

# Traumatic Teat Laceration in a Jersey Cow – A Case Report

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## **Abstract**

An adult jersey cow aged 3 years was presented with a history of right hind teat injury due to barbed wire while grazing. The mucosa and muscularis was sutured with 2 /0 Poly Glycolic Acid and skin was sutured with cross interrupted sutures. The animal made uneventful recovery without any complications.

**Keywords:** laceration; teat; cow; Jersey

## Introduction

Teat laceration is one of the most common clinical condition seen in grazing cattle due to barbed wires and agricultural implements (Singh et al., 2012). Early treatment of teat laceration is required to prevent infection and subsequent economic losses to the farmer. In most of the cases laceration of teat can be successfully treated by reconstructive surgery. The present case reports successful surgical management of traumatic teat laceration in a jersey cow.

## History and Clinical Observations

An adult jersey cow aged 3 years was presented to the Dept. of Surgery and Radiology, College of Veterinary Science, Tirupathi with a history of teat injury due to barbed wire while grazing. Clinical examination revealed full thickness deep lacerated wound at right hind-teat extending from the base to the tip with leakage of milk (Fig 1). The animal showed normal clinical parameters with no injury elsewhere on the body.



Fig.1 Laceration of teat - Cow

## Treatment and Discussion

The cow was restrained in lateral recumbency and sedated with Xylazine @ 0.01 mg/kg b.wt. intramuscularly. Anaesthesia of teat was achieved with ring block technique using 10 ml of 2% Lignocaine hydrochloride (Lox 2% solution, NEON Laboratories Ltd., Mumbai). The udder and teat were thoroughly cleaned with normal saline and were aseptically prepared for reconstructive surgery using betadine and surgical spirit. A teat siphon was introduced into the lacerated teat to facilitate easy suturing and further to prevent accidental suturing of teat canal. Surgical debridement of lacerated teat margins was performed using B.P blade No. 11 for freshening the edges. Interrupted sutures were placed opposing the mucosa and muscularis of lacerated teat surface using 2/0 PGA (Fig.2). Skin was opposed in interrupted pattern using No. 1 Silk (Fig.3). A plastic teat siphon was left in place for a week and post-operatively, antibiotics and analgesics were administered intramuscularly along with daily antiseptic dressing of wound. Skin sutures were removed on 10<sup>th</sup> post-operative day and the animal recovered with no complications.



Fig.2 Apposition of mucosa and muscularis



Fig.3 Application of interrupted sutures to skin

Surgical affections of the teat are of economic importance in cows especially in high yielders. The udder and teats are most susceptible 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). Incidence of teat lacerations, is relatively higher in goats due to their pendulous udder and large teats. In bovines, lacerations may occur due to a direct injury which might even be self-inflicted (Singh et al., 2012). Teat lacerations are a common occurrence in dairy cattle reared in zero grazing systems and cause losses in milk production (Nichols, 2008). Teat injuries occur due to trauma, chemical injury, insects, environmental conditions and the milking machine (Sreenu et al., 2014). Surgical intervention on the teat is best performed during the first 12 hrs following 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 and the surgery was attempted immediately after presentation (before 2 hrs) and the same procedure is reported by Sreenu et al., 2014.

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