Equine Emergencies: How to be prepared

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First, a little introduction...

- Sorum Equine Veterinarians is based out of Churchville MD
- Serve clients in Harford, Baltimore, and Cecil counties
- Full service emergency vets with digital radiography, ultrasound, endoscopy, and 24-7 on call
Equine Emergencies

• Horses like to hurt themselves!
• Being able to differentiate between time-sensitive and non time-sensitive emergencies is crucial
• Early action often can be the difference between life and death
• Be prepared with knowledge, medications, and basic medical supplies
What we will cover...

- Gastrointestinal issues
  - Esophageal obstruction (choke)
  - Colic
- Lacerations
- Ophthalmic issues (eyes!)
  - Corneal ulceration
  - General eye goop
  - Recurrent uveitis (moon blindness)
- Lameness
  - How to evaluate
  - When to call your veterinarian/farrier
Gastrointestinal issues

- The equine gastrointestinal tract is both a beautiful and delicate design
- They are built for consuming and digesting large amounts of very rough coarse feed material
- This feed material can become dehydrated quickly and can cause obstruction
Esophageal Obstruction

• Commonly called “choke”
• The horse is not technically choking, as they can still breathe
  • The trachea is not immediately involved
• The esophagus becomes obstructed by hard packed feed material
  • Hay pellets/cubes that are not soaked
  • Improperly chewed hay/grain
  • Grass clippings
• The horse can aspirate feed material; which leads to upper respiratory infection
What does choke look like?

- Most common sign is feed-colored discharge from the nose
- Horse appears distressed
  - Stretching out the neck
  - Coughing repeatedly
  - Eyes appear “bugged out”
- This IS a time sensitive emergency!
- Your veterinarian will sedate and remove the obstruction
- Esophageal scarring is possible
- More prone to repeat episodes
Choke is preventable!

- Regular teeth float and oral exam to ensure proper chewing
- Soak ALL hay cubes or pellets...every time!
  - These feed materials expand dramatically when they hit moisture
- Please don’t allow horses to graze on freshly mowed grass where the clippings are mulched on top
  - These are the most difficult chokes to clear and often result in permanent damage, or are fatal
The big “C”

• First, a little clarification...
  • Colic is not a disease! It is a clinical sign of an internal issue!
  • Broad term for abdominal pain

• There are many causes for abdominal pain in the horse
  • Gastric or colonic ulcers
  • Obstruction/Impaction
  • Spasmodic gas pain
  • Intestinal volvulus (torsion)
  • Nephrosplenic entrapment

• Every horse is different
  • Pain is displayed in various ways
  • Rolling, stretching out, nipping
What to do?

• Colic is a time sensitive emergency...sort of.
• What to do?
  • Remove feed and hay, but leave the water
  • Check the horse’s heart rate (# of beats in a minute) with a stethoscope
    • Normal 28-44 bpm
    • Elevated 48-80 bpm
  • Listen to gut sounds in 4 places
    • Practice listening on your normal horses to determine what regular gut sounds are
    • Gut sounds can be increased or decreased in colic
  • Administer pain relief and sedation if needed
    • Banamine (injectable or paste)
    • Rompun or Dormosedan
When to call?

- Heart rate of 50+ bpm indicates severe pain
- The horse is violently thrashing or trying to throw itself down
- The gums appear very pale, very dark, or purple
- The pain does not get better with banamine
- You just need back up!
Surgical colic

• At some point in their lives, most horses will experience a bout of colic
  • 16.3% of these horses require surgery
  • 76% of horses survive a surgical colic if the surgery is performed within 10 hours from the onset
  • 11% of colics require euthanasia
• Surgery is not benign
  • Anesthesia is difficult on horses, especially when they are sick
  • Horses form adhesions (internal scar tissue) from surgery and can colic again
• Being mentally and financially prepared for surgery from the beginning of horse ownership is vital
Lacerations (cuts, scrapes, etc.)

- Horses have a VERY large blood volume
  - Average sized horse has approximately 12 gallons of blood
  - A horse can lose up to 10% of this before shock signs are seen
  - So, fill up a bucket with 2 gallons of water, tint it red, then dump it out over your barn floor.

- Lacerations, especially on the face, can bleed profusely
  - If you are concerned about blood loss, monitor gum color and capillary refill time (press on the gums and watch the color return).
  - Provide lots of water and feed
Does it need stitches?

- The “window” for stitching a laceration is 24 hours, but ideally within 12 hours
- Does the laceration gap open?
- Is it in an area prone to proud flesh?
- Are there important underlying structures?
- How close is it to a joint?
- Was the injury traumatic?
What to do?

• Administer a pain reliever/anti-inflammatory
  • Phenylbutazone 2-3 grams
  • Banamine

• Clean the wound well with cold water from a hose
  • Reduces swelling
  • Flushes out dirt and debris
  • Gives you a better idea of severity

• Then, clean with soap or antibacterial
  • Chlorhexidine (Hibiclens or Novalsan) is very gentle on tissue and does not inhibit healing

• Don’t go crazy with topical goo!
  • Furacin does not belong on open cuts
  • A dry, clean cut heals faster than a damp gooey one

• Antibiotics are not always necessary
The eyes have it...

- We all love the soulful eye of the horse!
  - “He has a kind eye.”
- Ophthalmic issues can be devastating to our horses
  - Scarring
  - Permanent blindness
  - Loss of an eye
- Quick action can prevent devastating effects to eyes
How to tell the difference?

- Ophthalmic issues are not always time-sensitive
  - Environmental allergies
  - Conjunctivitis
  - Equine Recurrent Uveitis (Moon blindness)
  - Corneal scratch
  - Corneal ulceration

- Is there discharge?
  - Color, thickness, nasal discharge

- Is there obvious pain?
  - Blepharospasm

- What does the eye look like?
- What does the conjunctiva look like?
What to do?

- If the horse is obviously painful, give a dose of pain reliever/anti-inflammatory
- Flush out the eye with saline
- Warm compress to soften hardened discharge
- Evaluate the nostrils for nasolacrimal duct drainage
  - Easily clogged with discharge
- Apply ointment
  - If there is risk of an ulcer, do NOT use dex!
- Eye stain by your vet?
Corneal ulcers

• The outermost layer of the eye is a mere 1.0 mm thick and contains 4 layers
  • Outer epithelium, stroma, Descemet’s membrane, inner endothelium
• Perforation of the epithelium causes pain due to the large amount of nerve endings present
  • Horses often rub their eye in response to this; which worsens the issue
• Ulcers can worsen rapidly and become infected
  • Diagnosis and treatment are vital
  • Fluorescein stain
  • Neomycin polymixin bacitracin ointment
  • No dexamethasone!
ERU

• Equine Recurrent Uveitis or Moon Blindness
  • Typically seen in Appaloosas and paint horses, but can occur in any breed
• Caused by an autoimmune attack of the uvea of the eye
  • Many hypotheses...infectious, traumatic, etc.
• Horse shows edema of the eye, pain, and swelling (glaucoma)
• Can cause permanent scarring
• Important to differentiate from a corneal ulcer
• Steroids (dexamethasone) are useful in controlling ERU
Lameness

• Very wide variation in severity!
  • Non-weight bearing to subclinical

• Put your hands on the horse
  • Heat?
  • Pulse?
  • Swelling?
  • Behavior?

• Watch them jog
  • Head bob (“Down on sound”)
  • Hip hike

• Demo
A basic emergency kit...

• The basic medications that you should have
  • Banamine (paste or injectable...Please not IM!!)
  • Bute (paste, pills, powder)
  • Saline eye flush
  • Ophthalmic triple antibiotic ointment (must be made for eyes!)
• Basic bandaging materials
  • Non-adherent dressing
  • Roll cotton
  • Vet wrap

• Additional items that are very helpful
  • Sedation (Rompun or Dormosedan)
  • Antibiotics (trimethoprim sulfa, penicillin)
  • Chlorhexidine (Novalsan) and wound care
Questions??

- Thank you so much for your attention!

- If you would like to know more about me, please visit www.sorumequine.com

- Or call (320) 291-7162