



SOP 6.19 Transrectal palpation and ultrasonography in horses

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Purpose

- (1) The objective of this standard operating procedure is to provide guidance to the Charles Sturt University staff:
 - a) To describe the safe technique for transrectal palpation and ultrasonography of the reproductive tract in mares.

Scope

- (2) This procedure applies to any person who is involved in AEC approved projects involving transrectal palpation and ultrasonography in 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 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.

Equipment

- (5) Palpation gloves, obstetrical lubricant, halter and lead, crush, nose twitch (ear twitching is NOT permitted under any circumstance during teaching or research activities), tail bandage

Procedure:

- (6) Place the horse in a crush.
- (7) Sedate using an appropriate drug if necessary.
- (8) Apply a tail bandage.
- (9) The examination begins with the introduction of the examiner's gloved and lubricated hand through the anal sphincter, which may involve controlled force. The fingers and thumb should be kept together throughout the entire examination, and any encountered faeces should be evacuated.
- (10) Palpate the uterus and ovaries on both sides.
- (11) A systematic scanning using an ultrasound probe is performed after the initial examination of the reproductive tract.
- (12) Once ultrasound scanning is complete, the gloved hand is withdrawn from the rectum and examined for any evidence of blood.
- (13) A clean moist paper towel is used to remove any lubricant in the perineal area and the tail bandage is removed.



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- (14) If there is any evidence of blood on the glove or in the faeces, seek immediate veterinary assistance.

Drugs, chemicals, or biological agents

- (15) Typically, no other drugs, chemicals are used when a transrectal palpation and ultrasonography is performed.
- (16) However, in some situations a horse will require a nose twitch or sedation with an appropriate drug (xylazine, acepromazine, butorphanol, detomidine etc).
- (17) Rectal relaxants may be used to prevent excessive straining - propantheline bromide (Propan-B), hyoscine-N- butylbromide (Buscopan) etc.

Impact of procedure on wellbeing of animals

- (18) If properly performed, this procedure causes minimal, or nil impact on animal well-being.
- (19) 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

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

Pain relief

- (21) Pain relief is not required for this procedure. Sedation is commonly used if the horse is restless.

Reuse and repeated use

- (22) In a teaching context, a mare can be palpated three times in a session (mean palpation duration 3 minutes) for a total of 12 minutes in an hour with a 5- or 10-minute rest between each palpation. This can be repeated on alternate days for a maximum of two sessions per week.

Qualifications, experience or training necessary to perform this procedure

Demonstrator

- (23) Registered veterinarian having experience with these procedures. Thorough knowledge of the physiology, endocrinology and anatomy involved.

Students

- (24) Veterinary Science. Prior experience with handling horses and background knowledge of anatomy, physiology and endocrinology is required.

Record requirements

- (25) Routine monitoring sheet recording. In addition, details of all equine use including procedures should be reported to the technical staff for documenting on Ardex software.



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Associated documentation (including pictures if available)

(26) None required.

Glossary

(27) None required

References and relevant links

(28) Mare transrectal palpation <https://www.youtube.com/watch?v=dIJRGwpLqmo>