

**SURGICAL REPAIR OF LACERATED WOUND IN THE MOUTH OF 2 DAYS OLD CALF:
A CASE REPORT**

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ABSTRACT

A 2 daysold bovine male calf was presented with extensive lacerated wound on lower lip and chin with avulsion of the muscular area from the lower jaw that occurred due to an automobile accident. It showed restlessness and excessive salivation along with presence of blood clots. The animal was examined thoroughly and prepared for surgical repair of the damaged part. Reconstructive surgery of lower lip and chin was carried out under mental nerve block and linear block using 2% Lignocaine hydrochloride. Good surgical technique and effective post-operative management made the case successful recovery.

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INTRODUCTION

A wound is defined as discontinuity or separation of skin, mucous membrane, or any tissue surface. Lacerated wounds in animals are generally occurs due to accidental injury, crossing the fencing wire, automobile injury etc. A lacerated wound presents torn and irregular edges (Venugopalan, 2009). These wounds may occur at different places of body like face, inguinal region, abdomen, thorax, legs, etc. Ruminants are very often subjected to open wounds on near facial region due to automobile accidents, barbed fencing wires, snake bites, etc. Anterior facial region needs special attention in the surgical repair owing to the presence of important structures like buccal nerves, dental pads, incisors, etc.

Case History and Clinical Observations

A 2 days old year old bovine calf around 20Kg body weight was presented in the Veterinary Clinical Complex, Lakhimpur College of Veterinary Science, Joyhing, North Lakhimpur with a history of an extensive lacerated wound on mandibular region of right side of lower lip and check to an accident occurred just few hours ago. The calf showed excessive salivation and was unable to suck milk from his mother's teat due to the injury. On thorough examination the lacerated wound involved right side of lower lip and check with affection of Rima oris and tearing of orbicularis oris, incisive

muscle, buccinators and part of depressor labimandibularis muscles exposing the buccal and labialvestibale and commissures tearing. Clotted blood was observed on wound surfaces with little contamination (F1).



Fig 1 The bovine calf with lacerated wound on lower lip

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Fig 2 Surgical repair of the wound



Fig 3 Bovine calf after 3 days of treatment

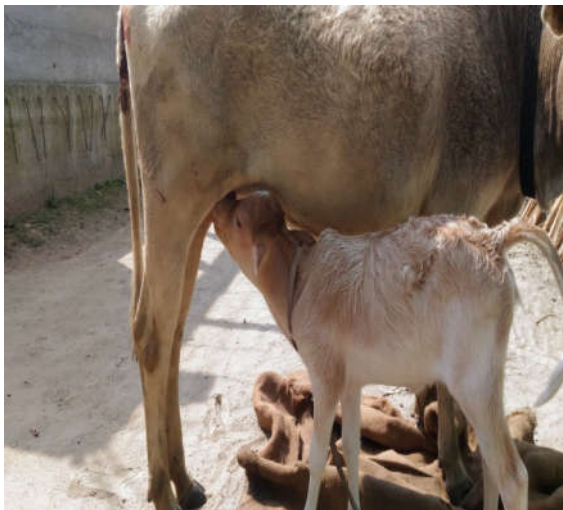


Fig 4 On the 3rd day when the calf able to suck the mother's milk

TREATMENT AND DISCUSSION

The animal was casted in left lateral recumbency and prepared for aseptic surgery. It was given mental nerve block and surface infiltration with 2% Lignocaine hydrochloride on the wound surfaces. The injury was cleaned with iodine lotion thoroughly to remove the debris and clots. After that the muscle layers and affected tissues were apposed using chromic catgut in continuous manner and irreparable parts were removed with a scissors (Fig 2). Suturing in this case was very difficult because, surgical procedure require mouth to be opened till the suturing was complete as the thickness of the wound involved inner surface of the lower lip and improper development of the muscles. After bringing the area into a proper shape, a paste made of boric acid and glycerine was applied on suture line to enhance healing. Chromic catgut was used as it was readily available and cheaper. Post operatively the animal was injected with Ceftriaxone @ 10mg/kg body weight and tolfenamic acid @ 1ml/10kg body weight intramuscularly. Owner was advised to provide oral feeding and regular dressing of the repaired area with betadine lotion and a paste made of Zinc oxide and povidone iodine was used because of their better wound healing and antiseptic properties respectively. The cell division in wounds is connected with increased demand for zinc due to its function in enzymes required for cellular replication and zinc found to be slightly mitogenic to epithelial cells (Agren et al., 1991) and the animal was said to have normal prehension and masticatory habits and able to suck mothers milk from 3rd day onwards indicating a complete and uneventful recovery (F4).

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