VETERINARY TODAY

Clinical Case Study
ISSN: 2583-8288

Published on: 25.12.2023

Teat Fistula and its Successful Management in a Non-Descript Goat

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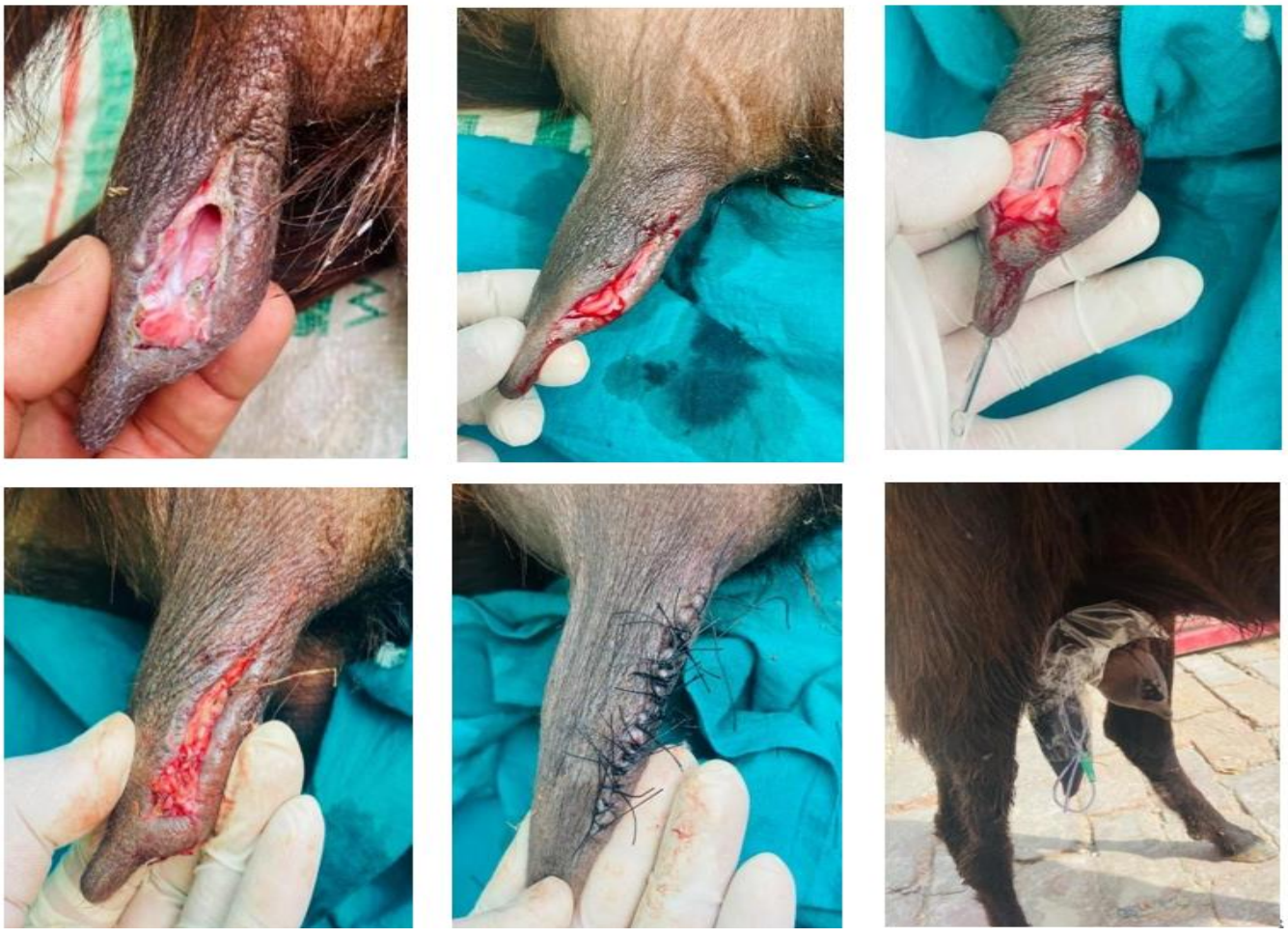
Abstract: A 3-year-old goat (nondescript) was brought to the Noble Polytechnic Veterinary Dispensary in Animal Husbandry, Junagadh, with a history of milk leakage through a teared teat. Examination revealed a longitudinal rupture of the left teat, measuring approximately 4-5 cm in length. Milk started to flow through the wound. In order to suture the teat using no. 2-0 catgut in an underlaying layer in a simple continuous pattern and the superficial layer in a mattress pattern using 1-0 silk thread, local anesthesia was administered. The milk was drained out of the teat siphon by placing it in this quarter. In order to avoid mistakenly destroying the teat canal during suturing, infant feeding tube number 10 was placed beneath the teat. Following surgery, a local antiseptic was administered along with an antibiotic, an intramammary, and an analgesic. On the fourteenth day, the animal displayed full recuperation without any issues.

Key words: goat, laceration, teat fistula, suture



Introduction:

Goats are an important component of livestock raised for meat and milk, but they are also very productive and can suffer significant financial losses due to a variety of surgical conditions (Kashyap *et al.*, 2017). A teat fistula is an anomalous tract that connects the teat cistern to the epidermis and causes milk leakage in nursing animals (Abu Seida and Ahmed, 2007). The lesion would progress towards mastitis if the case was not treated immediately. Teat fistula can be congenital or develop as a result of full thickness teat injuries that penetrate the teat cistern. Upon physical examination, the patient's temperature, heart rate, and breathing frequency were all within acceptable limits. It was easy to palpate the teat. For the preservation of health and milk production, early detection and treatment of the teat and udder are essential. This case study examines the effective surgical treatment of traumatized teats. Case history and treatment:

A three-year-old goat was brought to the Noble Polytechnic Veterinary Dispensary in Animal Husbandry, Junagadh, with a history of a longitudinally lacerated left teat. According to the owner, the injury happened when fencing wire crossed over agricultural ground. The teat's clinical examination revealed uneven cuts and a deep-extending lacerated wound with fistula, which caused milk to seep from the center of the left quarter and displayed inflammatory symptoms. After a physical check, the right-side teat was found to be normal. To get rid of dirt, a regular saline solution was used to cleanse the left-sided teat. After cleaning, examination of the left-sided teat revealed an elliptical-shaped aperture in the middle of the teat through which milk was drainage. Teat fistula was the diagnosis made in this case based on the physical examination and clinical symptoms. To relieve the patient of these ailments, it was decided to do a surgical repair.

After the teat was cleaned with regular saline and then 1% povidone iodine solution, the animal was placed in lateral recumbent restraint. Via ring block, desensitization was accomplished with 2% lignocaine hydrochloride. The collected milk was emptied out using a teat siphon that was inserted through the teat hole once the affected area had been desensitized. Following full drainage, the left-sided teat was shrined back to its original position. The edges of the wounds were cleaned and lavaged with regular saline solution. Using no. 2-0 catgut, the mucosa and submucosa were opposed in a straight forward continuous pattern, maintaining the teat siphon in place with a stay stitch. 1-0 silk was used to imitate the skin borders in a mattress pattern. The teat siphon was removed following suture placement. A single Pendistrin-SH tube was inserted into a teat that had been cut. Following surgery, regular doses of broad-spectrum antibiotics (Enrofloxacin) for five days and analgesics (Meloxicam) for three days was given. The owner was instructed to remove the milk by opening the infant feeding tube's cap every day, every four to six hours. The 12th day after the operation saw the removal of skin sutures.

Results and Discussion:

On the fourteenth day, the animal displayed full recovered without any issues. The process of milking was standard. The current instance had an acute teat laceration accompanied with fistulation, and the procedure was carried out as soon as the patient presented (within 12 hours). After 12 hours of injury, if the wound margins enlarge, surgical intervention was performed after the swelling subsided, which usually takes two to three days. At the base of the teat, a ring block using 2% lignocaine may be used to provide analgesia prior to surgical repair of a teat fistula. Simple continuous sutures in a double row, one engaging the mucosa alone and the other involving muscularis and connective tissue, are the most often advised suture pattern. Absorbable suture materials such as catgut, polyglactin 910, polyglycolic acid, or polydioxanone are typically advised for the closure of the mucosa, muscularis, and connective tissue. Non-absorbable silk sutures are typically used to stitch skin. In order to avoid suture dehiscence, unintentional obliteration of the teat canal while suturing, and pain from milking during the post-operative period, a teat siphon, feeding tube, or infusion

tube must be inserted. Depending on the depth and scope of the wound, the tissues involved, and the presence or absence of infection or self-mutilation, the healing period ranged from 12 to 14 days.

Conclusion

The successful repair of teat fistula in a non-descript goat is reported with emphasis on the precautions to be taken and the surgical management is explained in detail.

References:

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