Colic Surgery: What Horse Owners Should Know

Tonight, at midnight, you are told that you must make a decision about your very best horse. Your choice is to either have colic surgery performed or he will need to be put down. You have 20 minutes to make the decision. There is no certainty as to what the outcome of surgery will be, whether he will survive and return home or be alive in a year. Will he be able to perform at the level that he did before or will he even live a quality life?

You don't even know the veterinarian who is telling you about the surgery. Your regular veterinarian referred you to this other veterinarian after 2 hours of treating your violently painful horse in the field to no avail. Should you proceed with surgery, you must provide the surgical facility with a deposit of $3,000 - $5,000. The total cost may range from $8,000 - $12,000, or more if there are complications. What do you do?

In the midst of this scenario there is rarely enough time for me to tell clients all they need to know. For this reason, I want to share with you some of the things that I think horse owners should think about before they are faced with this difficult decision.

EQUINE COLIC GENERALLY

Colic is a symptom not a disease. What does this mean? Colic is a sign that something else is wrong - it is not the problem. Colic is simply a horse’s way of showing abdominal pain. This pain usually comes from the abdomen but can come from other organs as well. The horse’s intestinal tract is very complex, with many structures that can get themselves into trouble. Colic signs include depression, loss of appetite, lying down, pawing, rolling, kicking at the belly, looking at the side, stretching and many others.

There are a number of potential causes for colic. Most of them are simple, like spasm or gas in the intestine. Most horses that experience abdominal pain will either resolve on their own or with minimal treatment. The majority of the remainder will respond to intensive medical treatment in a hospital setting. Of horses that show colic symptoms, only a small percentage require colic surgery. It is these horses that are the subject of this article.

SURGICAL EQUINE COLIC
Horses that have a mechanical problem in their abdomen are surgical cases, meaning that the problem can only be corrected with surgery. Mechanical problems include:

- A volvulus - meaning a torsion or twist of the large colon.
- A strangulation of the small intestine by a fatty tumor on a cord, known as a lipoma.
- An impaction of the large colon, usually a build-up of feed material or sand.
- A foreign body blocking the small colon.
- **There are countless other variations...**

For each of the above diagnosis, there is a specific prognosis and an estimated surgical cost. For example, surgery for a large colon impaction usually has a better prognosis and is less costly than a small intestinal strangulation. One of the most important concepts to understand is that colic surgery is in itself “the ultimate diagnostic test.” Until the equine surgeon actually explores the abdomen to see what is going on, he or she cannot give you a definite diagnosis, prognosis, or expected cost.

**YOUR VETERINARIAN’S ADVICE**

*How does your veterinarian know your horse needs colic surgery?*

- A specific diagnosis is made following the physical exam that he or she knows can only be corrected surgically.
- The horse is exhibiting pain so unmanageable that there is no practical way to deliver intensive medical care.
- The horse may not look that bad (especially if they have been given pain medication), but all of the diagnostic tests add up to a case that is better managed surgically.
- Medical management has not corrected the problem. The horse is still in pain and so the only thing left to do is explore the abdomen surgically.

The veterinarian who sees the horse in the field must make a quick determination as to whether or not this horse is a surgical candidate. Perhaps the most important part of making that determination is asking you, the horse owner, about whether it is even an option. In extreme cases, the only other option is euthanasia.

**YOUR DECISION**

Here are some points to consider when making this difficult decision:

- **Diagnosis & Prognosis.** What does your veterinarian and the surgical...
veterinarian think is wrong with your horse? How complicated will the surgery be and what is the likely prognosis if all goes well during surgery? What is the rate of recurrence, if any? Are you comfortable with all of the risks involved?

- **Anesthesia & Recovery.** Colic surgery requires general anesthesia, where there is always a risk. We use a tail-tie system that reduces the risk of injury during recovery, but there is no guarantee. Are you willing to take this risk?

- **Cost.** Can you pay for colic surgery? Is your horse insured? If so, is there coverage for colic surgery? Colic surgery is expensive because it is performed in an equine hospital that has adequate staff, equipment and experience to do the surgery correctly, and can handle the intense follow-up care necessary.

- **Temperament.** Is your horse a good colic surgery candidate? Temperament plays a big role in this decision. Some of the worst candidates are intense performance horses that simply cannot tolerate being locked in a stall for the weeks following surgery. Older horses and horses with other underlying diseases are also not good candidates.

- **Travel & Convenience.** How far will you have to go for this service? Will your horse survive the trip?

- **Stress.** Colic surgery is not for every horse owner. Intense colic cases are stressful events for horse owners, especially if there are post-operative complications.

**SO YOU HAVE DECIDED TO PROCEED WITH COLIC SURGERY**

Assuming you have been fully advised and have decided to proceed with surgery, your horse is now being prepared for colic surgery. He stands in a brightly lit exam room. A team of people are gathered around him. Veterinary staff are rapidly clipping his belly. Intravenous fluid bags the size of grocery bags hang above his head and fluid pours into his vein through a large fluid line. Other staff are preparing the surgery room and anesthesia. Your horse is given a variety of medications in preparation for the surgery. Within minutes, he is taken into a padded room where he is anesthetized and gently lowered to the floor.

He is hooked to a hoist and trolley with hobbles on his legs and transported upside down to a padded surgery table. He is then placed on his back and secured to the table and hooked up to an anesthesia machine and ventilator as well as the equipment that monitor's his blood pressure and vital signs. A heavily gowned surgeon makes about a 15-inch incision on the midline of his belly. The surgeon and his assistant then explore his abdomen (sometimes shoulder deep) to find the problem. Most of this is done by feel, because many structures of the abdomen cannot be pulled out in plain view.

Colic surgery is a very physical undertaking. Heavy segments of intestine must be pulled out of the abdomen and emptied or repositioned. Once the surgeon has made a
diagnosis, he or she will usually want to discuss the problem with you. If the problem is not operable or the prognosis is poor, the decision may be made to discontinue the procedure and your horse may be euthanized on the table. You should be prepared to have this discussion.

Once the specific problem is diagnosed, it must be repaired. This may involve repositioning displaced intestine, removing damaged intestine, clearing a blockage of feed, sand, or a foreign object, or any other necessary procedure. Surgical time ranges from 1 ½ to 4+ hours. Once the surgeon is confident that the abdomen is free of other problems, the abdomen is closed very carefully with heavy suture material. Your horse is then taken back to the padded stall and recovered from anesthesia. Once he is steady on his feet, he is moved to his stall.

POST-OPERATIVE COMPLICATIONS

Survival rates for many types of colic operations are high, however things can go wrong at any time during this process. Very ill horses may have trouble surviving anesthesia. Horses can be injured during recovery. For horses with more severe conditions, the five days following surgery are a critical time and require intense medical treatment and monitoring as well as large volumes of intravenous fluids. During the first few days, horses are checked every 1-3 hours (day and night) and monitored carefully for any sign of a problem.

How long horses are in intensive care depends on the condition that was corrected. Complications during this period include abdominal infection, laminitis, colic recurrence, incision problems, and others. For horses recovering normally, the intensity of medical care decreases until the horse goes home, usually at 7 days after the operation.

HOME CARE

Once home, horses must be confined for about 8 weeks in a small stall and hand walked several times per day. A horse must be kept from moving at speed until the abdominal incision gains sufficient strength to take the weight of the intestines and organs in movement. Diet may need to be modified, and other specific treatment instructions may be given to you depending on the case.

CONCLUSION

There is lots of myth in the horse world about colic surgery. Generally, there is a belief that it is not often successful. True, 30 years ago few horses survived. Since then, however, there have been great strides made in equine surgical and anesthetic technique. Today many conditions carry a very good prognosis. That said, it is important to always remember the following:

• It is possible to invest a large amount of money and hope in colic surgery and aftercare, only to find that the horse suffers from a fatal complication later.
• Once you have embarked on the path of colic surgery, there is always the concern of “throwing good money after bad.” You need to know when you will stop.

• Once you have taken your horse to a referral center for colic surgery, the key is good communication with the equine surgeon. He or she will inform you of the risks and prognosis, and help you to make the best decisions along the way.

My advice is to think now about what you would do if you were forced to make this decision. This is easier said than done. Ultimately you will only know when you are faced with the crisis, but the best policy is always to “hope for the best, and plan for the worst.”

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