The Acute Distended Abdomen according to Langcake

Rules of thumb:
- Midline structure pain will radiate to the back
- If the viscera are inflamed, pain is diffuse
- If the abdominal wall is inflamed, the pain is localised to a discrete area

Characteristic locations:

* oesophagus pain mimics cardiac pain – same referral

Obstruction

Most often caused by post-operative adhesion (may take years)
- Acute constipation, distension, nausea + vomiting, pain
- If constipation + distension is long-standing and progressive, consider partial narrowing or chronic process
- ASK how often the pain pulses are felt

ASK ABOUT:
- Previous episodes of obstruction
- Previous abdo / pelvic operations
- History of abdo cancer
- History of abdominal inflammatory disease: Eg.
  - Inflammatory bowel disease
  - Cholecystitis
  - Pancreatitis
  - Pelvic inflammatory disease
  - Abdominal trauma

EXAMINATION:
- How does the patient look?
  - If they are lying quite still, it looks like peritonism (bad sign !)
- What was aspirated through the NG tube?
  - CLEAR +/- food = gastric outlet obstruction
  - FECULENT = distal small bowel …or colonic obstruction with incompetente iliocaecal valve
  - BILIOUS but NON-FECULENT = either
    - A medial or proximal small bowel obstruction, OR
    - a colonic obstruction with a competent iliocaecal valve
    (or else the faeces would be regurgitating into the stomach out of the incompetent iliocaecal valve)
- PUT YOUR FINGER IN IT!!  → hematomae / abscesses get forgotten
- ABSENT BOWEL SOUNDS? – sinister; maybe ileus
- PICTURE OF ILEUS: mild diffuse pain, not the severe increasing localised pain of obstruction

Obstructive symptoms which come and go suddenly for several days in an elderly patient (over 65) should make you suspicious of a GALLSTONE ILEUS

Proximal obstruction =
  - pain pulses every 3-4 minutes;

Distal obstruction =
  - Pain pulses every 10-15 minutes
INVESTIGATIONS for bowel obstruction:

**Bloods:**
- EUC (Hypokalemic? Hyponatremic? Hypochloremic? )
- FBC for Hb and white cells
- LFT for cholestatic issues or portal HT
- Amylase + Lipase for pancreatitis

**Abdo Xray**
May see characteristic water vs. gas levels in distended loops of small or large bowel.
- ? is there gas distal to the obstruction (if yes, then it is only a partial obstruction)
- So theres no gas BELOW the obstructed section of colon; BUT: is there gas in the small bowel? Is it regurgitating into the small bowel from the blocked colon?
  IF NOT = the iliocaecal valve is still competent
- are there haustra still visible (if not, its REALLY distended!)
- are there visible calculi, or air in the biliary tree?
- Is there air under the diaphragm? = perforated viscus

**Barium enema**
For **bird-beak sign:** demonstrates sigmoid volvulus
For **apple-core sign:** demonstrates colonic carcinoma

**CT with oral / rectal contrast**

**MANAGEMENT**

**Resuscitation**
- **IV fluids** (crystalloids, NS with K+ is good)
- Urine output should be at least 0.5 ml/hr (i.e halve the patients weight and expect it in mls of urine per hour)
- Monitor fluid response: within 10-15minutes the urine output should change
- The need for surgery must be assessed: most of these things resolve on their own, but if the bowel wall is so distended that its ischaemic, then there is risk of fecal peritonitis from which theres a 50% chance of death – so don’t let it get that far.
- !! NEVER LET THE SUN GO DOWN TWICE ON A BOWEL OBSTRUCTION!!