Anesthesia techniques of the udder and teat allow surgical manipulation of the organ. There are various techniques used in large animal practice and the choice is dependent on several factors including; surgical intervention to be undertaken, experience of the clinician and nature of the trauma. The techniques include; ring block, inverted-V block, teat cistern infusion, intravenous regional anesthesia of the teat, and perineal nerve block. The techniques may be used solely or in combination with other techniques to provide analgesia

1. **Ring block technique.**

This involves the application of a tourniquet at the teat base which may include a rubber tubing or a doyens clamp. Local anaesthetic is then infiltrated to the area ventral to the tourniquet in a ring fashion around the teat base. The anaesthetic is then massaged into the tissues and given some time to take effect (10-15 minutes). The technique provides analgesia to the area distal to the tourniquet.

1. **Perineal nerve block technique.**

The technique involves the desensitization of the perineal nerve which innervates the udder. 5-7ml of a local anaesthetic agent is injected into the subcutaneous and sub-fascial tissues at the ischial arch approximately 2cm lateral to the midline on both sides.

1. **Intravenous regional anaesthesia of the teat.**

The technique involves the application of a tourniquet at the teat base and intravenous infiltration of any superficial vein distal to the tourniquet.

1. **Teat cistern infusion technique.**

The technique involves application of a tourniquet at the teat base and subsequent infiltration of local anaesthetic into the teat cistern. The tip of the teat is blocked and the teat massaged to facilitate infiltration of the local anaesthetic into the mucus membranes of the teat canal. This provides analgesia to the teat canal (Marongiu, 2012).

1. **Inverted V block.**

This technique involves a full thickness (involving the skin and muscularis layers) line block administered over and adjacent to the affected tissue in a V-pattern. Local anesthetic is infiltrated 0.5-1cm apart to cover the area to be operated on.

1. **Paravertebral anesthesia**

Infiltration of local anesthetics to the paravertebral area of the first (L1), second (L2) and third (L3) spinal nerves will provide analgesia to the fore udder and fore teats. In this technique 10-20ml of 2% lidocaine hydrochloride is instilled in a fan shaped manner to desensitize the spinal nerves (Marongiu, 2012).

Taken from:

***Repair of a Teat Fistula in bovine with Emphasis on Anesthesia: a Case Report.***

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