

## *Colic Awareness Clinic - Prevention, Management, and Emergency Procedures* *Robyn Kopala and Lauren Basford - Discussion Summary*

November 8th, 2017

### *What are the types of Colic?*

**a. Medical Colic:** Medical colic can range from gas colic (mild), to impaction, to displacement. **Impaction** occurs when there is a blockage of feed material in the gastrointestinal (GI) tract. A common site of impaction is the pelvic flexure portion of the large intestine.

**b. Surgical Colic:** Surgical colic can occur for various reasons, ex. when the colon or intestine is twisted/out of place.

### *What causes colic?*

Causes are diverse but can include:

**a. Changes in gastrointestinal motility:** Normal GI motility patterns are necessary to maintain transit of ingested food, and to facilitate digestion/absorption of nutrients. Horses' internal organs are suspended from a mesentery which is suspended from the body wall, making them prone to **displacement**. One area of the GI tract can slow down or become hyper motile, causing a portion of the large intestine to shift out of place. The intestine can shift forward, back, or laterally. When motility slows down, you can hear less noise in the gut. When motility speeds up, it can cause cramping/become spasmodic.

Normally, displacement will not compromise the gut; however, torsion *will* affect blood supply to the GI tract and can cause tissue to die. Dead tissue would have to be removed during surgery. The weight of a primary impaction can shift and cause displacement of another area of the GI tract.

**b. Dehydration:** Dehydration oftentimes plays a role in impaction. In the fall/winter, horses may not consume enough water if water is too cold.

**c. Dental Issues:** Teeth issues can cause problems with grinding which can lead to an impaction if the hay is not grinded down to the proper length and size.

### *What are the warning signs?*

Warning signs include not eating, eating with less enthusiasm, laying down at an abnormal time, rolling, skin abrasions, kicking at the belly, looking at their side, pawing, kicking the barn, butt

rubbing, lack of care about self-preservation, abnormal behaviour. It is important to know your horse, and what is abnormal.

**There are no guarantees with any of these signals, and things can go sideways so fast. A small displacement can shift and cause an area of the gut to die within a very short period of time (1 hour) with little/no warning signs.**

### *What is the treatment protocol?*

**If you suspect colic, treatment should begin immediately:**

**a. Phone your vet.** Your vet will create action plan specifically for your case, considering your budget/relationship. Your vet will come right away to take heart rate, respiratory rate, and temperature, listen to gut sounds, and examine mucus membrane and capillary re-fill. Some will also do a flash ultrasound. Initial examination will help to determine if it is a medical or surgical case.

**b. Medical treatment:** Impaction or spasmodic colics can often be treated medically at home. Treatment may include administration of analgesics (i.e. Banamine), rectal exam, and intravenous/oral fluid administration. Your vet will then assess your horse's response to treatment. If horse is looking around for feed, and is bright, it is a good sign that it was a medical colic. Impactions that do not respond to medical treatment at home may require hospitalization for IV fluids/oral fluids. Most will respond to medical treatment and not need surgery.

**c. Surgical treatment:** If horse breaks through sedation and still looks uncomfortable, it is a good sign the horse requires immediate transport to clinic facility. During surgery, the surgeon will examine guts, exteriorize the GI tract, correct displacement, and put GI tract back in place.

### *Can medical colic turn into surgical colic?*

Yes. Medical colic can progress to surgical colic. If surgery is not possible, or if it is not a viable option for the client, the horse may need to be euthanized.

### *What are some of the ways we can prevent colic?*

**Know your horse, and design a plan that caters to their preferences.**

- Always provide access to quality feed and fresh clean water
- Use heated water buckets in the fall/winter (especially for horses in paddocks and in/out)
- Dental care
- Follow a good deworming program with fecal egg counts
- To encourage drinking, table salt or electrolytes can be added to diet. If added to feed, you can ensure your horse is consuming the additive. If molasses or electrolytes added to

water, always give horse access to a water-only bucket in case additive deters horse from drinking

- Soaking hay can make hay cold and deter horse from eating in cold weather
- Feed the least amount of grain that you need to maintain your horse's weight.
- Feed up to 50/50 alfalfa/hay mix if your horse's system can handle it as way to prevent ulcers, and buffer pH of GI tract
- If you do not have access to pasture, slow feeders help to keep horses chewing as many hours a day as possible
- Regular exercise promotes motility in the GI tract
- Do not make any sudden changes to diet, even if colic is suspected ie. feeding excess bran or beet pulp if horse is not used to it
- If hay supply is changing, introduce new hay gradually

### *If a horse colics once are they more likely to colic again?*

Nephrosplenic entrapment occurs when the large colon migrates between the spleen and the abdominal wall, and becomes trapped over the nephrosplenic ligament (which attaches the spleen to the left kidney). This is generally caused by changes in motility. Horses that have a nephrosplenic entrapment once may be prone to having it again.

### *Is colic more common in older horses?*

Colic can happen to a horse at any age, but it is the most common cause of death in older horses

### *Can a horse still have colic if it has had multiple bowel movements?*

Yes. The obstruction could be high in small intestine, followed by 100 feet of intestine containing digested food. It is important to be careful with using this as an indicator.

### *Does walking them help?*

Yes, walking or lunging will help with motility if the horse is well enough to do that.

### *What are some of the issues associated medicating a horse with colic? Are some medications more effective than others?*

Banamine could temporarily mask how bad things are; however, Banamine is useful for the majority of cases. Buscopan is a smooth muscle relaxant and is useful in some cases.

### *Do tranquilizers change gut motility?*

ACE does not change GI motility but some tranquilizers like Dormosedan and Xylazine do temporarily decrease motility.

### *Can a horse have colic surgery twice?*

Yes, horses can have colic surgery multiple times.

### *If a horse is over 25 would you operate?*

A lot of people would choose not to do a surgery at that age.

### *How does time of year contribute to the frequency of colic cases?*

The weather is more variable in the fall making blanketing more difficult, but the increased frequency of cases at this time of year has mostly to do with water consumption. Huge temperature fluctuations also make it hard for body systems to adapt/adjust.

### *Is it true that horses can only live for a limited number of years after their first surgical colic?*

No. If the horse survives approximately 3 months post-surgery, they are no more likely to have another surgical colic unless their first colic was nephrosplenic.

### *How much does colic surgery typically cost?*

\$10,000-\$15,000 which includes surgery and one week in the clinic. Average charge per day in the clinic depends on how much monitoring horse requires.

### *Should you tie your horse in the trailer on the way to the clinic?*

- Remove dividers if there are any to create an unobstructed open space.
- If the dividers are not removable and have any sharp edges they should be wrapped in a blanket and tied back so they do not swing open.
- horses do not have to be tied in a trailer. Typically they will find a corner and wedge themselves in place. Tying them could become an issue if they fall down in the trailer.

### *Can all horses handle recovery of colic? What if they do not handle stall rest well?*

They often do better than we think they would do

### *If horse has had colic surgery, is this something that should effect purchase?*

A horse is a tough sell if they have had surgical colic. You can check for the scar along the midline of the belly

### *Recommendations for Emergency Procedures:*

- As a horse owner you should have name/contact information for at least two emergency contacts who have a truck/trailer, are based in Southlands, and are willing to be contacted at any time. Know where to access contact information for commercial haulers
- As a leaser you should have access to all emergency contact information
- Discuss fee schedule for hauling with your emergency contact *before* an emergency happens
- Know what type of insurance you have, what type of insurance your hauler has, and what type of damages would be covered
- Everyone should have a thermometer in the barn, and the first step if you suspect colic to take temperature. You can let your vet know what your horse's temperature is when you call.

**Action Item:** SRC to assemble list of emergency contacts for the community, and further develop emergency process and procedure.

**Action Item:** SRC to look into what is covered through HCBC membership in terms of legal and insurance implications