

TRIPLE DRIP COMBINATION: MAINTENANCE OF ANAESTHESIA IN DONKEYS

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The triple drip combination can be used for the maintenance of anaesthesia where gaseous anaesthesia cannot be used. The recipe given below is used at The Donkey Sanctuary.

Donkey triple drip IV at 1—2ml/kg bwt/hr

Rates are approximate and will need adjusting to effect. Donkeys may need smaller volumes of mixture than horses and ponies to maintain anaesthesia.

MAKING THE MIXTURE

- 300ml 0.9% saline (remove 200ml from a 500ml bag of 0.9% saline and add the other drugs to the remaining 300ml)
- 225ml 10% guaiphenesin
- 225mg xylazine (eg 2.25ml of 100mg/ml (10%) xylazine solution)
- 900mg ketamine (eg 9ml of 100mg/ml (10%) ketamine solution)

In horses, the lethal dose of guaiphenesin is approximately 300mg/kg. The Donkey Sanctuary does not have proven data confirming the lethal dose in donkeys. Therefore, we currently extrapolate from the lethal dose in horses and are mindful of the knowledge that smaller volumes of guaiphenesin induce recumbency in donkeys.

Avoid dosages greater than 150mg/kg (1.5ml/kg of guaiphenesin 10% - 270ml for a 180kg donkey) as cardiovascular and respiratory depression may occur at these high dosages.



Calculate the toxic dose prior to beginning anaesthesia.

The 'triple drip' combination of guaiphenesin, ketamine and xylazine has also been used for induction and maintenance of anaesthesia in donkeys. A smaller volume of guaiphenesin is needed to induce recumbency in donkeys. Higher amounts of ketamine may be needed in these combinations.

It is not advised to use triple drip for lengthy procedures because the toxic dose of guaiphenesin is liable to be reached.

Guaiphenesin is irritating to perivascular tissues so the catheter should be thoroughly flushed with saline before removal.

Triple drip must be used on the day and does not store.

MORE INFORMATION

If you need clinical and dental veterinary advice contact our [veterinary team](#) or telephone 01395 578222 and ask to be put through to the veterinary department.