

Theloscopy

- What is theloscopy?
Theloscopy or teat endoscopy is a useful technique for diagnosis and therapy of covered teat injuries.
- When do we use theloscopy?
 - Lesions involving the streak canal
 - Lesions affecting the rosette of Furstenberg -> this located within the internal streak canal of the teat
 - Some teat abnormalities:
 - Teat Abnormalities
 - Polyps
 - Spider teat
 - Teat calculi (Lactolith)
 - Stricture of the teat orifice
 - Teat peas

These lesions create partial milk flow obstruction leading to the animal becoming a slow milker

Materials

- Theloscope
- Trocar
- 2.0 monofilament non-absorbable suture material
- Teat canula

Procedure

1. The teat should be prepared for surgery (anaesthetised and site cleaned)
2. The animal can either be placed in lateral recumbency or left standing
3. A teat clamp or a rubber band is placed at the base of the teat
4. Then, a canula is inserted into the teat and saline is used to clean the teat through the canula
5. Then, the theloscope is inserted into the teat cistern through the streak canal
6. The teat is then evaluated (abnormalities such as inflammation, obstructions are looked for)
7. The telescope is removed, and a sharp trocar is inserted into the teat through the streak canal.
8. The trocar is pushed through the lateral teat wall from the inside out.
9. The theloscopic sleeve is slid over the trocar into the teat cistern from the outside in.
10. The trocar is removed and the theloscope is inserted.
11. The distal teat is evaluated
12. . An instrument is inserted through the streak canal and the obstruction can be resolved
13. The lateral port is closed with a single interrupted suture

Post operative care

- The suture is removed as early as 24 hours after the surgery
- Milk from the quarter is passively drained with a canula
- Mammary antibiotics are infused into the quarter to prevent or treat mastitis

- A silicone teat insert is introduced through the streak canal and the teat is bandaged to avoid losing the insert
- A 3x3 (3 periods of 3 days without milking the affected quarter) convalescence treatment is started.
- The treated teat is milked with a cannula every 3 days for 9 days (silicone teat insert is left in place in between milking)
- A milking machine should not be used on the animal at this time

It is noted, that surgery via theloscopy requires fewer post operative manipulations, since this less invasive, there was no cutting of the sphincter end in this procedure -> faster healing time



Image 1, a theloscope in use to examine a teat of a cow