What Horse Owners Should Know about Colic Surgery

By Doug Thal, DVM

Introduction

Picture this … Tonight, at midnight, you are suddenly woken from bed and told that you must make a decision about your very best horse. You either will elect to have colic surgery performed on this horse or he will need to be put down. You have about 20 minutes to make the decision. There is no certainty as to what the outcome of surgery will be, whether he will survive to go 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 this. Your regular vet sent you to this strange place after 2 hours of treating your violently painful horse in the field, to no avail. The procedure will require that you start by immediately providing a deposit of $3000-$5000. The total cost may range between $5000-$10,000.

This all may sound like a nightmare, but this is actually the nature of abdominal crisis and severe colic in the horse. Severe forms of colic, so called “intestinal accidents”, usually come on suddenly, frequently without any known cause.

What would you do in this scenario? You may think that this could never happen to you, but the truth is that if you own many horses you will ultimately be faced with this decision- severe colic is more common than we would like. In the midst of an intense surgical colic, there is rarely enough time to tell clients all they need to know. It is for this reason that I want to share with you some of the things that I think horse owners should think about, before they are faced with having to make this decision.

We have discussed the meaning of the term “Equine Colic” in prior articles. These articles are archived on our website thalequine.com/Articles. If you read the articles on colic, you will understand in more detail what I consider the most important concepts for horse owners to understand about colic.

Colic summary

1. Colic is simply the horse’s way of showing abdominal pain. This pain usually comes from the intestine but can come from other organs.
2. The symptoms of colic are many and include: loss of appetite, lying down, pawing, rolling, kicking at the belly, looking at the side, stretching among many others.
3. The horse’s intestinal tract is very complex, with many structures which can get themselves into trouble.
4. 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 will require colic surgery. It is these horses that are the subject of this article.
“Surgical Colic Cases” generally will have a mechanical problem in their abdomen which can be corrected only with surgery. Surgical problems include conditions like these (there are countless variations):

- A volvulus (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.
- A foreign body blocking the small colon.

For each of the above diagnosis, there is a specific prognosis and a likely cost. For example, surgery for large colon impaction usually has a better prognosis and is less costly than small intestinal strangulation.

One of the most important concepts to understand is that colic surgery is in itself “the ultimate diagnostic test”. Until the surgeon actually explores the abdomen, he really can’t give you a definite prognosis or expected cost.

How does your vet know that a horse needs colic surgery or referral to a colic center? (see other articles)

1. A specific diagnosis is made in the exam which he or she knows can only be corrected surgically.
2. The pain is so unmanageable that there is no practical way to deliver intensive medical care.
3. The horse may not look too bad, but all of the diagnostic tests add up to a case that is better managed surgically.
4. Medical management has simply 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 questioning you, the horse owner, about whether it is even an option, and whether you are willing and able to go to the next level of treatment for your horse. Will you do it? In many cases, the only other option is euthanasia. Here are some points regarding making this difficult decision:

- Are you able to pay for colic surgery? Are you willing to do it for that particular horse? There usually are options for financing. Is your horse on Preventicare? (a type of colic insurance for horses fed the product StrongidC) Is the horse insured? If so, is there coverage?
- Is the horse a good colic surgery candidate? Colic surgery is not for every horse. Temperament plays a big role. 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 that have other disease are also not good candidates.
- How far will you have to go for this service? Will your horse survive the trip there? Colic surgery 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. These facilities are not common in the Southwest.

- Colic surgery is not for everyone. Intense colic cases are stressful events for horse owners who have not been through this sort of thing before. Financial stress is coupled with the stress of seeing a valued horse in intense pain. A decision must be made immediately. Don’t feel guilty if after hearing the options, you decide that colic surgery is not for you and your horse. Our job as veterinarians is to inform you as well as possible what your options are for your horse. It is then up to you to make a decision.

After discussing it with your veterinarian, you've now made the decision. You've decided that you will take the horse to the referral hospital. Your horse is now being assessed again by the surgeon there. After a thorough exam, he determines that the horse does need surgery. At this point, you should ask more questions:
  - What does the surgeon think the diagnosis is? What is the prognosis for that particular condition? What does he think that the cost will be?
  - Will the problem in the abdomen recur if it is fixed? For each problem, there is a rate of recurrence. You should be comfortable with that risk.
  - He may not be able to give you these answers until he looks inside the horse at surgery.

Surgery
Now your horse is being prepared for colic surgery. He stands in a brightly lit exam room. A team of people are gathered around him. Two 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 is preparing the surgery room and anesthesia. The 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 lowered to the floor. He’s hooked to a hoist and trolley by hobbles on his legs and transported upside down to a padded surgery table. He’s placed on his back and secured to the table. He’s hooked up to an anesthesia machine and ventilator and equipment to monitor 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 determine what the problem is. 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 the owner. If the problem is not operable, or the risk is poor, the decision may be made to discontinue the procedure and the horse may be euthanized on the table. Once the specific problem is diagnosed, it must be repaired. This may involve repositioning displaced intestine, removing damaged intestine, clearing a blockage, or any other necessary procedure. Surgical time ranges from 1 ½ - 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. The horse is taken back to the padded stall and recovered from anesthesia. Once he is steady on his feet, he is moved to his stall.

Complications
Things can go wrong at any time during the process. Very ill horses may have trouble surviving anesthesia. Horses can be injured during recovery. The 5 days following surgery are a critical time and require intense medical treatment and monitoring and large volumes of intravenous fluids. During the first few days, horses are checked every 2-3 hours (through the night) and monitored carefully for early signs 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.

More care at home
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 incision gains sufficient strength to take the weight of the intestines and organs in movement - hundreds of pounds. Diet may need to be modified, and other specific treatment instructions may be given.

Conclusion
There is lots of myth in the horse world about colic surgery. Mostly, there is a belief that it is not often successful. It is true that 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:

1. You may invest a large amount in surgery and aftercare, only to find that the horse suffers from a fatal complication later.
2. There is always the concern of “throwing good money after bad”. At what point do you stop?
3. Your horse can return home and seem to do well for a period of months or years, only to have the same or another colic problem occur. There are no guarantees.

My advice is to think now about your horses and what you would be willing to put into each of them if forced to make a 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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