Surgical management of deep lacerated tongue in a red kandhari cow calf

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Abstract

A 6 month old calf was presented with protruded tongue, blood tinged excessive salivation having deep lacerated wound at the lateral side of the anterior part of the tongue. The cause of injury might be some sharp object. The diagnosis was done by history and clinical examination. Pre surgical treatment was done to stabilize the animal and the cut portion was surgically corrected under influence of sedation with Xylaxine hydrochloride @ 0.1 mg/kg BW IM and local infiltration of 2% lignocaine hydrochloride. The mouth gag was applied and cotton bandage was tied at the base of tongue as tourniquet and to hold and pull the tongue and sutured by absorbable suture material. Sub-cuticular suture and simple interrupted suture techniques were used during surgery. Post-operatively, antibiotics and analgesic were given and advised owner offering for soft feed. Animal recovered quickly as healing of the oral cavity was very rapid.

Keywords: Surgical management, deep lacerated tongue, cow

Introduction

Laceration of the tongue usually occurs in bovine due to injury caused by sharp objects like thorns, nails, wires, needles or sharp teeth. Laceration of tongue may be superficial,deep,or involve loss of portion of organ (O'Connor,1994) [1]. The present article deals with surgical management of deeply lacerated tongue of a non descript cow calf due to sugarcane top consumption.

Case history and observations

Two month old Cow calf was presented at TVCC, COVAS, Parbhani, with the history of sudden onset of blood tinged salivation, protrusion of tongue towards right side, inability to consume milk and was dull. The physiological parameters like heart rate,respiration rate and rectal temperature were found in normal range with mild dehydration. Oral cavity on examination showed excessive salivation mixed with blood and the tongue was lacerated into unequal parts from middle of the tongue to base at which a part was attached to the base of the tongue at torus linguale (Fig-1).

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Fig 1: Deep lacerated tongue
Treatment
The calf was prepared for aseptic lingual surgery. Mild sedation was achieved with administration of Xylazine Hydrochloride @ 0.1 mg/kg also Inj. Atropine Sulphate @ 0.04 mg/kg BW I/V was given. The animal was restrained and local anaesthesia was achieved by depositing 10 ml of 2% Lignocaine hydrochloride at the site (Fig-2). After applying mouth gag.

![Fig 2: Local infiltration with 2% lignocaine](image1)

Torniquate was applied at the base of the tongue at torus lingual with the help of cotton bandage and retracted outside. The wound was thoroughly washed with 0.1% Potassium permanganate solution and all the blood clots were removed. The lacerated wound was sutured with Catgut No.1 by applying simple interrupted pattern on dorsal and ventral surface of tongue seprated (Fig-3). Post-operatively the animal was administered with Ringer’s Solution 1 lit/day and Dextrose solution 5%, 1lit/day, daily cleaning of mouth with 0.1% Potassium permanganate solution and application of boroglycerine at the suture site. Inj. Amoxicillin Cloxacillin @10 mg/kg BW I/M, Meloxicam @0.5 mg/kg BW I/M, Tribivet 2 ml I/M and Inj. Anhistamin @ 0.2 mg/kg BW I/M regularly for 5 days were given and maintained only on milk and the calf recovered uneventfully and able to consume milk (Fig-4).

![Fig 3: After suturing of the wound](image2)

Discussion
Most lacerations heal without surgical intervention by using daily mouth lavage and systemic antibiotics and by feeding a soft diet, however in severe cases that involve body of the tongue are best managed surgically. Laceration of the tongue can result in complete or partial severance of the organ with the severed portion protruding from the oral cavity. Excessive loss of saliva is common because of interference with swallowing (Radostits, et al. 2005) [2] Deep laceration of the tongue was successfully managed surgically resulting in rapid healing of the tongue was observed due to good vascularity (Thyagi, et al. 1993) [3]. In this case torniquate helped in controlling of bleeding as well as for easy protrusion of the tongue also anasthesia was prolonged in the local area. Calf recovered completely without any complications this simple technique can be adopted at field level.

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Reference
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