

What is a rig?

A rig is a male horse whose testicles have failed to descend properly. The veterinary term for this condition is cryptorchidism, and it can affect one testicle (unilateral) or both (bilateral)

In normal horses, the testicles develop close to the kidneys and migrate through the abdomen, down through the inguinal canal to their normal position in the scrotum. This usually happens before birth, but can occur at any point during the first year. In a rig, the testicle can be retained anywhere along this passage to the scrotum. The reason why testicles are retained is unknown.

When the testicles are in the scrotum, it allows them to develop and cool properly, enabling them to produce fertile sperm, but retained testicles are often incapable of producing fertile sperm due to inappropriate testicular development. However, rigs can produce sufficient sperm to impregnate mares, particularly if only one testicle is affected.

Even if they aren't able to produce fertile sperm, retained testicles still produce all of the sex hormones associated with being a stallion, so the most frequently noted sign of a rig is stallion-like behaviour. They can be aggressive and difficult to handle, and will often show interest in mares, particularly through the summer months.

Testicle stuck in the abdomen

Bladder

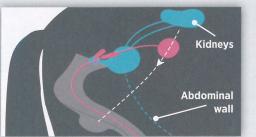
Prostate

Scrotum

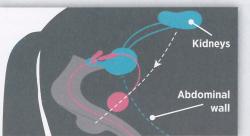
Kidneys

Path of

testicle



Testicle stuck in the inguinal canal



False rigs

Some geldings will continue to display stallion-like behaviour despite having been properly castrated – for example, if they were cut late. These are termed false rigs and it's important to differentiate these horses from true rigs. False rigs require behavioural therapy to correct their behaviour, whereas castration will often have a profound effect on the behaviour of true rigs.

Risks of a retained testicle

Although it's rare, retained testicles do carry an increased risk of testicular cancer. It's thought that this is because of the increased temperature in the abdomen. That being said, the greatest risk associated with owning a rig is to his handler, as a consequence of his behaviour.



Time to test him?

Any male horse who shows stallion-like behaviour but has no visible testicles should be tested. Also, if you have a young colt more than a year old whose testicles haven't yet descended, speak to your vet because it's important to seek veterinary intervention early.

Your vet can confirm whether your horse is a true rig using a straightforward test. If he's under three years old, two blood tests are required – a baseline sample and then a sample taken after injecting him with the hormone human chorionic gonadotrophin (hCG). If testicular tissue is present, the hCG stimulates it to produce hormones that are then detected on the second blood test.

If a suspected rig is over three years of age, diagnosis can be made with a single blood test that detects oestrone sulphate, which is produced by the testicles.

Tracking it down

The retained testicle will be in the abdomen or in the inguinal canal, although it's most common to find it in the inguinal canal. If the testicle is in the inguinal canal, it can often be felt within the inguinal ring under heavy sedation. If the testicle cannot be felt in the inguinal ring, then it's likely to be in the abdomen. It's sometimes possible to locate the testicle in the abdomen through ultrasound and rectal examination.

The location of the testicle will influence surgical planning and, therefore, where it's best to perform the operation. If the testicle is situated in the inguinal canal, it will need to be removed under general anaesthetic, but it can be done at home or in a veterinary hospital, depending on the facilities at your yard and your veterinary practice. If the testicle is in his abdomen, removing it is more complicated, so surgery must be performed in a hospital environment, under general anaesthetic or standing, via laparoscopic (keyhole) surgery.

When horses have just one descended testicle, it's recommended that it isn't removed unless the retained one is, too, as it can lead to the horse being mistaken for a gelding.

After surgery

Although rigs are often unfertile, they can store sperm in their accessory glands, and this can last for some time. Therefore, it's advisable to keep mature rigs separate from mares for several weeks after castration. It can also take six weeks or more for the levels of testosterone circulating in his system to decrease, and rigs may continue to be difficult to handle or attempt to mount mares during this period.

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How to avoid having a rig

Cryptorchidism is hereditary, so it's important not to breed from horses who are rigs and to avoid buying colts sired by rigs. In fact, because they shouldn't be bred from, rigs should always be castrated. When buying a gelding, ask the previous owner about castration history and, if you're suspicious, ask about his behaviour. Some passports contain castration certificates that can be checked before purchase.