

## **Acute Abdomen**

Acute Abdomen: Any animal that presents to the hospital with acute abdominal pain, or unstable condition due to abdominal disease

**Causes:** An endless list ranging from pancreatitis, prostatitis, pyelonephritis, trauma, sepsis, and neoplasia to GI obstruction/perforation/torsion, and infarctions

### Primary Survey

- Airway
- Breathing
- Circulation
- Disability/Dysfunction

### Perfusion Parameters

- MM color
- CRT
- Extremity temperature
- Mention
- HR
- Pulse quality

### Treat for Shock First

- Provide supplemental oxygen
- Place IVC
- Fluids
  - Crystalloids
  - Colloids

### Treat Abdominal Pain

- Distension
- Traction
- Ischemia
- Inflammation

### What are our options for analgesia in the ER?

- Opioids
  - Full mu agonist (morphine, hydromorphone etc.)
  - Buprenorphine

- Butorphanol
- Alpha-2 Agonists
  - Dexmedetomidine
- NSAIDS

### Indications for Emergency Surgery

- Organ displacement, torsion or obstruction
- Free peritoneal air
- Intrabdominal abscess/pyometra
- Septic peritonitis
- Bile peritonitis
- Uncontrollable abdominal pain
- Penetrating abdominal injury
  - Bite wound
  - Gun shot
  - Impaled

What classifies as a hemoabdomen?

- Free blood in the abdomen that does not clot
- PCV of abdominal fluid greater than peripheral blood

Causes

- Trauma
- Coagulopathy
- Ruptured viscera
- Torn blood vessel

When is an acute abdomen a surgical emergency?

- Primary disease
  - Bleeding liver or spleen mass
- Unable to stabilize medically
  - Fluid therapy
  - Blood transfusions

Next steps

- Bloodwork
  - PCV/TP
    - Parallel drop indicated hemorrhage

- Splenic contraction
- Hypoglycemia
  - Aggressive investigation for sepsis
- Azotemia and hyperkalemia
  - Consider uroabdomen
- Abdominal Radiographs
  - GDV
  - Small intestinal obstruction
  - Free peritoneal air
  - Free abdominal fluid
    - Loss of serosal detail
    - Less sensitive than POC ultrasound
- Abdominal ultrasound
- Fluid analysis

Abdominal Fluid Analysis	Result	Conclusion
Creatinine	2 X > Serum	Uroabdomen
Potassium	1.4 X > Serum	Uroabdomen
Bilirubin	2 X > Serum	Bile peritonitis
Glucose	20 mg/dL < Blood	Consistent with septic peritonitis
Lactate	2 mmol/L > Blood	Consistent with septic peritonitis