

# Inguinal Hernias Incidence

- **Full-term infants** **3-5%**
- **Premature infants** **5-30%**
- **Positive family history** **11.5%**
- **80 to 90% of pediatric hernias occur in boys**

# Clinical Presentation

**Right sided hernia 55%-60%**

**Left sided hernia 25%**

**Bilateral hernias 15%**

# Differential Diagnosis

- Torsion of testicle
- Hydrocele of the cord
- Inguinal lymphadenitis
- Torsion of the appendix testis

# Painless Scrotal Swelling

## Testis Normal

- Hydrocele and hydrocele of cord
- Hernia-incarcerated
- Idiopathic scrotal edema
- Henoch-Schönlein purpura
- Generalized edema
- Varicocele

## Testis Normal

- Testis Tumor
- Antenatal torsion testis (newborn)

An incarcerated hernia is one in which the contents of the sac cannot easily be reduced into the abdominal cavity

# Nonoperative Management

- Evaluate for signs of strangulation
- Sedation (+/-)
- Trendelenburg position
- Manual reduction (80-95%)
- Elective repair with 48 hours

# Treatment

- All inguinal hernias in infants and children should be repaired. They never resolve and are at risk for incarceration and strangulation.
- Early repair is advised because for the high incidence of incarceration
- Hydroceles (non-communicating) are observed for 12 months. After 12 months of age, a hydrocele that persists or develops should be repaired, because the narrow sac can widen and turn into a hernia.

# Incidence

- **12% incarcerated/strangulated**
- **Highest in first 2 months of life**
- **70% occur in first year of life**
- **Remaining 30% between 1 and 15 years of age**
- **82% of incarcerated hernias were on the right side**
- **83% of incarcerated hernias were found on boys**
- **Higher risk in the premature infant**

# Complications

- All hernia repair 2%
- Incarcerated hernia repair 19%
- Mortality 0-0.5%
- Intestinal Infarction
  - (1960-1965) 1.4%
  - (1978-1991) none
- Testicular injury
  - Vascular compromise 11-29%
  - Testicular atrophy 2%
- Recurrence

# Summary

- All inguinal hernias should be repaired promptly
- Neonates and pre-term infants (< 52 wks post-conception) should be repaired while in the hospital and observed for 24 h for postoperative apnea
- Incarceration is most common in the first two months of life
- Strangulation is rare
- Incarceration is best managed conservatively with manual reduction followed by elective repair

**Early elective hernia repair can and should be done before discharge in premature infants hospitalized for concurrent illness.**

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