What is a hydrocele?

A hydrocele is the accumulation of fluid on one or both sides of the scrotum. The fluid enters the scrotum from the abdominal cavity through a small opening or protrusion on either side of the pubic area known as the inguinal canal. The opening or protrusion is also known as a hernia. It usually seals itself off in the first few months of life, but occasionally persists and enlarges. If fluid is present in the scrotum beyond 6 to 9 months of life, it is most likely due to a persistent contact with the abdomen. (In the post-adolescent boy, fluid in the scrotum is usually due to spontaneous fluid accumulation and not from the abdomen.)

If the hernia is large enough, abdominal contents such as bowel or its covering (the fatty omentum) can enter. This is usually seen as a bulge in the groin and may be painful. You can sometimes reduce a hernia by calming the child and gently rubbing the bulge. On the other hand, if the bulge does not reduce in size or if it becomes red and increasingly swollen, or if there is fever and vomiting, you should immediately contact your doctor.
A hydrocele that persists beyond infancy is not likely to resolve and may gradually get larger. Thus it is advisable to correct the problem early on. A hernia should be repaired when discovered, regardless of the age of the child. The operation for both hydrocele and hernia are similar.

How do you repair a hydrocele or hernia?

The outpatient operation requires general anesthesia, which is administered by an anesthesiologist especially trained to care for children. A mask will be placed over your child’s nose and mouth and anesthesia delivered. Once asleep, a breathing tube is inserted into or just above the windpipe. An I.V. is inserted into the back of the hand, forearm, or foot, and then your child is turned on his side. The anesthesiologist will inject local anesthesia between two lower vertebrae into a space just outside the spine (caudal block). This injection will greatly enhance your son’s post-operative recovery, allowing him to awaken without pain and remain pain-free for several hours.

A small incision is made just above the pubic bone on one or both sides to locate and separate the fluid-filled sac from the spermatic cord (the tube that carries sperm and blood to the testis). Because there is a small chance that a hernia or hydrocele may also be present on the other side, a small scope may be inserted into the sac and air injected into the abdominal cavity to look for a hernia on the opposite side. If present, it will be repaired at the same time.

After separating the sac from the cord, it will be tied off and the fluid from the scrotum drained. The wound is closed from the inside with dissolving sutures and then covered with steri-strips and a saran-wrap-like bandage.

What about follow-up care?

1. On the day of surgery, your child will sleep most of the day and may require Ibuprofen or Tylenol for pain relief after the caudal block wears off. By the next day, he will feel back to his normal self.
2. The caudal medicine may cause some temporary leg weakness for one to two hours; for that reason, we usually don’t administer to children over five years old.
3. The bandage should be removed after two days. Underneath you will find steri-strips. Leave these to fall off by themselves.
4. It’s OK to bathe or shower when the bandage is removed. Until that point, either sponge bathe or use cleaning wipes. The steri-strips will gradually loosen up from the ends and can be clipped or removed after several days.
5. If the operation site becomes bright red, warm to the touch, or drains pus, call the office immediately at (808) 983-6210.
6. Activity should be curtailed with no active sports or swimming for 2 weeks. Toddlers will usually be ready to resume normal robust behavior the next day and restricting them may be frustrating. Just keep them from jumping from heights or straddling toys
7. An appointment should be made for the doctor to see your child four weeks after the operation. If there are concerns at any time prior, call the office.

Complications

1. Infection
2. Bleeding
3. Recurrence of the hernia or hydrocele.
4. Injury to the testicle, its blood supply, and/or vas deferens (sperm carrying tube), possibly resulting in decreased sperm production on the affected side.

For any questions or assistance, call Kapi'olani's Pediatric Urology Office at (808) 983-6210.