

EQUINE CASTRATION/ GELDING FACTSHEET

Reason: Most male horses are castrated for behavioural and management reasons. The procedure should also make the horse infertile.

Timing/Age: Younger horses are at reduced risk of complications. Ideally, we like to castrate horses at 6-18 months of age. Horses over 4 years old, particularly those of whom have bred, are at increased risk of complications and will need discussion whether castration at the hospital would be preferable. Castration outside of an operating theatre is best performed in the spring and autumn- we see significantly fewer complications when conditions are not muddy and summer flies are not present.

Before castration:

- Horses should receive a tetanus vaccination. Tetanus antitoxin can be given at the time of surgery, but it only provides coverage for a short period and is expensive.
- Please have the horse's passport present. Horses without passports will need to have a microchip implanted and the rest of the application process performed at the time of castration in part due to the medications which will be given.
- Examination prior to castration is critical and allows us to check for anatomical variations which may complicate surgery- an example is a retained testicle (rig).
- The horse will need checking repeatedly after the procedure throughout the day- please make sure someone is available to do this.
- *Note: Surgical procedures may make certain people feel ill. A friend could help out or we can ensure we bring along suitable help to hold the horse during the procedure if we know in advance.*

Place of Castration: Castrations can be performed standing with sedation, or under injectable general anaesthesia (field anaesthetic)- the choice is mainly dependent on a colt or stallion's behaviour; however, other factors may contribute to the way the procedure is performed. In both cases, a source of clean water, a source of hot water (a kettle or a clean thermos flask) and a clean small paddock to turn the horse out in afterwards is required. The following is also required depending on the procedure:

- Standing castration: A clean stable (bedded down ideally the night before)
- Castration under field anaesthetic: A clean dry field, reasonable weather (!)

Risks: Standing castration has the most risk of complications of any routine equine surgery (approximately 1 in 5 in various UK studies) but these are usually minor and the expense and risk of an anaesthetic is avoided. It is not suitable for difficult or very nervous horses.

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General anaesthesia in horses carries a risk of mortality (up to 1% for non-colic cases, although this is arguably considerably less for short anaesthetics for castration etc; a recent study of 315 horses castrated by general anaesthesia in the field had no mortalities).

An important, but fortunately rare complication, is herniation- something important, such as intestine, pushing out of the incision after surgery. This can be an extremely serious complication and horses should be monitored closely post-castration should this occur. Herniation is a higher risk in older horses.

Methods: *Chemical castration* in horses is not very effective at the moment and definitely not recommended (it is used to try to control populations of wild horses in some places)

Standing/ sedated- The horse is examined, heavily sedated and given pain relief and local anaesthetic into the testicles. The scrotum is then incised, the structures identified and separated and then the testicle is removed with an emasculator. This is an instrument which crushes the tissues to reduce bleeding and also cuts tissue. The emasculator is left in place for a few minutes prior to repeating the procedure on the other side. Incisions are not closed; they are left open to allow drainage post-operatively- complications occur when they seal too quickly. Castrations performed standing will not have the same level of sterility as those performed in a hospital theatre. As such, placing of sutures during standing castration is typically avoided.

Field general anaesthetic- The procedure is the same other than the fact that horse is anaesthetised- this involves sedation, placing a catheter into the jugular vein and use of an injectable anaesthetic agent so that the horse lies down. After the operation the horse may take a while to stand up and may be wobbly for a while.

Hospital general anaesthetics in a sterile theatre- This is the most appropriate technique for certain cases, including those with a retained testicle(s) (rigs), older horses or if the season would increase the risk of complications.

Aftercare

Assuming there were no issues at the time of surgery or immediately afterwards, we recommend the horse is kept quiet for 1-2 hours and then turned out in a small paddock. They need to be kept under close supervision throughout the day.

Please use prescribed pain killers/ anti-inflammatories as requested- they are important to keep the horse moving and reduce side effects. If prescribed please use the antibiotics as requested- these are necessary in a few cases (most infection cases are late and antibiotic use makes no difference to the risk and so they are not used routinely).

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What to what for- Early post-operatively

Bleeding- Some bleeding is normal after castration and can continue intermittently for a period of days or even rarely longer. As long as you can clearly count the drips this is a normal amount during the first few hours. If the horse stays still for a while and then moves there may well be a stream of blood but this should quickly return to drips, certainly within a couple of minutes.

Tissue protruding through incisions (herniation)- As long as tissue protruding is less than 2.5cm (1 inch), this is unlikely to be an issue. A very large amount of tissue is an emergency- please phone 0141 330 5999 straight away for advice.

Swelling

Some swelling occurs in almost every case. Please phone for advice if swelling appears excessive- please *do not* hose the sheath.

What to look for- A few days post-operatively and onwards

Discharge from the wound, and/or swelling, and/or lethargy

This usually reflects infection- please phone for advice

Please Note

Fertility- Castrated horses in theory can be fertile for 55 days post castration. Mounting after castration also leads to increased risk of side effects.

Exercise- Other than turnout as above please leave any exercise for a minimum of 1 week after the incisions are closed.

Behaviour- Most horses under 18 months of age will calm down relatively quickly, often within a few weeks but this varies. Older horses take longer and a few may maintain stallion-like behaviours.

Donkeys- Donkeys are much more prone to bleeding at castration than horses and this can be severe. The Donkey Sanctuary advises that they are castrated under a general anaesthetic in a sterile theatre as they definitely require sutures and this greatly increases the risk of infection if done in the field.