



Horse Health:

Cryptorchidism (Rigs)

What is it?

Cryptorchidism is the term used when one or both of a colt's testicles don't drop down properly into the scrotal sack located between the back legs.

These horses are often called "rigs" or "ridglings," but the official veterinary term is cryptorchid.

If only one testicle has dropped, the horse may look like a stallion on one side and a gelding on the other. If both testicles are missing from the scrotum, this is less common but more serious. These horses can never be fertile because sperm can't survive at body temperature. However, while the horse may be mistaken for a gelding, he will always behave like a stallion because retained testicles continue to produce the male hormone testosterone.

What causes it?

Normally, both testicles move from inside the abdomen into the scrotum before or shortly after birth. In cryptorchid horses, one testicle (unilateral) or both testicles (bilateral) get "stuck" higher up - either in the groin area or inside the abdomen.

The descent of the testicles is a complicated process that depends on both the horse's hormones and the way their body develops. If anything interrupts this process, one or both testicles may not move down into the scrotum.

Sometimes the exact reason isn't known, but the main factors include:

- **Genetics:** Cryptorchidism tends to run in families. For this reason, stallions with this condition shouldn't be used for breeding.
- **Hormonal influences:** Hormones help guide the testicles during development, and any imbalances can interfere with the process.
- **Anatomical issues:** If the passage through the groin isn't formed normally, the testicle can't move through.
- **Timing:** Occasionally, descent is delayed. If the testicle hasn't dropped by the time a colt is 2 years old, it's very unlikely to happen at all.

What horses are at risk?

Any colt can be affected, but certain bloodlines are more prone. Breeds such as Percherons, Saddlebreds, and Quarter Horses are reported to have higher rates of cryptorchidism.

Things that increase the chance include:

- **Family history:** If the sire was a cryptorchid, the foal is more likely to be too.
- **Young colts:** Owners sometimes panic if they can't feel both testicles in a foal. It's worth remembering that descent can be delayed, but by 2 years old, it should be complete.

What are the symptoms?

What you'll see depends on whether one or both testicles are retained.

If only one testicle is retained:

- One testicle can be seen in the scrotum, but the other is missing.
- The horse still shows stallion behaviour — for example, he may be pushy, vocal, or overly interested in mares.

- Fertility may be reduced, but breeding is still possible with one normal testicle.

If both testicles are retained:

- The scrotum looks empty, so the horse may look like a gelding.
- Despite this, he will still behave like a stallion because testosterone is still produced.
- These horses are always infertile because sperm can't develop properly at body temperature.

Many owners first suspect cryptorchidism when their “gelding” behaves very much like a stallion.

Are all “geldings” showing stallion-like behaviour cryptorchid?

No – in fact the majority are not. These are sometimes called “False rigs”, and there are a number of different reasons that this can occur:

- **The horse was castrated late:** Sexual and social behaviour is often learned, and if the stallion was castrated after puberty, he may continue to display sexual or other stallion-like behaviours, even in the absence of testosterone.
- **Other sources of testosterone:** All animals, male or female, castrated or not, make some testosterone in their adrenal glands. In most, this is not sufficient to maintain stallion-like behaviour. However, in some cases it may be. Alternatively, some horses may have a secretory tumour producing testosterone-like substances. This is why more complex hormone blood tests are sometimes needed.
- **Some testicular tissue survived castration:** This is rare but has occasionally been reported. If some testicular tissue is left in the

body after castration, it will continue to produce testosterone, and even a small testicular fragment will grow to produce substantial quantities if present in a castrated animal. However, with modern surgical approaches, this is very, very rare.

If you suspect your horse may be cryptorchid, your vet will try and rule out these possibilities before going to surgery.

How is it diagnosed?

Your vet will use a combination of checks to confirm cryptorchidism:

- **Clinical History:** Your vet will need to ask about any relevant information on your horse's recent behaviour.
- **Physical Examination:** A thorough physical exam, including feeling the scrotum and groin area to check for missing testicles.
- **Rectal examination:** Sometimes the vet can feel a retained testicle through the wall of the rectum.
- **Ultrasound scan:** Useful for spotting testicles that are hidden inside the abdomen or groin.
- **Blood tests:** Special hormone tests can confirm if testicular tissue is present.
- **Other tests:** In rare cases, further checks may be used to look for signs of testicular function.

How can it be treated or managed?

The only way to treat cryptorchidism is surgery. Retained testicles don't "drop down" later in life, no matter how long you wait. Because they keep producing testosterone, cryptorchid horses continue to act like stallions, which makes them harder and sometimes more dangerous to handle. Retained testicles have an increased risk of testicular tumours later in life, which is another reason surgery is recommended.

Surgical options include:

- **Inguinal castration:** If the testicle is stuck in the groin, it can often be removed through a small cut near the scrotum.
- **Laparoscopic (keyhole) surgery:** This is a slightly more modern, minimally invasive technique where small cameras and instruments are used through tiny incisions in the abdomen. Recovery is usually quicker and cleaner.
- **Open abdominal surgery:** This is less commonly performed, but may be needed if keyhole equipment isn't available.

This type of surgery should always be done by an experienced equine vet, usually under general anaesthetic or heavy standing sedation.

Can it be prevented?

There isn't a way to prevent cryptorchidism in an individual foal. However, because it's strongly genetic, affected stallions should never be bred from.

As an owner, you can help by:

- Having colts checked regularly by your vet to monitor testicular descent.
- Castrating cryptorchid horses, both for safety and welfare reasons.
- Avoiding the use of cryptorchid stallions for breeding.

What should I do?

Cryptorchidism is fairly common in horses and can be confusing, especially when a supposed gelding still shows stallion behaviour. The condition isn't painful in itself, but it does bring management and safety challenges. The good news is that modern surgical techniques mean cryptorchid horses can be castrated safely and go on to enjoy a normal,

happy life.

If you suspect your horse might be a rig, or if you have a colt with only one testicle visible, the best step is to contact your vet for an examination and tailored advice.