Objectives

1. The learner will identify the presentation of sigmoid volvulus in a pediatric patient.
2. The learner will identify the differential diagnosis of a patient presenting with signs and symptoms that may indicate sigmoid volvulus.
3. The learner will list common treatment modalities, including pharmacological management.
Case Presentation

15-Year Old Male
7/2017

• Presents to ED – 5 days of constipation and abdominal pain
• “Always constipated,” but now worse.
• Last BM 5 days and described “normal”
• PSH/PMH: Hypospadias repair, Seizure Disorder
• PE – tender LLQ and RLQ
• Labs – normal
• Radiology

Abdominal X-ray
Sigmoid Volvulus

- Extremely rare in children and adolescents, life-threatening
  - Onset: 7-12 years of age
  - 3.5:1 male to female predominance
  - Incidence: 1.67/100,000
- Frequently reported in the “volvulus belt” – high fiber diets
- Pre-disposing factors

Pathophysiology
**Presentation**

- Insidious onset of slowly progressing nausea
- Abdominal pain and distension – MOST COMMON
- Vomiting after onset of pain (after several days)
- Relieved by passage of stool or flatus

**Management - Nonoperative**

- Fluid resuscitation and IV antibiotics
- Attempt at nonoperative reduction with air contrast enema*
- Sigmoidoscopy with exsufflation and rectal tube reduction**

**GOAL** – Reduce the Sigmoid Volvulus and prevent recurrent episodes.
16-Year Old Male – 8/2018

- History of abdominal pain and constipation x 4 days.
- History of previous sigmoid volvulus one year ago treated with endoscopic decompression.
- Patient had Contrast Enema demonstrating sigmoid volvulus.

Operative Management
Today...

- Having regular bowel movements daily
- No episodes of abdominal pain
- On Miralax and Senna

Algorithm - Management

Suspected Sigmoid Volvulus
- Contrast Enema
- Reduced Bowel Preparation

Rectal Biopsy, Sigmoidectomy
- (+) HD
- Colostomy
- Pullthrough
- (-) HD
- Primary Repair

Not Reduced
- Rectal Biopsy, Sigmoidectomy
- (+) HD
- Colostomy
- Pullthrough
- (-) HD
- Colostomy vs. Primary Anastomosis


References


References


Questions