Application of a Nose Twitch - Horses

Recommended instructor to student ratio: 1:2

Category
3. Minor conscious intervention

Objective
To describe the safe technique for applying a nose twitch to a horse. Twitches are applied to restrain horses to enable or facilitate minor procedures.

Alternatives to animal use
No practical alternative

Equipment
Nose twitch and protective footwear. The twitches referred to in this SOP are those consisting of a handle with a loop of rope or light chain at the end. This SOP does not apply to aluminium screw twitches or the ‘humane’ twitch.

Safety and Risk considerations
Horses are unpredictable and dangerous large animals that can cause severe and sometimes fatal injuries to the handler and/or bystanders. Signs of distress include moving away, kicking and striking at operator if conscious. Risk of injury can be minimised by ensuring that personnel involved are adequately trained in handling and restraint of horses.

Drugs, chemicals or biological agents
Typically no other drugs, chemicals are used when a nose twitch is applied. However, in some situation horse will be sedated for invasive or painful procedures. Drugs used for standing sedation include:
- Xylazine: 0.2-0.5 mg/kg IV
- Detomidine: 0.01 mg/kg IV
- Acepromazine: 0.02-0.04 mg/kg IV
- Butorphanol: 0.01-0.02 mg/kg IV

Procedure
1) If possible, allow the owner or usual handler to control the horse.
2) Assess the behaviour and temperament of the individual horse
3) Ensure the immediate environment is as controlled as possible. This includes ensuring that only required personnel are present, other animals are only present if unavoidable and that potentially arousing visual and auditory stimuli are minimised.
4) Personnel should be competent in handling, restraint and understanding equine behaviour. Specifically they should be aware of the signs of fear and anxiety e.g. ears directed caudally, pawing, striking, attempting to rear etc.
5) All movements and activities should be based on the operators’ understanding of equine behaviour. This includes being as quiet as is practical, ensuring that the horse is aware of where people are at all times and avoiding sharp rapid movements.
6) In most instances the operator will stand to the left of the horse.
7) The loop of the twitch should be placed over the thumb and little finger or thumb and little finger and ring finger of the hand that is going to apply the twitch (usually the left hand). This leaves the middle two or three fingers outside the loop. Having two or three fingers outside the loop makes it easier to slide the loop off and is more controlled than having the entire hand inside the loop (which can lead to the wrist impeding sliding the loop off). See diagram below for finger positioning.
8) Grasp the lower half to two thirds of the upper lip with the hand using the digits that are inside the loop, slide the loop off the fingers and around the lip, and tighten the loop around the upper lip by twisting the handle with the free hand (as depicted in the image below). Care must be taken to not partially or totally block the nostrils of the horse with the operator’s hand- this will cause most horses anxiety and distress.
9) Half to two-thirds of the upper lip immediately below the nostrils should be included in the twitch loop.
10) A loop of the lead rope should be wound around the twitch handle as an extra precaution against the twitch handle presenting a danger if the horse rears or throws its head around.
11) If the horse needs to be moved, under no circumstances use the twitch to do this. All movements should be controlled with the lead rope and head collar, not the twitch.

12) It is possible to overtighten the twitch, signs of this include blood on twitch, loss of blood supply of the tissues involved in the twitch loop and signs of pain displayed by the horse. If any of these signs are observed the twitch should be loosened until these signs stop. Once the procedure is finished the twitch is released and pulled off the nose when loose enough. The nose is then massaged after withdrawal of the twitch.

Impact on wellbeing of animals
Overuse of twitches on individual horses can lead to head shyness. Misuse of twitches can lead to head shyness, physical damage and negative behavioural outcomes. Ear twitching is not encouraged.

Animal Care
Observe animals for signs of excessive distress. If observed, discontinue use

Pain Relief
Not required.

Reuse and repeated use
Procedures should only be repeated two times per animal for demonstration. For research purposes, animals may be twitched as often as required to ensure a safe working environment. Dependent on time, personnel and other resources, consideration should be given to re-training horses so that twitch use can be minimised.

Qualification, experience or training necessary to perform procedure
Demonstrator: Operators should be familiar with the correct techniques and the normal behaviour of horses before attempting this procedure.
Students: Procedures should be clearly demonstrated before students attempt them. Students should be aware of the requirements for correct and safe technique.

Reference