



FACTSHEET: PROFESSIONALS

TEST FOR A CRYPTORCHID (RIG)

Stallion-like behaviour can occur in donkey geldings, especially if castration was delayed until the donkey was mature.

Checks for cryptorchidism (retained testicular tissue) include a clinical examination of the inguinal and scrotal area and the use of ultrasound percutaneously and per-rectum if this is safe to do so and if the equipment is available.

Blood testing is appropriate where results of these procedures are not certain.

All suspected cryptorchids (rigs) should be tested, no matter what their age.

The Chorionic Gonadotrophin stimulation test

In donkeys cryptorchids do not produce sufficient oestrone sulphate to use this as a reliable test so historically donkeys have been tested using the Chorionic Gonadotrophin stimulation test.

Take two blood samples for testosterone measurement:

- Prior to I/V injection of 6000iu human chorionic gonadotrophin (hCG).
- Between 30 and 120 minutes after the injection.

Levels of testosterone before and after injection of hCG:

| Type of male | Species | Basal | Post hCG |
|-------------------|---------|-----------|-----------|
| Stallion | Donkey | 4.3-7.3 | |
| | Horse | 5.0-30 | |
| Rig (cryptorchid) | Donkey | 1.1-2.0 | 1.2-2.6 |
| | Horse | 0.3-4.3 | 1.0-12.9 |
| Gelding | Donkey | 0.05-0.30 | 0.05-0.41 |
| | Horse | 0.03-0.15 | 0.05-0.19 |
| Atrophic testes | Donkey | 0.64 | 0.67 |

Test for anti-Müllerian hormone (AMH)

A new test is available for donkeys using anti-Müllerian hormone (AMH):

Anti-Müllerian hormone is expressed in the sertoli cells of testicles, and is a reliable and sensitive test for the presence of testicular tissue.

- Take one serum sample at any time of day.
- Testing is carried out by Liphook laboratory (Hampshire, UK) and they should be contacted directly for details regarding submission of samples.

See online at www.liphookequinehospital.co.uk/equine-laboratory/laboratory-services for more information on contacting the laboratory.

Currently the number of samples from donkeys necessary to validate this test remain low.

However; results show that:

- All negative results are reliable and AMH < 14.7 (+/- 2.4ng/ml) indicates a castrated donkey.
- A cryptorchid (rig) donkey is indicated where results are AMH >14.7 (+/- 2,4)ng/ml.
- Follow results of AMH >14.7 that indicate suspicion of a cryptorchid with an hCG test.
- If the test results do not fit the clinical picture consider using alternative testing.