



AAST Acute Care Surgery Didactic Curriculum

Hernias

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Inguinal Hernias

Highlights:

- Symptomatic inguinal hernias should be repaired
- Asymptomatic < 50 yo consider repair, good data for watchful waiting in >50 yo, will eventually become symptomatic in 5 years
- Incarcerated/Strangulated inguinal hernias can be repaired open or via MIS (laparoscopic or robotic) techniques. Would not use mesh in contaminated fields, need to know how to do tissue repair (Bassini/McVay) which is an open technique

Femoral Hernias

Highlights:

- Should be repaired when found as they have a higher risk of becoming incarcerated or strangulated
- Same techniques as inguinal hernia repair

Ventral Hernias

Highlights:

- Abdominal wall hernia patients should be optimized prior to repair. BMI < 35, Diabetes under control HgBA1C <6, and smoking cessation
- Umbilical hernias should be repaired if symptomatic, use mesh if over 2cm, 1-2cm controversial, <1cm primary repair
- Spigelian and other less common abdominal wall hernias should be repaired as they have higher risk of symptoms and incarceration
- Retrorectus repair with low weight polypropylene mesh has best data, can be open or MIS approach, consider separation of components for defects larger than 10cm, loss of domain hernias and complex flank incisional hernias require experience/training to do well
- Emergency Operation for incarcerated/strangulated hernias depends on physiology of patient and amount of contamination. Sick patient with lots of contamination just close primarily and come back another day

Parastomal Hernia

Highlights:

- Very high incidence: 1 year 30%; 2 years 40%; >50% in longer follow-up. End colostomies with highest rate; prophylactic mesh placement is recommended in *permanent elective* end colostomy construction.

- Evaluation: physical exam and cross sectional imaging. Need to know dimensions, contents, and presence or absence of concomitant ventral hernia.
- Because of high recurrence rates, watchful waiting is often practiced. There is no current evidence for early repair vs this approach. Elective indications for repair: pain, skin breakdown, difficulty pouching, discomfort, leakage. Urgent/emergent repair with strangulation, obstruction or incarceration.
 - Consider stoma reversal for all patients (approximately 25% are appropriate for reversal).
 - Stoma relocation may need to be considered, especially with concomitant ventral incisional hernia.
- No agreed upon method of repair, but mesh is recommended over suture repair. Placement of mesh can be via any approach: onlay, retrorectus and intraperitoneal. No superior technique for placement has been documented.
- Laparoscopic and robotic repairs have equal recurrence rates.
- In laparoscopic parastomal hernia repairs, some studies show superiority of Sugarbaker over keyhole placement of mesh, with a recent meta analysis showing this difference disappearing in subgroup analysis.

Internal Hernia

Highlights:

- Incidence: 2-9% after laparoscopic RYGB; unknown incidence with other operations but possible with all operations that create a mesenteric defect.
 - Petersen's defect, jejuno-jejunal mesenteric defect, and mesocolic defect are the 3 sites of herniation from LRYGB
 - Closure of mesenteric defect in LRYGB lowers risk. No evidence for closure vs non closure in other gastrointestinal operations.
- High index of suspicion in any LRYGB patient presenting with abdominal pain and nausea necessary to avoid catastrophic consequences (bowel necrosis).
 - CT sensitivity 82%, specificity 84.8%. Most predictive findings: venous congestion, swirl, and mesenteric edema.
 - Diagnostic laparoscopy should be considered in cases where imaging is inconclusive
- Most common presentation is SBO; herniation through any congenital defects can occur.