Inguinal hernia / hydrocele in males

What is an inguinal hernia?
An inguinal hernia is a bulging or out pouching of abdominal contents (fluid, fat, or intestine) through a weakness in the inguinal canal (Fig. 1). These may be called a groin hernia. In boys, the testicle originates near the kidney and descends to the scrotum through this canal. After which this tract should seal off. Failure of this tract to close can allow fluid or abdominal content to enter the groin and/or scrotum. Hernias are more common in boys than in girls.

What is the difference between an inguinal hernia and a hydrocele?
In a child, they are essentially the same thing. Hydrocele refers to fluid in the scrotum or inguinal canal where a hernia often refers to the intestine or other abdominal contents. Fluid may have come through the canal before it closed off and then became trapped in the scrotum (non-communicating hydrocele).

If the tract remains open then the fluid may go back and forth between the scrotum and abdomen (communicating hydrocele). You will notice the size of the scrotum change throughout the day, often getting larger when the child cries or has a bowel movement.

What are the signs/symptoms of an inguinal hernia?
A lump or bulge in the groin or scrotum is usually the first sign of a hernia. This bulge may only be apparent when your child cries or stands up and may disappear when they lie down.
Often a child will be born with a hydrocele and one or both sides of the scrotum will be enlarged. **Hydroceles do not cause pain.** If the hydrocele is non-communicating (does not change in size) then there is a high chance of it resolving on its own over the first year.

**Is an inguinal hernia dangerous?**
If the defect in the inguinal canal becomes large enough to allow more than just fluid to pass through then potentially a piece of intestine can pass in the canal. **This may become painful**, especially if it gets stuck in the canal. In this situation you should try to reduce the hernia by pushing the contents back into the abdomen by applying pressure in the manner shown in figure.

If a piece of bowel gets stuck in the canal it may become strangulated (cutting off the blood supply) this would be very painful and may become dark red or purple. In this situation, lay your child down flat and attempt to reduce the hernia as previously mentioned. If this does not work quickly then you need to contact your doctor immediately. Your child may need urgent surgery.

**How is an inguinal hernia treated?**
Surgery is required to fix an inguinal hernia.
Surgery consists of a small incision over the groin
Surgical repair of a hernia is one the most common surgeries performed in children.
Surgery for inguinal hernia and hydrocele are the same.

**Before surgery**
No aspirin or ibuprofen for 7 days before surgery (review all medications with your surgeon prior to surgery).

**The day of surgery**
Check in at out-patient surgery.
You will meet with your surgeon and anesthesiologist.
A general anesthetic will be used.
a general anesthetic will be used (with a pediatric trained anesthesiologist it is just as safe as for an adult). You will be able to go home a couple of hours after the procedure is complete.

**What to expect after surgery**
There will be several small steri-strips over the incision with a clear plastic dressing over the top.
A small amount of blood or fluid collection under the dressing is not uncommon.
The dressing should come off on its own after about 7 days. If it has not come off completely, it is okay to remove it.
Stitches are under the skin and will dissolve on their own.
Shower or bath 24 hours after surgery is permitted.
Constipation will result with abdominal pressure and straining and is important to avoid.
High water intake and stool softeners will help avoid constipation.

**Medication**
Most children do well with Ibuprofen and Tylenol for pain, we recommend that you alternate these every 2 hours for the first 24 to 48 hours (only when child is awake) to keep your child comfortable. *(Remember to never give the same medicine type more than once every 4 hours.)*

**Dosing chart (for Tylenol and Ibuprofen)**

<table>
<thead>
<tr>
<th>Weight (lbs)</th>
<th>Tylenol (mg)</th>
<th>Ibuprofen (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-15 lbs</td>
<td>50</td>
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<tr>
<td>15-19 lbs</td>
<td>75</td>
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<tr>
<td>40 lbs</td>
<td>180</td>
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<tr>
<td>50 lbs</td>
<td>220</td>
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</tbody>
</table>

For children older than 1 year, you will have a prescription for Tylenol with codeine for more severe pain.

**Contact information**
Follow up University of Oklahoma Children’s Hospital
Clinic visit in 3 to 6 weeks
Out-patient surgery 405-271-4130
Weekdays 8am – 5pm
Pediatric Urology Clinic 405-271-3800
After 5 pm and weekends
Hospital operator 405-271-5656
(ask for pediatric Urology Doctor on-call)