

**SURGICAL MANAGEMENT OF ACCIDENTALLY ABLATED TEAT AND ITS INCOMPETENT TEAT SPHINCTER IN A DAIRY COW**

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**ARTICLE INFO**

**Article History:**

Received 4<sup>th</sup> April, 2019

Received in revised form 25<sup>th</sup> May, 2019

Accepted 18<sup>th</sup> June, 2019

Published online 28<sup>th</sup> July, 2019

**Key words:**

Teat Ablation, Incompetent Teat Sphincter, Povidone iodine, Simple interrupted suture

**ABSTRACT**

Udder and teat health are increasingly important for dairy producers and any disease conditions which involving udder or teat ultimately affects the productivity and the farmer's economy. A HF cross bred cow presented with the history of teat ablation 1 hours prior to parturition. The ablated teat area infiltrated with lignocaine around the teat orifice, 8 ml of Povidone iodine solution was infused around the teat orifice after 30 minutes of LA injection and the teat opening were sutured with simple interrupted suture. Ablated teat condition with incompetent teat sphincter in a cow was successfully treated with the help of povidone iodine solution and Simple interrupted suture.

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**INTRODUCTION**

The udder and teats are vulnerable to external trauma or injury because of their anatomical location, increase in size of udder and teats during lactation, faulty methods of milking, repeated trauma to the teat mucosa, injury by teeth of calves, accidentally stepped on teat, paralysis resulting from metabolic disturbances at parturition (Tiwary *et al*, 2005)

Incompetant teat sphincter (relaxation of teat sphincter). The milk was dropped intermittently from teat orifice. This condition respond to treatment by injection of small amount of lugol's iodine with Insulin syringe around teat orifice (2- 3\0.1 ml), two heifers were respond and milk leaking was stopped. (Nouh *et. al*)

Teat leaker or Free milker is the condition just reverse of teat stenosis. It can be due to injury or relaxation of teat sphincter. In this case milk will go on leaking and sometimes infection may gain entry leading to mastitis. This condition is treated by injection of 0.25 ml of lugol's iodine around the orifice or scarification and suturing with one or two stitches (Ramesh *et al* 2005).The present demand for high milk production exposes the teat of dairy cattle to vigorous manipulation and high risk of injures. Injures to the teat can be caused by various factors including trauma; infection, husbandry practices and environmental factors (Ghamsari, *et al*, 1995).

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**Case history and Treatment**

The HF Cross bred cow was presented to Edapatty Pudhur Milk Producers co. operative society (Valapady MPT-Salem aavin) with the history of teat ablation (Fig-1) 1 hour prior to parturition and after parturition there is continuous free flow of milk (Fig-2) from ablated teat opening. On physical examination there is swelling of ablated teat area, severe haemorrhage, free flow of milk from the teat canal, hot to touch and other parameters were normal. To alleviate pain inj. meloxicam given at the dose rate of 0.5mg /Kg B. Weight and to prevent secondary bacterial infection ampicillin and cloxacillin given at the dose rate of 8 mg/kg body weight were administered into I/M and I/V route respectively for 3 days. The animal was restrained in lateral recumbency and the ablated teat area cleaned with potassium permanganate solution, after cleaning lignocaine was infused around the teat orifice. 8 ml of Povidone iodine solution was infused around the teat orifice after 30 minutes of LA injection and simple interrupted suture also applied on teat opening to prevent the free flow of milk, the suture were removed on 20<sup>th</sup> day (Fig- 3).



**Ablated teat cow at owner premises**

**Before the treatment**



**Fig 2** Free flow of Milk from ablated teat opening

**After the Treatment**



**Fig 3** Removal of suture on 20<sup>th</sup> day post operative

**RESULTS AND DISCUSSION**

The animal with incompetent teat sphincter was uneventfully recovered and the wound were healed completely (Fig-3). Regarding to treatment of free milker, it was treated by injection of Povidone iodine solution using insulin syringe around teat orifice to stimulate formation of circular rings which make the orifice narrower and stop leaking of milk. These results was in agreement with that of David, *et al*, 2005, Mahdy, 1998, Misk, 2008 and Thomas and Simon, 2008.

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**How to cite this article:**

Saranya Kannan M.V.Sc (2019) 'A Case Study: Effects of Laser Beam & Ultrasound Therapy In Osteitis Condensans ILII', *International Journal of Current Advanced Research*, 08(07), pp. 19436-19437. DOI: <http://dx.doi.org/10.24327/ijcar.2019.19437.3749>

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