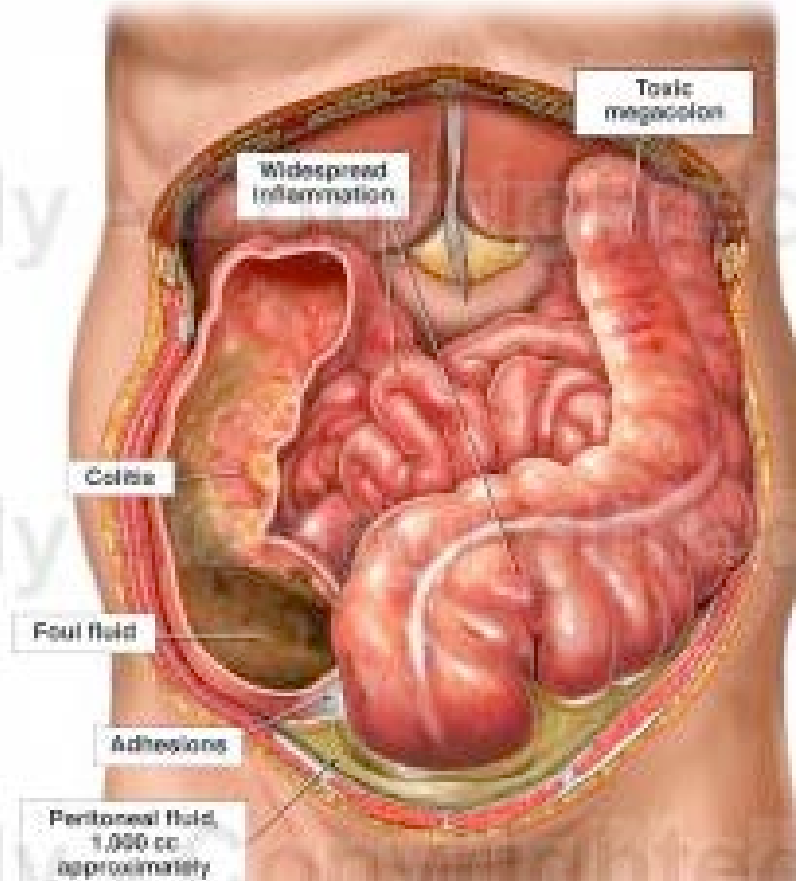
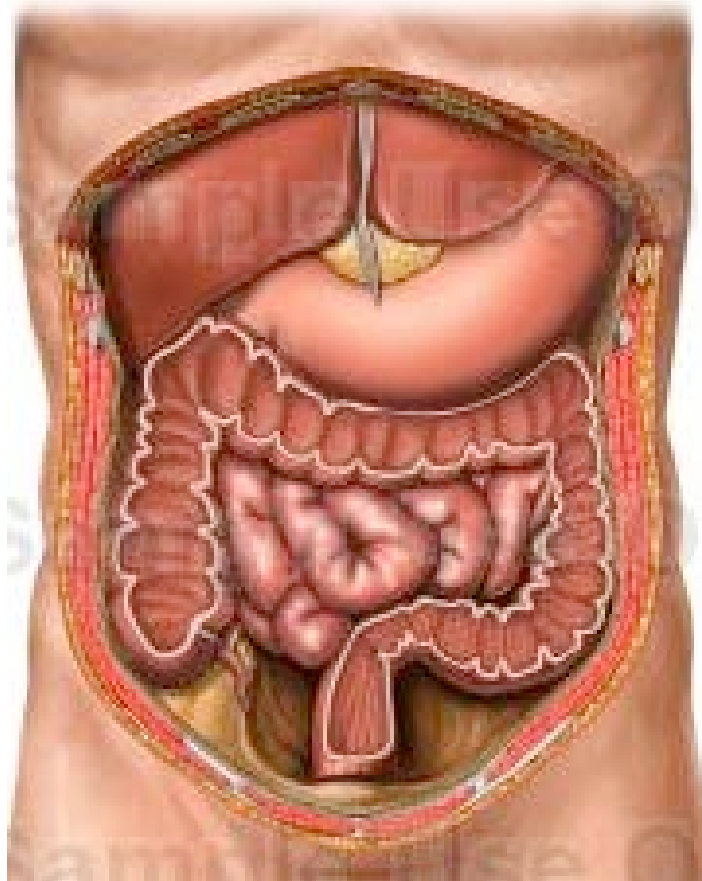


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Toxic Megacolon

Toxic Megacolon





Toxic Megacolon

- Serious life-threatening condition that can result as a complication of:
 - UC
 - Crohn's Disease
 - Infectious colitides
- Rapid dilation of the proximal colon
 - Will only perforate if the inflammatory process has weakened the wall of the cecum
- Thickened, severely inflamed distal colon
 - Segment where perforation is imminent

Causes of Toxic Megacolon

Inflammatory

- Ulcerative colitis
- Crohn's disease

Infectious

- Bacteria
 - *Clostridium difficile* pseudomembranous colitis
 - *Salmonella* (typhoid and nontyphoid)
 - *Shigella*
 - *Campylobacter*
 - *Yersinia*
 - Hemolytic Uremic Syndrome³
- Parasitic
 - *Entamoeba histolytica*
 - *Cryptosporidium*
 - *Trypanosoma Cruzi*
- Viral
 - Cytomegalovirus colitis

Other

- Ischemia
- Kaposi sarcoma





Mechanism of Dilation

- Not well understood
- Severe inflammation and local mediator release
- Inflammatory damage to colonic mucosa due to severe colitis seems to extend into the smooth muscle layer
- Bacterial translocation
- Nitric Oxide

Diagnosis

- Suspect in any patient with abdominal distention, diarrhea, and systemic toxicity
 - May also have bloody diarrhea, fever, chills, and abdominal pain
- History of:
 - IBD
 - Meds: antimotility agents, chemo, broad-spectrum antibiotics, steroids
 - Foreign travel
 - HIV
- Best accepted clinical criteria
 - Fever of $\geq 101.5^{\circ}$
 - Heart rate of ≥ 120
 - WBC > 10.5
 - Anemia



Radiographic Findings

- Plain abdominal radiograph
 - Dilation of the ascending of transverse colon
 - Thickening and edema of the wall of the transverse and descending colon, with a thin trail of luminal air
- CT
 - Can help rule out other causes of dilation





Medical Treatment

- Admit to ICU
- Bowel rest and decompression with NGT
- CBC, electrolytes and serial abdominal films every 12hrs initially
- Prophylaxis for DVT and gastric ulcers
- Broad-spectrum antibiotics
- Patient repositioning
- If due to IBD:
 - Add Hydrocortisone 100mg IV every 8hrs
 - Immunosuppressants are not recommended
- If due to C.diff colitis
 - Stop offending antibiotics
 - Start oral Vanco 500mr every 6hrs and IV Flagyl



Surgical Treatment

- Absolute Indications
 - Free perforation
 - Massive hemorrhage
 - Progression of colonic dilation
- Relative indication
 - Failure to improve in 48hrs
- Perform Subtotal Colectomy and end ileostomy
 - Treatment of choice
 - Laparoscopy should be avoided
 - Catheter left in rectal stump for continued drainage
 - 5d

Surgical Treatment



- Sixty-three patients underwent colonic resection⁴:
 - 49 (70%) subtotal colectomies
 - 14 (20%) total colectomies
 - including 4 (6%) proctocolectomies.
 - Seven (10%) patients had decompression or faecal diversion only.

- Total surgical complication rate was 19%
 - 8% in patients treated with subtotal colectomy
 - 21% in patients treated with total proctocolectomy
 - 86% in patients treated with either decompression or diversion.

- The total mortality rate was 16% ($n = 11$).

Questions



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