrician referred us to a specialist called "a pediatric urologist." His urologist said an undescended testicle is a common problem and could easily be fixed. Everything else with Kenny was normal. After talking about all of our options, Kenny's urologist recommended that he have surgery.

After the surgery, Kenny didn't have any other issues. He is growing up fine and doesn't even know he had an issue. We were nervous that he may not be able to have children or have other concerns, but his urologist told us everything should be fine – and it is.

As parents, it can be tough watching your kid deal with any medical issue. But, Kenny had a good doctor that talked us through all of his options and made us feel comfortable with the choice we made. Kenny is growing up and doing anything a normal three-year-old does!

**Name has been changed*

Introduction: When Your Baby is Born

It's incredibly exciting to see your newly born baby boy! But if you learn that his **genitals*** don't look quite right, it can be frightening. Your health care provider may be the first to notice that your newborn's **testicles** may have not developed fully before birth. His **scrotal sac/scrotum** (the skin sac behind the penis) may be empty.

Before birth, a baby boy's testicles develop and form inside his **abdomen**. They then move down (descend) into the scrotum. If one or both of his testicles don't descend the way they should, they are called "undescended". The medical term is **cryptorchidism**. It is more common for one testicle to be undescended rather than both. Usually, the other testicle is still there, it's just higher up than it should be.

Undescended testicle is most often seen with boys who are born prematurely. Rarely, it's found in a full term baby. About 3 to 4 out of 100 babies are born this way.

The good news is that an **undescended testicle** will often drop down as it should after a few months. If this doesn't happen naturally by 6 months, it's important to get treatment. Testicles that remain up high may be damaged. This could affect fertility later or lead to other medical problems.

In this guide we provide information to help you figure out what to do if your baby boy is born with an undescended testicle.



How Does the Male Reproductive System Form?

Male Reproductive Organs

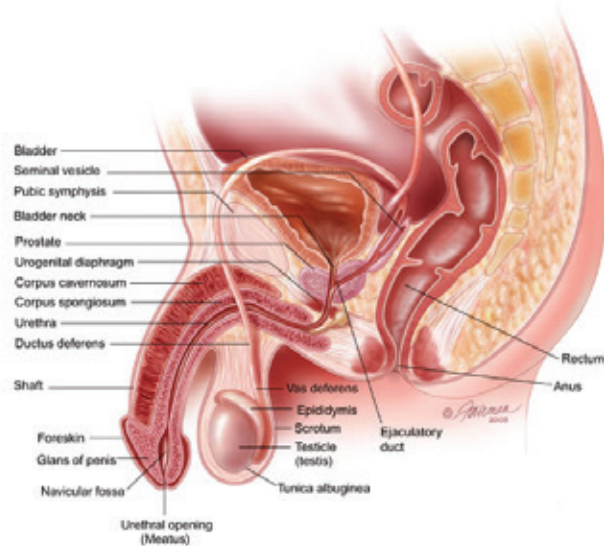


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The **male reproductive system** includes the penis, testicles and scrotum. These organs make, store, and transport **sperm**. A sperm is a very tiny male sex cell. The sperm cell is needed to fertilize a woman's egg (ova) to make a baby.

- The penis includes the glans (the head), the corona (the ridge between the head and the shaft) and the shaft (the long part of the penis). The **urethra** is the opening at the tip.
- The testicles are two organs that hang in a pouch-like skin sac (the scrotum) below the penis. These organs are where sperm and testosterone (the male sex hormone) are made.
- The **scrotum** is designed to keep the testicles cool, away from the body. This is because sperm can't grow at body temperature. Sperm start growing in the testicles and gain movement and maturity while travelling through the **epididymis**.

Normal testicles form early in a baby boy's growth, while still in the **womb**. They form in the lower belly (abdomen) and drop into the scrotum toward the end of pregnancy. Normal testicles attach themselves with stretchable tissue in the bottom of the scrotum. This is controlled by the baby's normal hormones.

What are Undescended Testicles

"Undescended testicle" is the term used when one or both of the testicles fail to drop into the scrotum. Your baby's pediatrician can find this during a routine exam. The scrotum looks and feels empty.

About 3 or 4 out of 100 newborn boys (up to 21 out of 100 premature newborns) have this defect. Only 10 out of 100 infants who have undescended testicles have them on both sides. Most of the time there are no other symptoms besides an empty scrotum.

Testicles that don't drop into the scrotum won't work normally. The scrotum keeps the testicles cool to keep sperm healthy. While the testicles are in the abdomen, they are warmer than they should be. If this goes on too long, the sperm will not mature well. This can lead to infertility. This is a greater risk when both testicles remain high in the body.

Undescended testicles are also linked to a higher risk of:

- Testicular cancer in adulthood
- Testicular torsion (twisting of the chord that brings blood to the testis)
- Inguinal hernia (a hernia that develops near the groin)

Luckily, about half of the boys born this way will continue to grow normally. The testicle will drop into place on its own. This often happens within the first 6 months of life. If they don't drop after 6 months, treatment may be needed.

It's important to note that this is different from **retractile testicles**. With retractile testicles, the testes are in the scrotum but they also move into the **groin**. They can pull up with a normal reflex to cold or fear. But they can also be moved by hand from the groin to the scrotum. A pediatric urologist can tell the difference with a physical exam.

If undescended testicles appear in an older child, it is called an **ascending testicle**. This happens because the testicle isn't attached in the scrotum. It is noticed as the child grows. Often, these boys are known to have a retractile testicle first. Later, they are diagnosed with an ascending testicle. About 1 out of 5 of these cases are found in older boys. These testicles need surgery to "fix" them into the scrotum. Sperm won't mature if the testicle stays undescended.

Only testicles that are truly undescended need treatment. To assure good genital health, boys should be checked during their yearly exam.

What Causes This Problem?

Why the testicles fail to drop is not clear. It could be because the baby is born early and the testicles didn't fully develop. Or, the testicles drop but miss the scrotum. They may end up next to the scrotum instead (**ectopic testicles**). Or, the

baby's hormones can't stimulate the testicles the way they should.

No studies have shown that this is from something the mother did or ate during pregnancy. Some studies have found that genetics can play a role, passed down from a male relative.

GET DIAGNOSED

An exam by a pediatrician or **pediatric urologist** will confirm that one or both testicles are not in the scrotum. The doctor may or may not be able to feel the testicle in the abdominal wall.

A testicle that cannot be felt in an exam is called "nonpalpable." **Nonpalpable testicles** may be in the abdomen (undescended), very small (atrophic) or not there at all.

It's important to find out if a testicle is there, but hasn't dropped. An undescended testicle left inside the abdomen could form a **tumor** later in life. Such a tumor might not be noticed until it becomes large or causes symptoms.

Although an ultrasound may be able to show if the testicles are present, it is not a perfect test. Because it is not a perfect test, it is not always used to find an undescended testicles.



GET TREATED

If your baby's testicle doesn't drop into place by six months, you should take your baby to see a specialist. A pediatric urologist can talk with you about surgery. Surgery is the main form of treatment when testicles don't drop naturally. Drugs and hormone treatments have not been found to help.

The timing for surgery will depend on:

- Your child's age
- His general health
- His medical history
- His ability to tolerate anesthesia and surgery
- Your own comfort level and treatment goals

The main surgery to move testicles into place is called an **orchiopexy**. Overall, this surgery is very successful (98 out of 100 cases are successful). The surgery involves a small cut in the groin area. This is done to find the testicles. Another small cut is done near the scrotum to put the testicles in the correct place. This surgery usually takes 45 minutes. In some cases, depending on the location of the testicles, a completely scrotal approach may be possible.

To start, the child is given general **anesthesia**. Almost always, the child can go home the same day as surgery. Normal activities can be done within one to two days.

Pediatric urologists are experts in **laparoscopic surgery**. Laparoscopy is surgery done through a small cut with a special, tiny camera and tools to work inside your child's body. This surgery is done when your doctor cannot feel the testicles.

With laparoscopy, a cut about one inch long is made in the groin area. Most often, no scar is seen later. The testicle(s) found in the abdomen are freed from nearby tissue. They can then be moved into the scrotum. There, the testicle is stitched into place.

If there is a **hernia** (a bulging of an organ or tissue through an abnormal opening), it is fixed at the same time. In some cases, the testicle is too high for this simple surgery. Other methods (and sometimes even two surgeries) may be needed to fully correct the issue.

AFTER TREATMENT

After treatment, most children grow normally and in good health. They can become fertile like all healthy men. The testicle often grows to regular size in the scrotum. However, if the testicle wasn't normal to start with, it may never grow the right way. Other times, sperm won't grow in a testicle that couldn't develop in the scrotum.

When the child becomes a teen, he should have routine physical exams. He should also learn to do testicular self-exams every month. This precautionary care is used to look for signs of testicular cancer. Even though the risk is small for testicular cancer, it is still important to do self-exams.

GLOSSARY

ABDOMEN

Also known as the belly. It is the part of the body that holds all of the organs between the chest and the pelvis.

ANESTHESIA

Medicine that is used to help patients fall asleep and feel no pain in all or parts of their body. This is used for surgery or other medical tests.

ASCENDING TESTICLE

The testicle can look like it's in the normal position, but it isn't attached and can move up. If the testicle remains descended, surgery is needed. This is found in older boys.

CRYPTORCHIDISM (cryp•or•chi•dism)

See Undescended Testicle.

ECTOPIC TESTICLES:

The testicles drop but miss the scrotum. They may end up next to the scrotum instead.

EPIDIDYMIS

A coiled tube behind each teste where sperm travels as it matures.

GENITALS

The outer sexual organs - the penis, scrotum and testicles of a male.

GROIN

The area between the abdomen and the thigh area on either side of the body.

HERNIA

A bulging of an organ or tissue through an abnormal opening.

LAPAROSCOPIC SURGERY

A procedure where tiny plastic tubes are placed through a small cut in the patient for surgery. With these tubes, a tiny camera allows the surgeon to see inside the patient to perform surgery.

MALE REPRODUCTIVE SYSTEM

The male reproductive organs are the penis, scrotum and testicles. They produce, maintain and transport sperm (the male reproductive cells) and protective fluid (semen).

NONPALPABLE TESTICLES

A testicle that cannot be felt in a physical exam. It may be in the abdomen (undescended), very small ("atrophic") or not there at all.

ORCHIOPEXY

The main surgery to move testes into place and attach them in the scrotal sac.

PEDIATRIC UROLOGIST

A surgeon who is expertly trained to diagnose, treat and manage children's urinary tract and genital problems.

RETRACTILE TESTICLES

An issue where the testicle drops into the scrotum, but it doesn't stay in place. It can move up and down with reflexes. This may be noticed after six months of age.

SCROTAL SAC/SCROTUM

The scrotum (or scrotal sac) is a part of the male sex organs that is located behind and below the penis. It is the small sac that holds and protects the testicles, blood vessels and part of the spermatic cord.

SPERM

Male reproductive cells made in the testicles that can fertilize a female's egg.

TESTICLES

Two organs that hang in a pouch-like skin sac (the scrotum) below the penis. This is where sperm and testosterone (the male sex hormone) are made. They are also called testes.

TUMOR

An abnormal mass of tissue or growth cells.

UNDESCENDED TESTES

The term used when one or both of the testes fail to drop into the scrotum.

URETHRA

The tube connecting the urinary bladder to the genitals (in both men and women). In the penis, it is the tube that carries urine and sperm out of the body.

WOMB

A hollow, pear-shaped organ located in a woman's lower abdomen where a baby develops before it is born. It is medically called the uterus.

QUESTIONS TO ASK YOUR DOCTOR

- Should we wait to treat my baby?
- Are there any side effects from surgery?
- Is there anything we should do after surgery to care for my baby?
- Will my baby have any problems in the future if he's treated now?
- Will my baby be fertile and able to have children of his own?
- Can we do anything to lower my baby's risk for testicular cancer in the future?

Notes

ABOUT THE UROLOGY CARE FOUNDATION

The Urology Care Foundation is the world's leading urologic Foundation - and the official Foundation of the American Urological Association. We provide information for those actively managing their urologic health and those ready to make healthy changes in their lives. Our information is based on the American Urological Association resources and is reviewed by medical experts.

To learn more about different urologic issues visit **UrologyHealth.org/UrologicConditions**. Go to **UrologyHealth.org/FindAUrologist** to find a doctor near you.

This information is not a tool for self-diagnosis or a substitute for professional medical advice. It is not to be used or relied on for that purpose. Please talk to your urologist or health care provider about your health concerns. Always consult a health care provider before you start or stop any treatments, including medications.

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