Hydroceles and inguinal hernias are closely related conditions which can have similar symptoms. A hydrocele is a collection of fluid around the testicles within the area called the scrotum. An inguinal hernia occurs when abdominal organs or tissues extend beyond the abdominal cavity into the inguinal canal (groin) and/or scrotum.

About 1-5% of children will have a hernia or hydrocele, including newborns. Premature infants, small for gestational age infants, and twins have a higher rate for having a hydrocele and/or an inguinal hernia.

**SYMPTOMS & TYPES**

**Noncommunicating hydrocele:** In this type of hydrocele, fluid comes from the lining of the scrotum and is often a result of trauma or inflammation. These are common within the newborn period but typically improve during the first several months of life. The amount of fluid and scrotal swelling remains constant throughout the day.

**Communicating hydrocele:** This occurs when the area between the abdomen and scrotum remains open after birth allowing fluid to move freely through the open channel and collect within the scrotum. The opening is referred to as a “communication” between the abdomen and the scrotum. A bulge or swelling will be present in the scrotum, particularly when there is increased abdominal pressure (when the child is crying or straining). The swelling may increase throughout the day and get smaller during naps or overnight, which indicates communication of the hydrocele.

**Inguinal hernia:** This is the same as a communicating hydrocele but includes a protrusion of abdominal structures in addition to fluid through the open channel in the groin. When this occurs, the abdominal organs, such as the small intestine or the omentum that lines the abdomen, are able to be easily reduced, or pushed back into the abdomen. Sometimes the abdominal structures become trapped in the groin or scrotum. This is called an incarcerated hernia. When this occurs, the swelling cannot be pushed back into the abdomen. The blood supply to the area can be cut off, the tissues can die, and the swelling turns dark purple. This is an emergency and requires immediate medical attention.
DIAGNOSIS & TESTS
A diagnosis is made during a physical exam by a doctor or advanced practice provider. The practitioner will apply gentle pressure to check if the swelling is reducible (i.e., the swelling can easily be pushed back into the abdomen). Imaging studies such as X-rays or ultrasounds are generally not needed except in rare circumstances when there is concern for an incarcerated hernia or other emergent scrotal conditions.

TREATMENT & CARE
Management of hydroceles and inguinal hernias differs depending on the age of the child and the type of abnormality discovered. Intervention ranges from observation to surgical correction.
• A noncommunicating hydrocele can be observed until the child is close to 1 year old, as it typically resolves on its own.
• A communicating hydrocele and a reducible inguinal hernia usually can be observed until the child is at least 6 months of age. If the symptoms persist after 6 months of age, surgery will likely be needed in order to prevent complications.

LIVING & MANAGING
If surgery is required, the child will usually be discharged home the same day of surgery. Typically, acetaminophen or ibuprofen will manage any pain your child may experience. After surgery, your doctor will provide you with specific post-operative instructions. Typically, instructions include avoiding full baths for 1-2 days and avoiding strenuous activities for 3-4 weeks. Testicular examination should be done yearly to ensure no change in the position of the testicle following a hydrocele and/or hernia repair.

REFERENCES & SOURCES