

Short Communication

TEAT FISTULA IN A JAMUNAPARI GOAT - A CASE REPORT

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Received 06 March 2017, revised 10 June 2017

ABSTRACT: A four years old Jamunapari goat was brought with the history of teat injury at left quarter with leaking of fresh milk from the site and blocked right quarter. Clinical examination showed fistulous opening on the mid region of left quarter. Infant feeding tube was placed in the both quarters. Milk drained out and three-layer closure was performed using no. 3-0 PGA and skin sutured with silk. Postoperatively, antibiotic and analgesic with local infusion were given. The animal showed complete recovery on 15th day without any complications.

Key words: Jamunapari goat, Laceration, Quarters, Teat fistula.

Teat fistula is a tract originated from the teat canal and mostly caused by accidental injury. Teat fistula may be acquired secondary to full thickness teat injuries that enter the teat cistern or may be even congenital (Thomas *et al.* 1995). Surgical affections of udder and teats are getting much attention now a day as these affect the economy and considered as emergency because of any delay in repair can lead to mastitis or even necrosis of the teat (Singh *et al.* 2003). The present case discusses the successful surgical management of traumatic teat fistulation in a Jamunapari goat.

Case history and treatment

A four years old Jamunapari goat was presented with the complaint of teat injury at left quarter (Fig. 1) and blocked right quarter. As per owner the injury was caused by fencing wire occurred during crossing of cultivated land. Clinical examination of the teat showed irregular cuts and the lacerated wound extended deeply, resulting in leakage of milk from the middle of the left quarter as well as inflammatory signs (Fig. 2). Physical examination revealed that the right quarter was closed and enlarged and completely blind. Hand milking of right quarter revealed painful milking. Left quarter and washed with normal saline solution to remove dirt. Exploration of the left quarter after washing showed elliptical shaped opening on the mid portion of the quarter and through this there was leaking of milk. On the basis of physical examination and clinical findings the case was diagnosed as teat fistula of left quarter. Hence the surgical correction

was decided to relieve the patient from these ailments.

The animal was restrained in lateral recumbence and the teat was washed with normal saline followed by one per cent povidone iodine solution. Desensitization was achieved by ring block anaesthesia by using 2% lignocaine hydrochloride followed by 10% spray at the site. After desensitization of the affected part, infant feeding tube (No.7) was passed through the opening of the teat and accumulated milk inside the mammary gland was drained out. Similar procedure was also adopted for the right quarter. Both of the quarters were shieked in normal position after complete drainage. The wound margins were debrided and lavaged with normal saline solution. The suturing of the fistula and other layers performed by 3-layer closure technique. Mucosa and the sub mucosa were apposed using no. 3-0 Poly glycolic acid (PGA) in a simple continuous pattern keeping the infant tube in situ by stay suture. The skin edges were approximated in a mattress pattern by using 1-0 silk. The radiograph of the quarters was taken by the C-arm machine, to check the proper placement of the tube and patency of the teat canal. Radiographic findings showed proper placement without narrowing of the lumen of the teat canal. One tube of Pendistin-SH were infused into the each quarters. Parentally, injection Enrofloxacin @ 3mg/kg body weight was administered intramuscularly for seven days and Meloxicam was administered intramuscularly @ 0.5 mg/kg, body weight for three days. The owner was advised to drain out milk by opening the cap of the infant feeding tube every day at an interval of

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Fig. 1. Injured left quarter.



Fig. 2. Soiled affected quarter with leakage of milk from the site.



Fig. 3. Repaired quarter.

four hours. Skin sutures were removed on 8th post-operative day.

The animal showed uneventfully recovery on 15th day without any complications (Fig. 3). The udder and teats are vulnerable to the external trauma or injury because of their anatomical location, increase in size of the udder and teats during lactation (Weaver *et al.* 2005). A fistula on the teat is exceedingly difficult to close during lactation, owing to the large amount of milk constantly passing through it. Infective organisms gain entry through this wound, leading to mastitis (Kumar 2000). Surgical intervention on the teat is best performed during the first 12 hours following the injury. Later, swelling of the teat can be too severe to permit adequate reconstruction of the tissue. In the present case, it was an acute teat

laceration with fistulation and the surgery was performed immediately after presentation (before 12 hours). Different suture techniques are used to repair the teat fistula but double layer simple continuous suturing with PGA 3-0 and simple interrupted suturing of skin with nylon 1-0 is found suitable for repair of teat fistula (Shiju Simon *et al.* 2010).

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*Cite this article as: Kashyap DK, Giri DK, Dewangan G (2017) Teat fistula in a Jamunapari goat - a case report. Explor Anim Med Res 7(2): 230-231.