UNDERSTANDING COLIC:
DON’T GET IT TWISTED
Today’s Topics:

- What is colic?
- Anatomy review
- How to identify colic
- What to do when you suspect colic
- What to expect during a colic visit from your veterinarian
- Types of colic
- Management /treatment
- Prevention?
What is colic?

**Abdominal Pain** – a clinical sign rather than a diagnosis

- Most commonly involves the gastrointestinal tract
- Non GI causes of colic pain – liver, kidneys, ovaries
- Other diseases that can look like colic:
  - Laminitis
  - Tying up
  - Pleuropneumonia

- Colic is the #1 cause of early death in horses.
- Incidence is around 10%, higher in stabled, working horses
Abdominal Anatomy

Left Side

Right Side
Signs of colic:

- Decreased/no appetite
- Decreased/abnormal manure
- Pawing
- Flehmen
- Stretching
- Looking at sides
- Lying down
- Rolling
- Low grade fever
- Depressed
MY HORSE IS COLICKING!!!!

• Remove any hay/grain
• TPR – take your horse’s vital signs (if safe to do so)
• Call your vet
• Banamine – ½ dose (500lb/5ml for average size horse)
• Handwalk if anxious/painful and can keep standing
• If rolling/dangerous, keep in stall and remove buckets

• A word about Banamine:

Clostridial Myositis
Colic Visit:

- Physical Exam
- Sedation +/- banamine +/- buscopan
- Palpation per rectum
- Pass nasogastric tube

If indicated:
- Abdominal ultrasound
- Abdominocentesis (belly tap)
- IV fluids
- Referral to hospital
Colic Exam:

- **History:**
  - Management changes
  - Recent medications
  - Manure production
  - Appetite/water intake
  - Deworming schedule
- **TPR** – normal values?
  - T: 98F-101.5F
  - HR: 28-36 bpm
  - RR: 8-12 bpm
- Mucous membranes color and capillary refill time
- Gastrointestinal sounds - borborygmi
- Digital pulses
Palpation Per Rectum

What structures can we feel on a normal rectal exam?
- Left kidney, spleen, large colon, small colon, cecum, uterus/ovaries in mare, bladder

What abnormalities can we palpate?
- Displacement of large colon
- Torsion (twist)
- Gas distension
- SI loops
- Impaction
- Masses
- Rupture
Nasogastric Intubation “Tubing”

Diagnostic & Therapeutic

- Flexible tube up nostril, swallowed, through esophagus into stomach
- Build up of fluid usually means an obstruction downstream (horses cannot vomit)
- Used to administer water, electrolytes and sometimes mineral oil
Abdominal Ultrasound

- Why do we use it?
  - Assess GI motility and location
  - Intestinal wall thickness
  - Excess fluid
  - Look for masses
- When do we use it?
  - Rule in or out small intestinal involvement
  - If suspect a nephro-splenic entrapment based on PPR
  - Better assess severity of colic

*Limitations: depth of penetration approximately 18cm, does not go through gas*
Abdominocentesis “Belly Tap”

- Introduce needle or cannula into peritoneal space to obtain fluid for analysis

- When and why performed?
  To get more information:
  - Increased amount of fluid, cells or blood, feed material?
  - Normal – pale yellow and clear
  - Abnormal – orange/red, cloudy
Types of Colic

1. Intestinal Dysfunction – most common
   • Impactions, gas/spasmodic colic, ileus

2. Enteritis & Ulcerations – related to inflammation, infection and lesions
   • Stress, disease, parasites
3. Intestinal Accidents – less common
   - Displacements, torsions, strangulations
   - Usually require emergency surgery
Medical management

- Gas/Spasmodic colic
  - Sedatives, analgesics, buscopan, exercise
- Gastric ulcer pain
  - Gastroscopy, omeprazole, management changes
- Colon impactions
  - Reduce feed intake, NG fluids +/- IVFT, check teeth, assess diet
  * Cecal impactions may require surgery
Surgical Colic

- Surgical lesion identified on exam:
  - SI strangulations/obstructions
  - Many large colon displacements and all torsions (twists)

- Endotoxemia: in severe colic, damage to intestinal walls allows leakage of endotoxin into the circulation (a component of the outer wall of gram-negative microorganisms in the intestine)
  - Shock

 Persistent pain/high heart rate despite medical treatment
Life after surgery

- Successful outcome depends on the lesion type and time to surgery

Best case scenario for simple displacement:
- Home within one week
- Stall rest with handwalking for 4-6 weeks
- Turnout in small paddock for one month
- 3-4 months post surgery, if no complications, can begin going back to work
Prevention
Prevention?

• Routine wellness care
  • FEC and targeted deworming
  • Regular dental care/oral exam/ floating
• Appropriate feeding
  • Free choice good quality hay/grass
  • Increase frequency/reduce size of grain meals
  • Stick to a routine (diet and exercise)
    • Avoid abrupt changes in hay/grain
• Appropriate exercise/turnout
• Warm water in winter (need 10-12 gallons/day)
• Add salt to diet to increase water intake in cold months
• Secure grain bins