5 year old German Shepherd Dog

• Acute onset of abdominal distension
• Pale mucous membranes
• Acute collapse
• Severe gastric distension (gas, fluid)

• Gastric malpositioning
  – Pylorus
    • Dorsal, gas-filled
  – Fundus
    • Ventral
GDV

• Gastric dilation with volvulus
  – Surgical emergency

• Pylorus rotates to the left dorsal abdomen
  – Normally in the right ventral

• Compartimentalization
  – Double bubble, Smurf hat, etc.
  – Due to stomach folding on itself
Positioning for GDV

• THE MOST IMPORTANT VIEW
  – RIGHT LATERAL

• Avoid VD view
  – Compression of the caudal vena cava can exacerbate shock
• Pylorus left cranial
• Fundus ventral, displaced rightward
DV View
8 year old Great Dane

- Acute onset of vomiting and abdominal distension
GD or GDV?
RIGHT Lateral is key
GDV

Abnormal location of pylorus

Compartmentalization
Gastric Distension

Left Lateral

Right Lateral
2 Year old, MC, Daschund

- Vomiting
- Owner says he has looked “pale” since yesterday
- Collapsed, tachypneic
3 year old Labrador Retriever

- Acute onset of vomiting
- Possibly got into trash
- One old sock is missing
Negative Contrast Gastrography

- Pneumogastrogram
- Can be useful in outlining foreign material, masses, anything in the gastric lumen
  - Especially the pylorus
- Easy to do
- Stomach tube & room air
- Carbonated beverage
  - ~50 mL
14 Year old, MC, DSH

- Vomiting intermittently
- 2 weeks
- Inappetant
- Palpable abdominal mass
Ultrasound
Ultrasound

- Loss of wall layering
  – Neoplasia is most likely
- Altered wall layering
  – Could also be inflammatory
4 Year old, FS, DSH

- Acutely vomiting
- Painful on abdominal palpation
2Y, MC, Mixed Breed Dog

- Acutely vomiting
- Concerned about intestinal obstruction
Findings & Differentials

• Questionable gas-distended bowel
  – Mechanical Ileus
  – Functional Ileus
  – Normal cecum?

• Imaging Plan
  – Identify normal colon & cecum
Negative Contrast Colonography

- “Pneumocolon”
- Catheter-tip syringe
  - +/- Flexible catheter, large gauge
- Lubricant
- Inject room air (not too fast)
  - 60-100 mL/dog
  - 20-30 mL/cat
36 Hour old, M, Quarterhorse

- Colic
- Distended, painful abdomen
- No feces passed since birth
• Generalized gas distension
• Entire intestinal tract
Differentials

• Functional ileus

• Mechanical ileus
  – Luminal object
    • Foreign body
    • Meconium impaction
  – Non-patent lumen
    • Colorectal anomalies
      – Atresia coli
      – Atresia ani
Positive Contrast Colonography

- Barium Enema
7 Year old, FS, Beagle mix

- Presented on emergency after being hit by car
- Non-ambulatory
- Painful abdomen

- Owner says she has been eating, drinking, defecating normally prior to accident
Focal Ileus

- Severe
- Few loops

- Mechanical ileus
  - FB
  - Mass
  - Stenosis

- Functional ileus?
Next day...
Advice...

• Finding the foreign body
  – Take the other lateral view

• Is there really ileus?
  – Is it PERSISTENT on the images you have?
  – Is it PERSISTENT on subsequent images?

• Is there feces in the colon of the chronic vomiting patient?

• Consider negative contrast for stomach/colon