



## ANAESTHETIC PROTOCOL

	<b>Theatre Protocol</b>	<b>Field Protocol</b>
<b>PRE MED</b>	<ul style="list-style-type: none"><li>■ ACP 0.03mg/kg IM (30 min's prior)</li><li>■ Xylazine 1.1mg/kg IV (5 min's prior)</li></ul>	<ul style="list-style-type: none"><li>■ ACP 0.03mg/kg IM (30 min's prior)</li><li>■ Detomidine 20µg (kg IV 5 min's prior)</li></ul>
<b>INDUCTION</b>	<ul style="list-style-type: none"><li>■ Ketamine 2.2mg/kg IV</li><li>■ Diazepam 0.1mg/kg IV</li></ul>	<ul style="list-style-type: none"><li>■ Ketamine 2.2mg/kg IV</li><li>■ Diazepam 0.1mg/kg IV</li><li>■ Butorphanol 0.01 - 0.02mg/kg IV*</li></ul>
<b>MAINTENANCE</b>	<ul style="list-style-type: none"><li>■ Isoflourane, or Triple Drip IV at 1-2ml/kg/hr, or Ketamine top ups</li><li>■ Can top up every 10-15 min's as necessary with 1/3 induction dose of ketamine and 1/3 dose xylazine up to a maximum of 90 min's as cumulative.</li><li>■ Aim not to exceed the original ketamine dose for induction as this can lead to severe ataxia on recovery.</li></ul>	<ul style="list-style-type: none"><li>■ Ketamine top ups</li><li>■ Can top up every 10-15 min's as necessary with 1/3 induction dose of ketamine and top up with 1/2 induction dose of detomidine at 30 min's</li><li>■ The use of butorphanol will prolong initial anaesthesia by up to 10 min's, but care with respiratory depression</li></ul>

\*Care with butorphanol administration in older donkeys as it can cause a deeper anaesthetic plane. It is best reserved for stressed donkeys or very painful procedures.

For Mules, increase the doses by  $\frac{1}{3}$  –  $\frac{1}{2}$

Triple drip recipe:

- 300ml Saline
- 150ml 15% Myolaxine
- 225mg Xylazine (4.5ml of 5%)
- 900mg ketamine (9ml of 100mg/ml)

### **For more advice please contact:**

The Donkey Sanctuary, Veterinary Dept, Slade House Farm, Sidmouth, Devon, EX10 0NU

Telephone: 01395 579162. Email: [vets@thedonkeysanctuary.org.uk](mailto:vets@thedonkeysanctuary.org.uk)

Castration video link: [http://youtu.be/h3xppA\\_wn3o](http://youtu.be/h3xppA_wn3o)

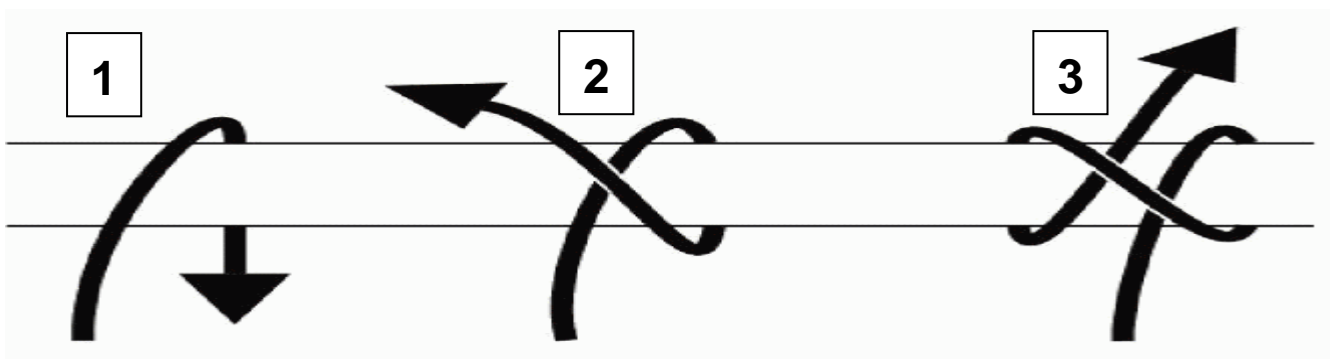
Wikivet Veterinary Education Online: <http://en.wikivet.net/Donkey>

# CASTRATION SURGERY IN DONKEYS<sup>1</sup>

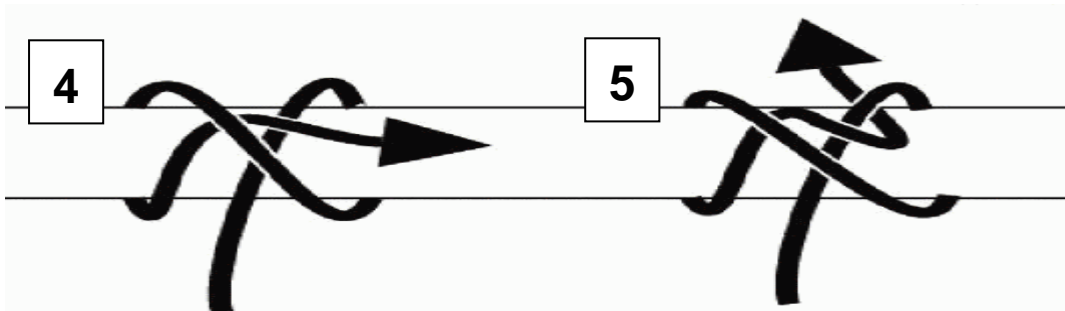
The following considerations relate specifically to castration surgery in the donkey:

- The larger than normal vessels in the donkey require ligation (see constrictor knot below), which can lead to an increased risk of infection and foreign body reaction.
- Donkeys are often presented at an older age for castration with increased size of testes, increased quantities of scrotal and inguinal fat together with established sexual behaviour, all of which can cause postoperative complications. It is often better to opt for an inguinal approach rather than scrotal in these cases.
- The short height of most donkeys precludes standing surgery, necessitating general anaesthesia and extra assistance during surgery to monitor the animal.
- Owners of miniature donkeys occasionally request castration at a very young age (sometimes only a matter of days).
- Post-operative care in some unhandled animals can prove difficult.
- The stoic nature of donkeys can result in post-operative problems not being noticed early enough.

## The Constrictor Knot



1. Place working end over cord.
2. Cross over the static end.
3. Go round the back and through again. This is now a Clove Hitch.



4. Take the working end and go over the first loop.
5. Then under towards the middle and pull up tight.

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<sup>1</sup> Sprayson, T., Thiemann, A. (2007) Clinical approach to castration in the donkey. In Practice 29, 526-531.

**Analgesia**

We routinely give Flunixin 1.1.mg/kg IV with the premed five minutes prior to GA. Flunixin is then continued at 1.1mg/kg BID PO for a maximum of 5 days followed by Phenylbutazone 2.2 - 4.4mg/kg BID PO if necessary.

**Antibiotics**

We give these according to situation:

Uncomplicated surgeries of short duration – Benzylpenicillin IV

Longer surgeries of uncomplicated nature – Penicillin IM 3 days duration

Longer surgeries of complicated nature – Penicillin IM 5-7 days duration

Be aware of vaccination status – if unsure we advise administering Tetanus antitoxin.

**Should you require further information please contact the Veterinary Department,  
Slade House Farm, Sidmouth, Devon EX10 0NU, by telephone on +44 (0)1395 579162,  
or by email to [vets@thedonkeysanctuary.org.uk](mailto:vets@thedonkeysanctuary.org.uk)**