

Thal Equine Client Handout: Castration Care

TIMING & PREPARATION

Castration is surgical removal of the testicles. It is performed on colts to modify behavior and to prevent stallion-like body development. Castration is usually performed before the age of 24 months. Any colt older than 9 months of age should not be put on pasture with fillies and mares because they may mount and potentially impregnate them. In our area, we like to castrate colts during the cooler months when there are fewer flies.

In normal colts, the testicles have descended into the scrotum by the time of birth. In some colts, called "high flankers" or "ridgelings" by horsemen, one testicle does not completely descend into the scrotum but remains in the inguinal canal. With time, and in some cases, this high testicle may descend into the scrotum and be more accessible for removal. Colts that retain a testicle in the abdomen are known as "cryptorchid," meaning hidden testicle. Removal of retained testicles, called a "cryptorchid castration," is more complicated and should be performed in a surgical center by a veterinarian experienced with performing this procedure.

Before castration, the colt should be accustomed to handling and be halter trained, so it can be easily managed during and after surgery. Tetanus immunization is necessary before or at the time of surgery. Postoperative care is usually needed for at least 2 weeks after castration, so schedule the surgery for a time when you will have the time to monitor the horse after the procedure. Ideally, you should be comfortable handling the young stallion before having him castrated. In some cases, it can take weeks to months for stallion-like behavior to decrease after castration. Monitoring at home and caring for the colt according to instructions is essential for a

smooth, uncomplicated recovery. The period after castration is also a good time to begin daily training of your young gelding.

THE PROCEDURE

In our practice, we usually perform what is known as a recumbent (down) castration under short acting general anesthesia. The colt lies on his left side with a hind leg tied up for positioning and access to the scrotum. We perform the procedure in the field or at the clinic, and usually outside. Some veterinarians prefer to perform the procedure standing but I prefer doing the majority down for a variety of reasons. We use sterile surgical instruments for this procedure.

I start by examining the colt to be sure that both testicles are down and that he is well enough for the procedure. At that point, I give an injection of anti-inflammatories and antibiotics. I feel that this increases comfort after castration and reduces the incidence of infection.

I then give a sedative and loop a large, soft cotton rope around the colt's neck. Five minutes later I give a general anesthetic and the colt is laid down onto his left side. The rope is brought around the hind leg and hock and the leg is lifted out of the way. The scrotum is surgically prepared. A large incision is made over one testicle, the testicle is exposed and sterile emasculators are used to crush the large vessels of the spermatic cord, preventing hemorrhage. The other testicle is similarly removed. A surprise to some horse owners is that the incisions are left wide open. Not only do I make very large incisions, I stretch the incisions even wider to improve drainage and reduce the chance for infection. For the same reason, I remove extra skin, fat and connective tissue. It usually only takes me 5-7 minutes to perform the actual routine castration procedure.

We monitor the colt as he recovers from the anesthetic, which usually takes about 15 minutes. At that point, he rolls to

his chest and usually gets up easily with little assistance.

He will be unsteady on his feet for another 5-20 minutes, but after that he can be trailered or moved to a stall. I also remove wolf teeth at no charge as part of our castration. I feel that this is a great time to get this procedure done easily and without pain.

POTENTIAL COMPLICATIONS

Castration is a routine surgical procedure, but complications happen, and so those involved must take it seriously. It is nearly impossible to predict if postoperative complications will occur. The most common complications include:

- **BLEEDING:** Excessive post-operative bleeding after castration is more common in horses that have a clotting abnormality or very large testicular blood vessels. It can also occur if the vessels are not properly crushed. When properly performed though, most horses bleed very little. For older breeding stallions and those with very large testicles, we may choose to ligate (tie off) the large blood vessels to insure no hemorrhage. This may add a few minutes to the procedure.
- **INGUINAL HERNIA:** In some horses, the opening in the abdominal wall (inguinal canal) through which the testicles descend into the scrotum is larger or more flexible. In these horses, the intestines and other abdominal tissue can pass through the inguinal opening and come out the incision (called herniation). Although inguinal hernias are uncommon, they are a life threatening complication and must be dealt with immediately and properly.
- **INFECTION:** As mentioned, the incisions are not sutured and are allowed to heal from the inside out. If the incision closes prematurely, infection can be sealed inside. Post-castration infection usually causes excessive swelling of the scrotal area and sheath and a depressed attitude and appetite. Horses with infections

will often have a fever over 102.5 degrees. This complication is most often seen 2-7 days after castration but can occur anytime.

- PREGNANCY: A recently castrated gelding can still get a mare in foal for some time after castration because of sperm remaining in the conducting system of the urogenital tract. Recently castrated geldings should be kept away from females for at least 30 days.

AFTER-CARE

It is vital that you monitor your recently castrated gelding.

- For the first 24 hours after castration, keep the horse confined and calm in up to a 20'x 20' stall or corral. During the first 6 hours after surgery, look in on the animal every few hours, as directed.
- Look for streaming of blood from the wound. Some dripping is to be expected for the first few hours after castration, but *call us immediately if blood streams from the wound. Also call us if you observe colic signs or any dramatic increase in scrotal swelling or pink/red tissue protruding from the wound.*
- Exercise is important to help reduce swelling and facilitate drainage. We recommend starting the exercise program 24 hours after the procedure. The exercise program should consist of 15 minutes of controlled exercise, once or twice daily. Lungeing or ponying at the trot is best. The horse may initially seem stiff, but this stiffness usually resolves with more exercise.
- Apply fly spray around the flanks and hindquarters. Spray from the side. Do not spray directly up into the wounds. Fly spray can be very irritating to open wounds.
- The wound will heal over 2-14 days. It will contract down over a few days to a much smaller wound and then fill with a bed of red tissue. During the first few days to a week, any drainage will subside.

- During days 2 through 5, the scrotum may swell up to 3 times its original size. This is normal. This postoperative swelling is reduced with exercise. The scrotum is usually back to normal size after 5 days but a bit of swelling may persist at the lowest part of the sheath.
- Clear, red tinged fluid draining from the wound is normal for the first few days. If the drainage becomes yellow or pus colored, you should call our office.
- Any other recommendations, as directed by me or your equine veterinarian.

PLEASE CALL US IMMEDIATELY IF:

- You have any questions concerning the castration and healing of the wound. Call us if you feel anything seems abnormal.
- Your horse acts depressed, or won't eat following the procedure. This is probably the most important thing to watch out for. He should always maintain a good appetite and attitude.
- You observe excessive swelling of the scrotum or sheath.
- Your horse's temperature in the morning, before exercise is greater than 102 degrees F.
- You observe excessive bleeding or drainage from the scrotal incision. Bleeding is usually only a potential problem the first 24 hours after the procedure.
- You observe any tissue hanging out of the scrotal incision.

By Douglas O. Thal DVM Dipl. ABVPBoard Certified in Equine Practice Thal Equine LLC Last Updated August 2011