SOP 095 Application of a nose twitch - horses

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Written by: Unknown
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Purpose

(1) The objective of this standard operating procedure is to provide guidance to the Charles Sturt University staff on:
   a. How to describe the safe technique for applying a nose twitch to a horse to restrain horses to enable or facilitate minor procedures.
   b. Ear twitching is NOT permitted under any circumstances during teaching or research activities.

Scope

(2) This procedure applies to any person who is involved in AEC approved projects involving applying a nose twitch to horses.
(3) All researchers and teaching staff using animals for scientific purposes must be competent. For definition of competency refer to Charles Sturt University's Policy on 'Animal Care Competency Training and Assessment'

Details of procedure

Safety and Risk considerations

(4) Horses may be dangerous by virtue of their size, ability to use multiple defensive and avoidance tactics (body movements, kicking, biting, lunging etc) and rapid changes in behaviour. They can cause severe and sometimes fatal injuries to the handler and/or bystanders. Signs of distress include moving away, swinging of the head, kicking and striking at operator. Risk of injury can be minimised by ensuring that personnel involved are adequately trained in handling and restraint of horses, and familiar with both the normal and flight-related behaviour of horses.

Equipment Required:

(5) 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.

Application:

(6) If possible, allow the owner or usual handler to control the horse with a halter/head collar and lead rope or bridle.
(7) Assess the behaviour and temperament of the individual horse to determine suitability for application of a nose twitch. A horse that is demonstrating signs of heightened

agitation/distress/anxiety is not a suitable candidate for twitch application and chemical restraint should be considered if restraint is necessary.

(8) 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 or have been deemed to be suitably calming for the individual to be restrained. Ensure that other potentially arousing visual and auditory stimuli within the working environment are minimised.

(9) 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.

(10) All movements and activities should be based on the operators' understanding of equine behaviour and understanding of the horse's senses. This includes being as quiet as is practical, ensuring that the horse is aware of where people are at all times, avoiding sharp rapid movements, and in particular being aware of the horse's blind spots. In most instances the operator will stand to the left of the horse.

(11) The loop of the twitch should be placed over the operator's 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 in finger 1 for finger positioning.

(12) 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 in figure 1). 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. Half to two-thirds of the upper lip immediately below the nostrils should be included in the twitch loop.

(13) 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.

(14) If the horse needs to be moved, under no circumstances should the twitch be used to do this. All movements should be controlled with the lead rope and head collar, NOT the twitch.

(15) 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.

(16) The twitch should be in place for no longer than 5 minutes as the restraint loses its effect after this time and may cause a violent response from the horse.

(17) If restraint is required for longer than 5 minutes an alternative means of restraint should be considered e.g., chemical restraint.

(18) Once the procedure is finished the twitch is released and pulled off the nose when loose enough.

(19) The nose is then massaged after withdrawal of the twitch.

Drugs, chemicals, or biological agents

(20) Typically, no other drugs, chemicals are used when a nose twitch is applied. However, in some situations a horse will be sedated for invasive or painful procedures. Drugs used for standing sedation include:

a. Xylazine: 0.2-0.5 mg/kg IV

b. Detomidine: 0.01 mg/kg IV
c. Acepromazine: 0.02-0.04 mg/kg IV
d. Butorphanol: 0.01-0.02 mg/kg IV

Impact of procedure on wellbeing of animals

(21) Nose twitches can lead to unwanted behaviours. Misuse of twitches can lead to physical damage, head shyness, and negative behavioural outcomes both in the short and long-term.

Animal care

(22) Observe animals for signs of excessive distress. If observed, discontinue use.

Pain relief

(23) Not required.

Reuse and repeated use

(24) Procedures should only be repeated two times per animal for demonstration during teaching or research.
(25) Wherever possible for individuals involved in research, time should be taken to habituate the animals to the data collection procedures to be applied prior to commencement of the research trial.
(26) Dependent on time, personnel and other resources, consideration should be given to re-training horses so that twitch use can be minimised.

Qualifications, experience or training necessary to perform this procedure

Demonstrator

(27) Operators should be familiar with the correct techniques and the normal behaviour of horses before attempting this procedure.

Students

(28) Procedures should be clearly demonstrated before students attempt them.
(29) Students should be aware of the requirements for correct and safe technique.

Record requirements

(30) None required

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Associated documentation (including pictures if available)

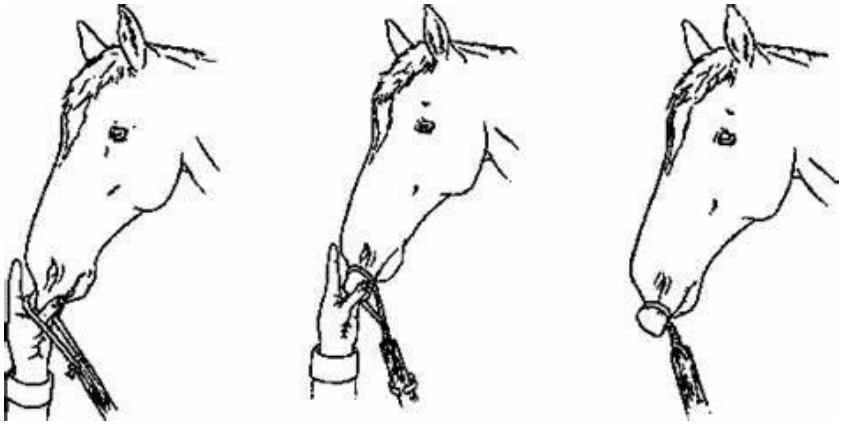

Figure 1 – Application of nose twitch to a horse

Glossary

(31) None required

References and relevant links

Ali, A.B.A., Gutwein, K.L. and Heleski, C.R. 2017. Assessing the influence of upper lip twitching in naive horses during an aversive husbandry procedure (ear clipping), Journal of Veterinary Behavior, 21, 20-25.

Flakoll, B., Ali A. B. and Saab C. Y. 2017. Twitching in veterinary procedures: How does this technique subdue horses? Journal of Veterinary Behavior 18, pp23-28.