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



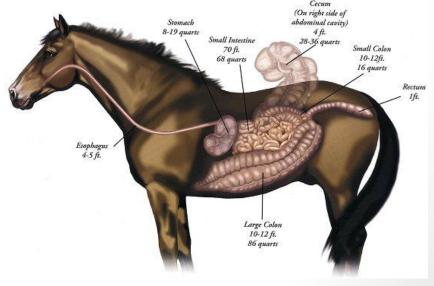
What we will cover...

- 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
- The 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 discarge
- Is there obvious pain?
 - Blepharospasm
- What does the eye look like?
- What does the conjunctiva look like?

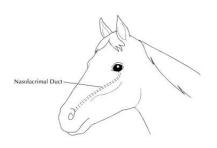






What to do?

- 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 <u>www.sorumequine.com</u>
- Or call (320) 291-7162

