RUTGERS
Robert Wood Johnson
Medical School

Rising Belly: What to Do With Severe Abdominal Distention

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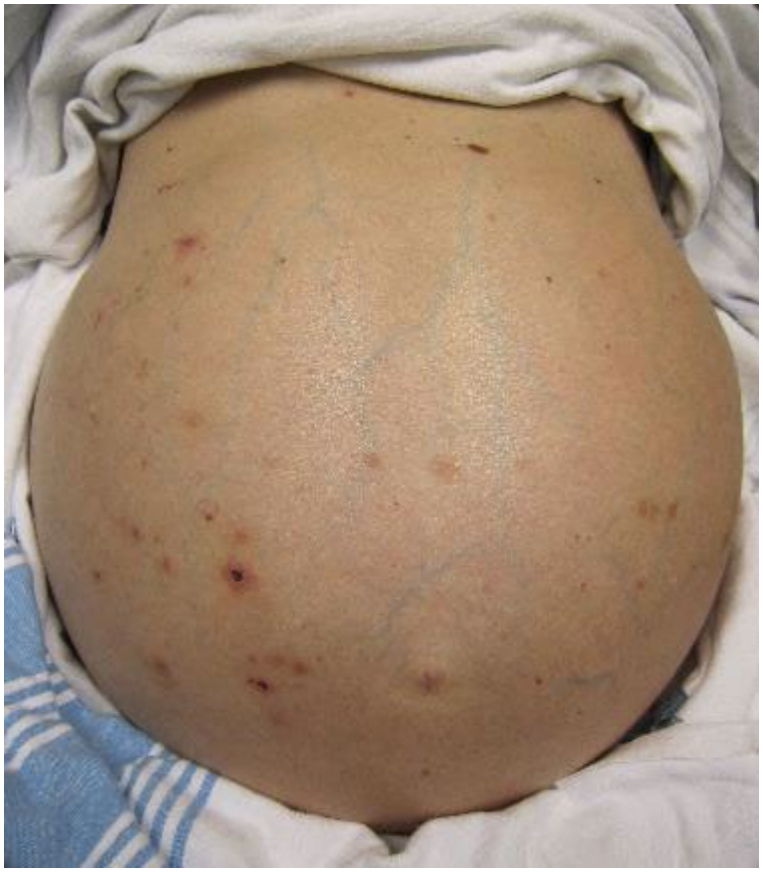
Disclosures: *Implicit Bias*

- **EVERY** distended abdomen is an acute abdomen until proven otherwise!

Overview

- Abdominal Distention
- When is it a problem?
- Where do I start?
- Helpful diagnostic studies
- Most common pathologies

The Distended Abdomen



Distension is a marker of dysfunction

Questions:

- Is this distension?
- Is the dysfunction pathologic?

Where Do I Start: *Physical Exam*

- Inspection
  - Caput medusa, bruising, mottling, etc.
  - Scars (prior surgery)
  - Tubes/devices (ex. durable enteral access, gastric band)

- Auscultation
  - bowel sounds – absent, present, “tinkling”

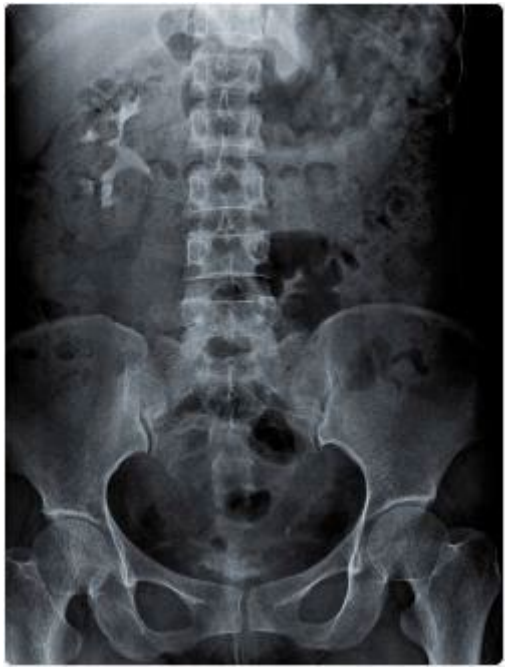
- Palpation
  - Masses, tenderness, hernias

- Percussion
  - Tympany, “tap tenderness” (ie. peritonitis)

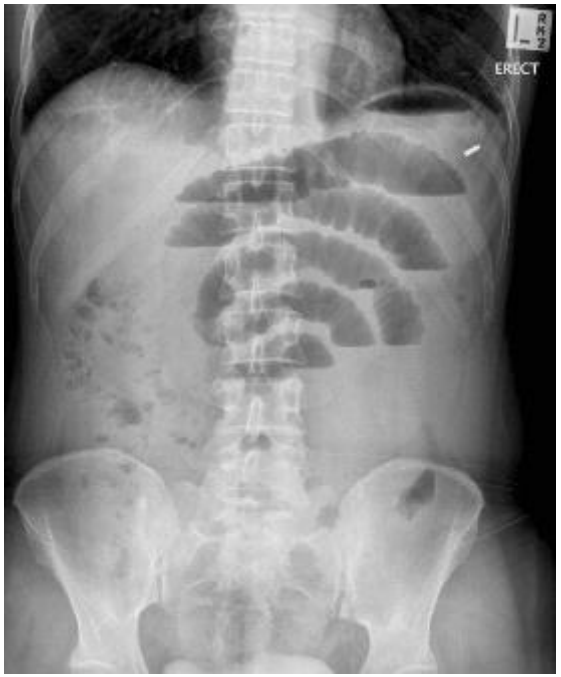
Is This a Problem: *Concerning Signs/Symptoms*

- Obstipation or Diarrhea
- Emesis
- Pain (peritonitis, “out of proportion”, unrelenting)
- Fever of unknown origin
- Leukocytosis
- Shock

Where Do I Start: Basic Imaging

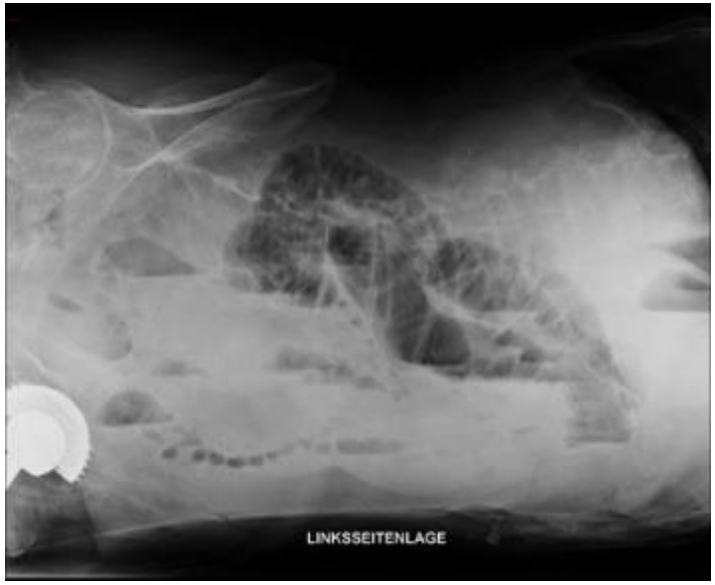


Normal Upright KUB

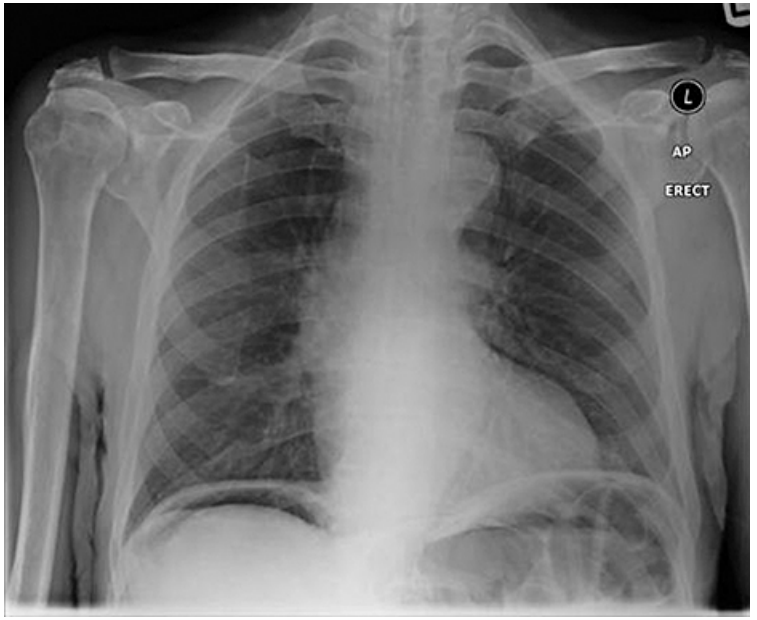


Abnormal Upright KUB

Where Do I Start: Basic Imaging



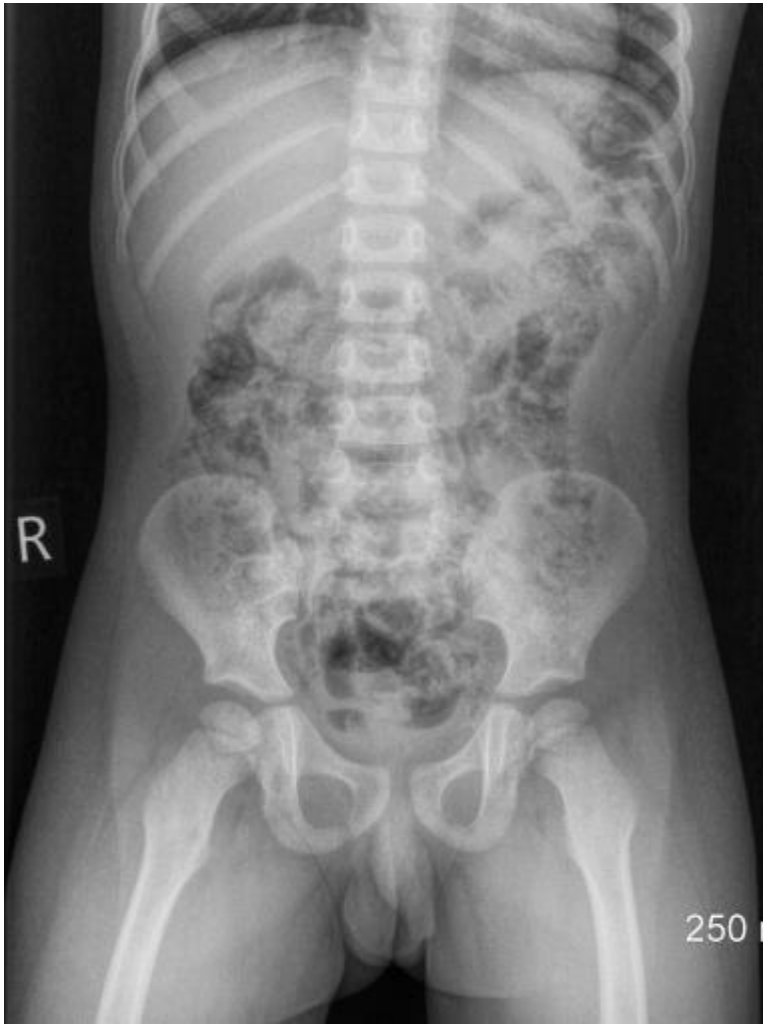
Lateral Decubitus KUB



Upright CXR

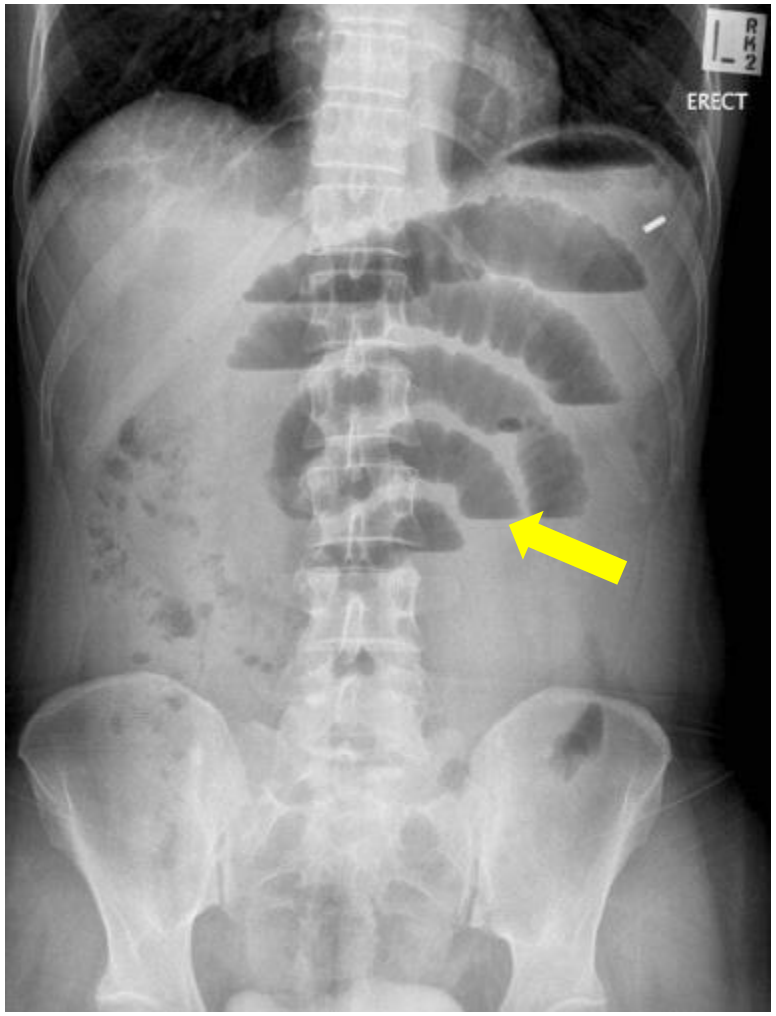
Constipation

- Etiology
  - Critical illness
  - Dehydration
  - Narcotic induced
- Assessment
  - KUB
- Management
  - Manual dis-impaction
  - Enemas
  - Rectal stimulants
  - Enteral cathartics (with caution)



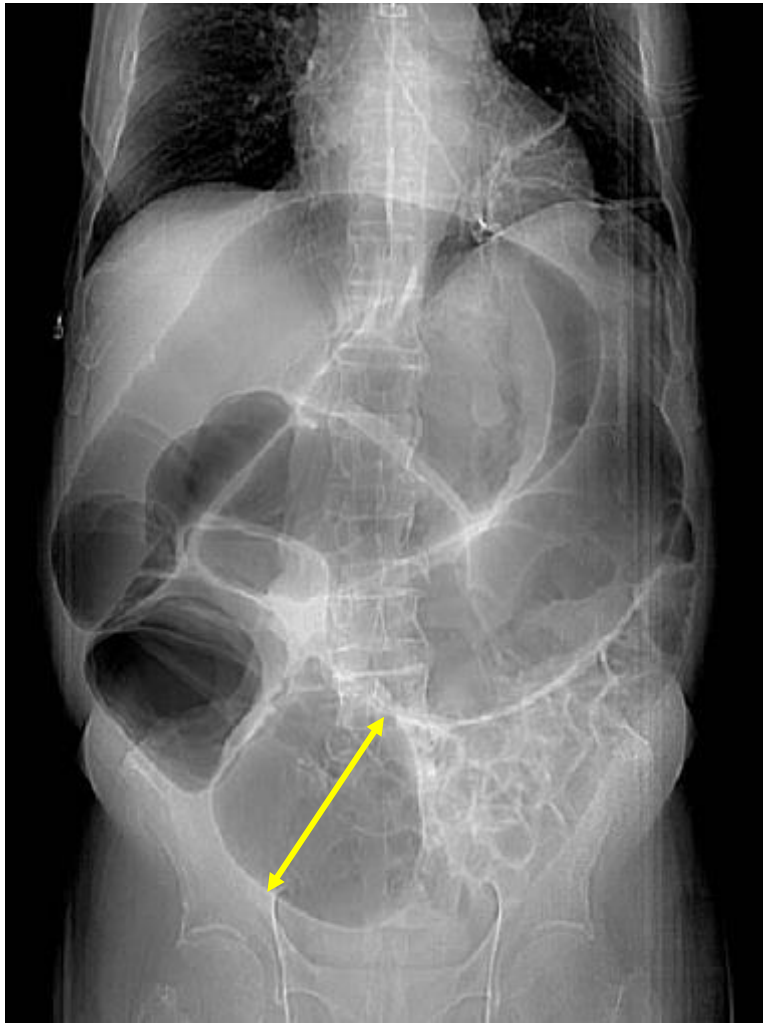
Ileus

- Presentation
  - Obstipation
  - +/- pain (colicky vs unrelenting)
  - +/- nausea/vomiting
- Etiology
  - Inflammatory
    - Ex: parapneumonic, cholecystitis, diverticulitis, abscess
  - Electrolyte derangements
  - Narcotic induced
- Assessment
  - KUB
  - +/- CT scan depending on situation
- Management
  - Surgical consultation
  - NPO, nasogastric decompression
  - Correct electrolytes
  - Minimize narcotics



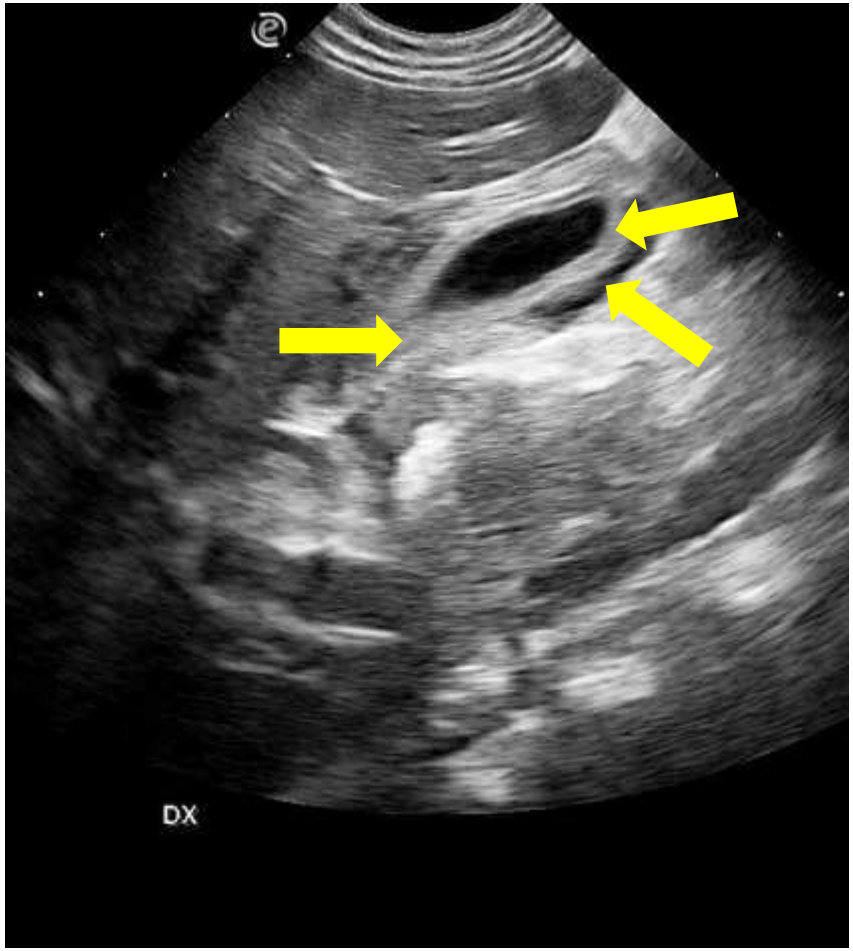
Ogilvie's Syndrome: Colonic Pseudo-obstruction

- Presentation
  - Obstipation
  - +/- abdominal pain
- Etiology
  - Parapneumonic
  - Electrolyte derangements
  - Narcotic induced
- Assessment
  - KUB, +/- CT w/ IV contrast
  - Monitor cecal diameter (goal <10cm)
- Management
  - Emergent Surgical & GI consultation
  - Rectal Tube decompression
  - Correct electrolytes
  - Minimize narcotics +/- methylnaltrexone
  - +/- colonoscopic decompression
  - +/- neostigmine
  - Surgery as last resort



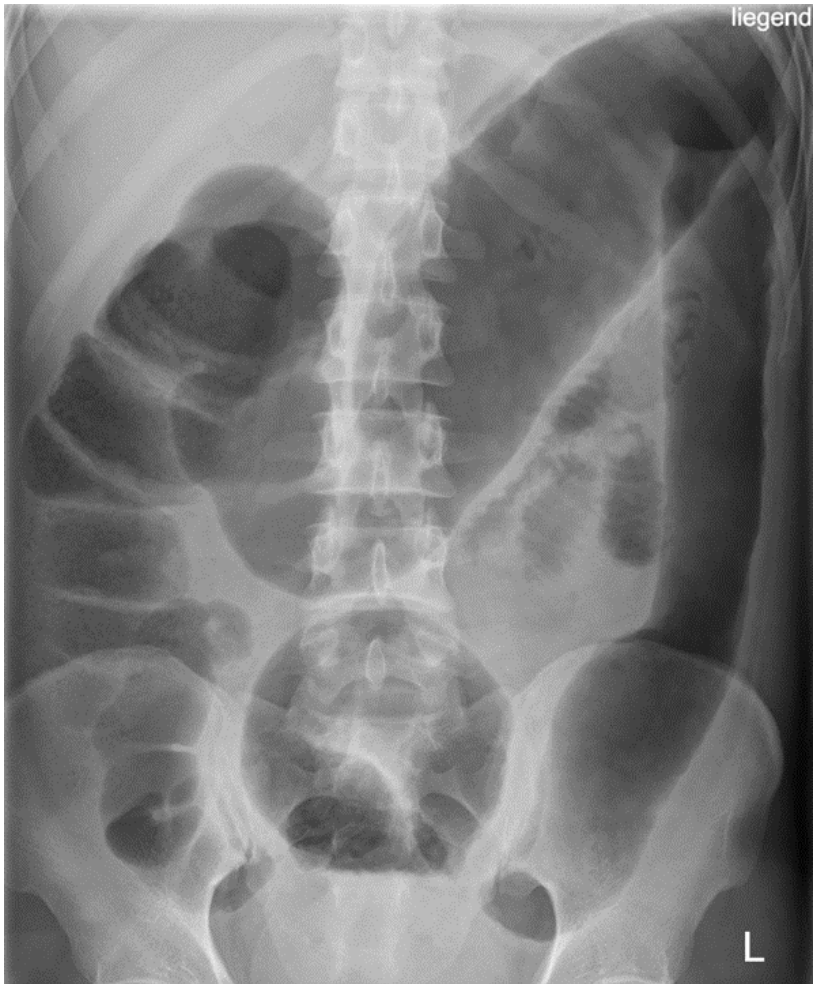
Acalculous Cholecystitis

- Presentation
  - Right upper quadrant pain
- Etiology
  - Critical illness
  - Dehydration
- Assessment
  - RUQ U/S
  - LFTs
- Management
  - Urgent Surgical consultation
  - Percutaneous cholecystostomy tube



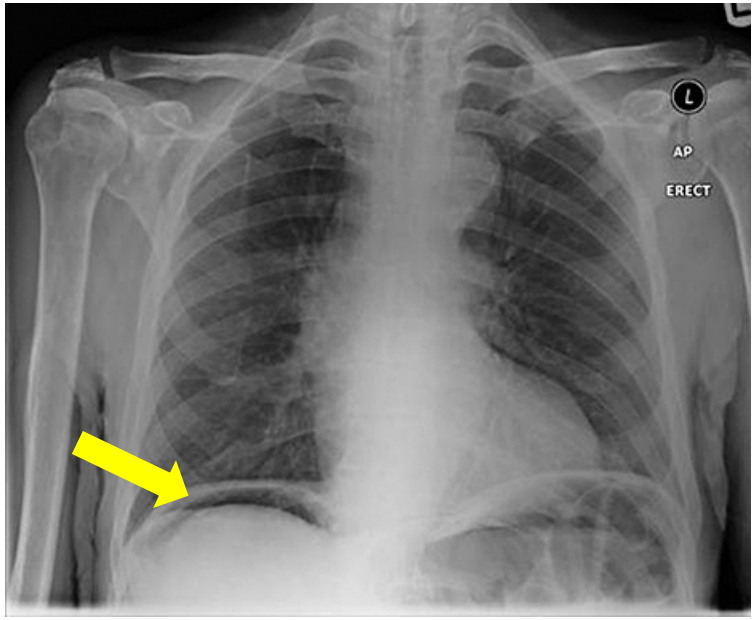
Toxic Megacolon

- Presentation
  - Diarrhea
  - Abdominal pain +/- peritonitis
  - End organ dysfunction (ex. shock, AKI, encephalopathy)
- Etiology
  - C.diff infection
- Assessment
  - KUB
  - +/- CT w/ IV contrast, oral contrast not needed
- Management
  - Emergent Surgical & ID consultation
  - Fidaxomycin vs IV flagyl +/- enteral vancomycin
  - Sepsis care (cultures, IV fluids)



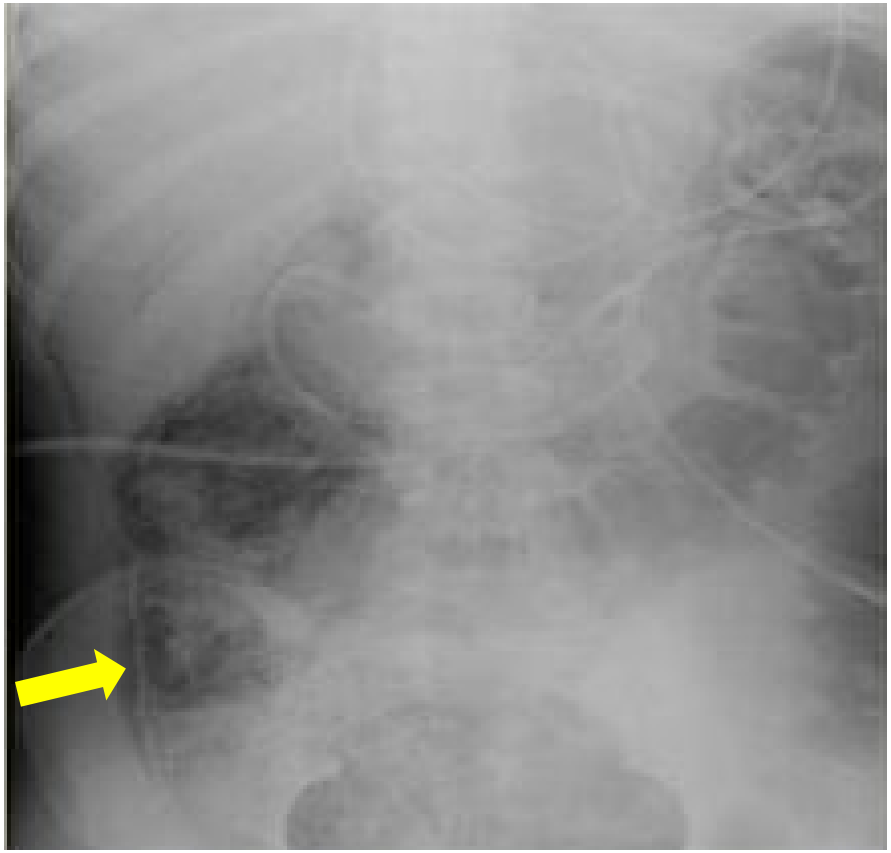
Gastrointestinal Perforation

- Presentation
  - Acute onset severe abdominal pain
  - +/- peritonitis
- Etiology
  - Peptic ulcer perforation
  - Diverticulitis
  - Stercoral ulcer
- Assessment
  - CXR or KUB
  - CT w/ IV contrast, oral contrast not needed
- Management
  - Emergent Surgical consultation
  - Broad spectrum antibiotics



Mesenteric Ischemia

- Presentation
  - “pain out of proportion to exam”
  - +/- bloody/mucoid bowel movements
- Etiology
  - Embolic disease
  - Mesenteric thrombosis
  - Non-occlusive mesenteric ischemia
- Assessment
  - KUB
  - CTA/CTV without enteral contrast
- Management
  - Surgical Consultation
  - Broad spectrum antibiotics
  - +/- systemic anticoagulation



Summary

- In the ICU, **every** distended abdomen is an acute abdomen until proven otherwise!
- KUB is a very useful diagnostic tool (preferably upright/lateral decubitus)
- Don’t hesitate to call consultants early for assistance (Surgery, GI, ID)
- Early recognition can avoid significant morbidity and mortality

THANK YOU