

# Cinder Hill Equine Clinic



## Castration

Colts are generally castrated for ease of management. If a colt is left entire it is usually impractical/impossible to run them in company, with either mares, geldings or other stallions, especially as they mature. They can become difficult to handle, and in some cases, can be so dangerous as to pose a serious risk to the people and other horses around them. The added concern with an entire male is the risk of mares having an unwanted covering resulting in pregnancy, either by an undesirable sire or when breeding was not even being considered.

### Options

Castration maybe a very commonplace procedure, but that's no reason to take this routine operation lightly. There are many different factors to consider and more potential problems than many realise.

Most colts end up becoming geldings because it leaves them much easier to handle, particularly if they are kept with mares. The comment '...you can tell a gelding and ask a mare, but you have to discuss things with a stallion' is very true!

Castration makes sense and will make life easier all round, unless you plan to breed from a horse. Ironically, extremely good performance later may provide a reason for wishing a horse had remained entire as many horses are gelded before knowing how well they will perform.

Obviously, our aim is that the surgery will be straightforward, and it usually is, but there are enough possible complications to take it seriously. It makes sense for colt owners to discuss the options carefully with us first.

### Facts to consider

The big question is usually whether to perform a standing castration using sedation and local anaesthetics, so the colt is aware but does not feel anything, or castration under general anaesthesia with the colt unconscious and totally unaware.

Other factors to consider include:

- **Age** - Foals are too tiny to perform a standing castration, but the surgical procedure is more straightforward. With a mature adult stallion, however, the risk of bleeding and other complications is greater with standing surgery.
- **Size** - Small ponies can be difficult for the vet to castrate standing as they are simply too close to the ground.
- **Maturity** - For the standing procedure, the testicles must have dropped sufficiently so that everything is easily within the surgeon's reach. Equally a rig (the proper term is cryptorchid)

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with only one descended testicle cannot be done standing as the missing testicle may be within the abdomen, requiring a rather more complex surgical procedure.

- **Temperament** - standing castration is not safe with a difficult horse, as a horse can still kick despite heavy sedation, making the procedure impossible.
- **Handling** - A colt should be well-handled prior to the procedure, whichever way it is done. As a vet, there is nothing much worse than realising that a horse booked for castration has never even worn a head collar. Apart from the danger for the handlers involved, think how frightening and stressful it must be for the colt, if his first close encounter with people is for a castration.
- **Breed** - Certain breeds such as Shires and Standardbreds may be at increased risk of evisceration (the catastrophic post-surgical prolapse of abdominal contents). For such animals a more complex procedure in the hospital under general anesthetic is justified.
- **Welfare** - The choice of surgical method for castration may be based on cost as well as best practice. This is often true with ponies, where the cost of castration may even exceed the monetary value of the animal, particularly if there are ensuing complications that increase expense.

There are a number of charitable initiatives involving organised castration clinics at reduced cost. We would encourage any owners who genuinely cannot afford this essential aspect of horse care to contact the charities directly (including World Horse Welfare, Redwings, BHS, Blue Cross or RSPCA).

Ultimately, the chosen method should be based on a risk analysis for the individual horse and considered alongside your vet's preferred approach and the facilities available.

## When to castrate a colt

A colt can be castrated at any age. It is traditionally done in the spring of the yearling year, but in reality, it can be performed earlier as a foal, or later in life. There is a body of opinion that castration should be left as late as possible, to allow the horse to 'mature'. However, there is no evidence that foals left entire develop any differently from those castrated early. Indeed, on the continent it is common place for colt foals unsuitable to be kept for breeding purposes to be castrated when still suckling from the mare. There is evidence to suggest that those foals castrated at such a young age recover from the operation faster and with fewer complications than their older counterparts.

Colts can be castrated at any time of year, however, they should ideally be castrated either in the spring or autumn, in order to avoid the flies of summer and the deep mud of winter, both of which can increase the risk of post-operative complications.

Both testicles must have descended into the scrotum for a colt to be castrated. If only one is present

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(a 'rig'), the owner is faced with two options:

1. Give the colt more time in the hope that the missing testicle will eventually descend, although this does not always occur (if the testicle has not descended by one year of age, then it becomes increasingly unlikely that it will ever "drop").
2. Take the rig to a hospital for castration. This may incur significantly more surgical intervention and cost, as the retained testicle can be anywhere from the inguinal ring (groin) to within the abdomen, which would necessitate either laparotomy or laparoscopy (i.e. surgical procedure to enter the abdomen) to remove it. It is also important to check that there is nothing else apart from two testicles within the scrotum, as rarely a horse may have a hernia, in which case they should be castrated in a hospital.

It is best to ensure that a foal has had his first 2 doses of tetanus vaccination before castration.

## **Where to castrate a colt**

Colts can either be castrated at an equine hospital or at the owner's premises providing they are suitable. The obvious advantage to castrating a colt at home is that it removes the requirement for transportation. Someone experienced in handling horses will be needed, and preferably one who does not mind the sight of blood. The vet will also require a source of warm, clean water.

If the colt is having a general anaesthetic they should ideally be starved overnight, although still having free access to water. However, this is simply not practical if the colt is still suckling from the dam. A flat grass field would be preferable to a stable when castrating a colt, as a general anaesthetic will require the colt to lie on the ground during the operation. Stables are often too small to anaesthetise a horse safely, and there is the increased risk of a horse hurting himself on any protuberances on the stable wall, during either induction of, or recovery from anaesthesia.

It is also possible to castrate a colt standing under heavy sedation, and using a local anaesthetic, providing that they are of a suitable size and temperament. In this instance, the ideal location to castrate the colt would be in a large well-lit stable or barn.

It is best to discuss the facilities you have available with your vet to see if they are suitable, before booking the appointment for the castration itself.

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## **The Surgical Procedure**

Regardless of whether a colt is castrated standing or under general anaesthesia, at home or in an operating theatre, the basic surgical procedure is identical. Both testicles are removed via a surgical incision into the scrotum. Usually two incisions, one for each testicle. The blood vessels and other network of tubes running from the testicle into the abdomen must be crushed and cut at the time of removal of the testicle.

There are two different techniques to castrate a colt under general anaesthesia. Either the 'open' technique, where the scrotum and vaginal tunic containing the testicle are incised and then left open for drainage, or the 'closed' technique where the tissue layers are sutured once the testicles are removed, in order to reduce the risk of herniation. The closed technique takes longer and requires the cleaner environment of an operating theatre, therefore incurring a higher cost, however, it has a lower risk of associated complications in older or very large stallions. When horses are castrated standing, under sedation, the open technique is used.

## **Post-operative care**

The exact details of post-operative care will vary on a case-by-case basis; however, they will focus on cleanliness, close observation and exercise.

Young animals can be turned out in a small paddock soon after surgery. Exercise will encourage drainage and minimise swelling at the surgical site. If a colt will not exercise sufficiently solo, enforced exercise may be required, either with in-hand walking or lunging. The colt may be prescribed a short course of antibiotics and painkillers following surgery, and the vet will ensure that the colt is protected against tetanus. If your colt has not already received the primary course of vaccinations, anti-toxin should be given at the time of surgery, thereby providing immediate cover.

The surgical site will need to be inspected daily for rapid detection of any possible complications. If there are no post-operative complications the incisions should be completely healed within two weeks.

## **Complications & Risks**

Castration is generally regarded as being a routine procedure, and in most cases it is both straightforward and uncomplicated. However, it should not be forgotten that it is an invasive surgery and occasionally complications will occur.

A general anesthetic in any healthy horse carries with it an element of risk, although every attempt is made to minimise this risk. In smaller ponies or older horses, a general anesthetic is essential to perform the procedure. The vet will be able to advise whether a general anesthetic is necessary.

Bleeding is a potential post-operative complication. A small amount of blood dripping from the

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wound in the first twenty-four hours after castration is normal, but if it exceeds a fast drip, call your vet immediately.

Another common complication, as horses do not live in a clean environment, is post-operative infection. The sheath and scrotum can swell dramatically, and the colt may become lame behind due to the extent of the swelling. You may also notice that he becomes depressed and goes off his food if he develops a temperature. This will require veterinary attention: it may only require a course of antibiotics, but sometimes the incisions will need to be re-opened to allow drainage. This can usually be done under sedation.

A potentially more serious complication can arise if anything is seen to be hanging down from the surgical incision. This may just be a small piece of the vaginal tunic (the fibrous sac within which the testicle sits), in which case it can either be left alone to dry or trimmed off, depending on how much is protruding. In more serious cases it may be a piece of intestine that can prolapse from the castration site. This is a serious emergency, and you must seek veterinary assistance urgently.

If you have any concerns, please call your veterinary surgeon.

## **Can a colt be fertile after castration?**

Yes, a colt CAN be fertile for a short while after being gelded, so should not be turned out with mares for at least two months following castration, to ensure that they are a) no longer fertile and b) they have lost the hormonal influence leading to 'stallion-like' behaviour.

Many veterinary surgeons encourage horses and ponies to be turned out after this surgery to reduce the risk of swelling. If your yard has both mares and geldings turned out together in the same field, you may need to make some temporary alternative turn-out arrangements during this time.