

## COMPLICATIONS OF CASTRATION

Castration, or removal of the testicles, is the most common equine surgical procedure performed. It is typically performed to reduce the masculine behavior in male horses that are not used for breeding. The testicles are the primary source of androgens (hormones) in the male, and castration generally results in a more docile and manageable horse.

Although castration is thought of as a “routine” common procedure, it is a surgical procedure that is performed under anesthesia. Therefore, there are risks and complications associated with the procedure that owners must be aware of and remember. Complications include:

- Anesthesia- this is a risk in itself. Horses that have a compromised cardiovascular system could die as a result of the anesthesia. Horses can have a reaction to the anesthesia drugs and subsequently die. In addition, horses can injure themselves while lying down or while trying to stand up when still experiencing the effects of the anesthetic.
- Edema (swelling)- this is the most common complication of castration. Most horses develop some degree of edema over the days following the castration. This is why most veterinarians recommend an exercise routine and cold-hosing the region for a period of time after the surgery. This helps promote drainage and reduce the amount of swelling and edema. If the swelling becomes too severe, it can inhibit urination or cause focal areas of necrosis (death of the tissue) on the prepuce.
- Hemorrhage- Minor bleeding frequently occurs and will stop with time. Allowing the horse to stand quietly for 15-20 minutes will typically stop the bleeding. However, if the bleeding continues at a steady prolonged amount, it will require further intervention by a veterinarian. This could involve packing the scrotal region with gauze for several hours, or it may require repeating general anesthesia and further exploration to find and ligate the blood vessel.
- Eventration- this is a rare but serious complication that can occur after castration. This is an immediate medical emergency and occurs when intestinal contents enter the inguinal canal from the abdomen, fall through the incision, and are visible externally. This requires immediate attention by your veterinarian to try to clean the exposed tissue and replace it back into the abdomen (if possible).
- Infection- this can occur with any surgical procedure. The infection can be localized and form an abscess, or it can be more generalized and spread throughout the body. The infection may require appropriate antibiotics and possible removal of the affected tissue.
- Hydrocele- this is accumulation of fluid in the tissue that was cut during the castration. To the owner, this will look like testicles have reappeared. It is best to have your veterinarian examine the horse to determine the exact problem. If it is a hydrocele, your veterinarian can treat it by draining it or removing the excess tissue.
- “Proud cut”- this means that all of the testicle was not removed during castration. The horse may have persistent “stallion-like” behavior due to hormone-producing tissue being left behind. This may require further exploration of the scrotal region to find the remaining tissue.

Castrations are performed daily all around the world. While it is generally seen as a routine procedure, it is important to keep in mind that it is a surgical procedure with potential complications. Be sure to discuss any concerns that you have with your veterinarian prior to having the castration performed and notify your veterinarian right away if you see problems developing after castration.