

Poor Human Practices

Castration

SEBWAT parameter

(Standardised Equine-Based Welfare Assessment Tool)

Sex

Genital/rectal lesions

Welfare issue

- Castration (also known as 'gelding') is the procedure of removing a stallion's testicles for the purpose of making it infertile, and to reduce stallion-like male behaviour.
- This makes the animal more docile and easier to handle, particularly in the presence of other equids.
- Mules are born infertile, so castration may still be carried out to reduce unwanted male behaviours.



Animal is normally kept isolated therefore displays excitement, and becomes difficult to handle when in the company of other equids.

Welfare significance

Severe pain and suffering

- In locations where castration is carried out by untrained people using crude (cruel) methods, the animal is not anaesthetised for the procedure, or provided with pain relief.
- Castration carried out without anaesthetic is excruciatingly painful and owners should be made aware that “the animal’s inability to [verbally] communicate in no way removes the possibility that an individual is experiencing pain or is in need of appropriate pain relieving treatment”¹.
- Crushing, tearing or twisting of the testicles is poor welfare practice and is likely to have both short and long term negative welfare effects on the animal, causing both physical and psychological trauma.

Fear, distress, psychological trauma

- General anaesthetic renders the animal unconscious and therefore acts as a means of chemical restraint. Without anaesthetic, physical restraint will be used, generating fear and aggression responses from the stallion and making the procedure dangerous for the animal and the handlers.
- In some cases the stallion may be ‘cast’, i.e. its legs tied together and then pulled out, causing the animal to fall to the ground. Equids are prey animals and being pulled to the ground by a ‘pack’ of humans simulates being attacked by predators, so the stallion is likely to suffer great fear and distress, and resist violently to attempt to free itself, risking physical injury too. If several people pile onto the animal to pin it down this will cause even more psychological trauma.
- The stress, trauma and pain experienced means that an animal castrated in this manner will take longer to recover and is more likely to succumb to infection than one castrated using a more welfare-friendly method. High stress leads to immuno-suppression, making it more difficult for the animal to fight disease and infection, thus making illness longer or more severe.

- Equids have excellent memories, particularly of painful or unpleasant experiences. Therefore an equid exposed to such a traumatic procedure may develop a deep-rooted fear of humans, making handling more challenging, or even impossible, in some cases for most of their life.
- Conversely, the animal may be so traumatised by the procedure that changes occur within the brain chemistry² (which could be permanent) causing a state of ‘learned helplessness’, characterised by an apathetic demeanour. See the [Apathy](#) section for more information on this welfare issue.

Ineffective or dangerous procedures

- Appropriate surgical castrations are carried out using either the standing method (with local anaesthetic and sedation) or under general anaesthetic. Donkeys should never be castrated standing as they have a tendency to bleed more, which requires the spermatic vessels to be tied off³. Older stallions (i.e. more than 3 years old) should be castrated under general anaesthetic for the same reason. This risk of excessive, possibly fatal, bleeding and other complications is far higher in the Brooke context when castration is by untrained people using crude procedures.
- Only equine emasculators are suitable for use on equids. Cattle castrators should never be used as they will not stem the blood flow sufficiently and the animal could haemorrhage and die⁴.
- Crushing, tearing or twisting of the testicles may not be entirely successful in removing or destroying the testis, meaning that the animal may still be fertile despite a ‘castration’ procedure. Therefore the animal’s welfare has been severely compromised, and the desired outcome may not even be achieved.
- This also has welfare implications for female equids who are impregnated unplanned by an improperly castrated stallion.

¹ West et al (2009)

² Hall, et al (2008)

^{3,4} Brooke (2013)

Infection

- When castration is carried out by untrained persons, in unsanitary conditions, or with inadequate post-operative care, there is a high risk of infection within the scrotum or urinary tract, by tetanus or staphylococcus bacteria which can prove fatal.
- In some cases a scirrhus cord infection can develop. This is when an abscess develops on the spermatic cord, characterised by openings in the scrotum discharging pus, accompanied by a hard lump in the groin area. There may also be signs of lameness and colic (colic is a veterinary emergency which can quickly become fatal). Such abscesses may take years to develop and are extremely difficult to treat. If the infection spreads into the abdomen then the prognosis is hopeless⁵.

Complications

Other serious complications from castration include:

- Haemorrhage – a serious haemorrhage requires the location and ligation (tying off) of the blood vessel, which requires competent veterinary intervention.
- Prolapse of the bowel (eventration) – a rare occurrence where a section of bowel protrudes through inguinal canal and out through the castration wound. In the Brooke context this condition is untreatable and euthanasia is necessary⁶.
- Scrotal swelling – some swelling is expected even after a welfare-friendly veterinary castration, but should subside within 4-12 days. Excessive swelling, or swelling which persists beyond this time suggests an infection has developed.
- ‘Champignon’ – a characteristic mushroom-shaped growth of proud flesh developing from the castration wound. Proud flesh is prone to excessive bleeding if damaged.

Castration of foals

- Castration can be carried out at any age but generally it is done in younger animals (1 to 3 years) to reduce complications and prevent the development of stallion-like behaviours.
- Castration of foals less than 1 year old is controversial. Advocates state that a foal is easier to restrain and that there are fewer accidents and complications castrating foals; however, disadvantages include increased distress and psychological trauma due to the foal being less used to being handled, the testes being smaller and more difficult to handle and possible negative consequences on the animal's development⁷.
- When older stallions are castrated, stallion-like behaviour may already have become learned rather than being governed by hormones, meaning that castration will not have as noticeable an effect on reducing the stallion-like behaviour.

Some welfare benefits of castration

- Whilst many forms of castration carried out within Brooke countries are cruel and carry a high degree of risk, castration carried out by trained veterinarians with access to suitable facilities does carry a number of welfare benefits for stallions.
- Stallions exhibiting natural behaviour such as guarding or mounting mares can cause accidents and provoke negative interactions from handlers and owners of both the stallion and the mares. In Afghanistan, owners reported beating stallions that were approaching their mares with hammers and shovels causing substantial injuries⁸.

^{5,7} Hayes (1992)

⁶ Brooke (2013)

⁸ K. Wells, personal communication

- In other instances, owners attempt to prevent natural masturbation behaviours by attaching rings or tying sting to the penis, or devices with bristles or nails to the underside of the abdomen. Anti-masturbation devices not only fail to reduce masturbation, but in many cases actually increase the frequency and duration of episodes⁹. These devices can also cause abrasions, lesions and scarring to the penis and become a source of pain and infection.
- In some cases, stallions are isolated from other equids to avoid accidental impregnation of females, or fighting with males. As a herd animal, isolation is extremely stressful for equids and many stallions housed in isolation exhibit stress-related stereotypic behaviours such as box walking, crib biting, aggression and self-mutilation.
- For male equids not intended for breeding, welfare-friendly castration can enable an opportunity to mix with other equids safely, therefore having potential to improve welfare in contexts where the alternative would be isolation and punishment for displaying natural stallion behaviour.

Possible causation

- Castration can be perceived as a solution to 'aggressive' behaviour from stallions, or to make male equids more docile and easier to handle. This can help to protect owners/handlers and other animals from injury caused by stallion-like behaviour.
- It may be performed to reduce stallions making attempts to escape to seek mares.
- In contexts where it is considered inappropriate for some members of the household to observe natural reproductive behaviours from stallions, castration may occur for cultural reasons, so that male equids can be housed near the owner's home.



String tied around penis.

Means of resolution

- Owners should be encouraged to understand why the animal is displaying 'aggressive' behaviour. Is this natural stallion behaviour or a result of frustration, fear or pain caused by negative human interactions? The [Fear and aggression](#) section has more information on identifying causes of aggressive behaviour.
- Improvements to handling techniques and encouraging positive interactions (e.g. grooming, feeding, etc.) to create a bond between the animal and owner can reduce the risk of injury and make stallions easier to handle. Aggressive behaviour in stallions is often increased due to owners behaving aggressively towards the animal, thus forming a vicious circle.
- Improved, welfare-friendly training methods will make stallions easier to handle and can be promoted as a welfare-friendly alternative to castration (improved training will also have many other benefits for both equines and owners).
- Improvements to fencing or tethering can prevent roaming and escape.

Refer to the Working Equid Veterinary Manual, Community Engagement work plans or strategies and the Handling Guidelines before conducting an intervention.

Disclaimer

Should evidence suggest castration is a priority welfare issue, please contact the Brooke UK's Service Provision Team for further discussion on next steps. This is due to the high degree of welfare risk involved with this management practice.

⁹ McDonnell (2000) quoted in McGreevy (2004)

References

Avondale Veterinary Group - *Guidelines for Castration* - <http://www.avondalevets.com/wp-content/uploads/2010/01/Guidelines-on-Equine-Castration.pdf> - accessed March 2016

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