

SURGICAL MANAGEMENT OF CHRONIC BUCCAL FISTULA IN A CAMEL (*CAMELUS DROMEDARIUS*): A CASE STUDY

Bajrang Lal Kaswan¹, Saraswat Sahoo¹, Subha Ganguly^{2*}

¹Teaching Veterinary Clinical Complex, Arawali Veterinary College, Rajasthan, INDIA

²Department of Veterinary Microbiology, Arawali Veterinary College, Rajasthan, INDIA

ABSTRACT

A 6 years old female camel was presented at Arawali Veterinary College, Sikar with history of escape of partially masticated feed materials from the opening at right side cheek from last one year. It was diagnosed as buccal fistula and it was surgically repaired with a rectangular hard leather piece under xylazine sedation. It took nearly 5 weeks for complete recovery under monitoring.

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KEY WORDS

Buccal fistula, Camel, Xylazine

*Corresponding author: Email: ganguly38@gmail.com Tel: +91 9231812539

INTRODUCTION

Camel suffers from various surgical affection of head region such as mandible fracture, soft palate injury, buccal fistula, lacerated eyelid, ruptured eyeball, corneal opacity and lacerated nostril because camel browsing the upper storey tree vegetation and the thorny vegetation from shrubs and bushes, which often inflict injuries to the head region mostly eyes and lips are involved [1]. Buccal fistula is also reported by Gahlot [2], Patel et al. [3] and Purohit et al. [4] in camel. Gahlot [5] reported that a careful per oral examination revealed absence of 3rd cheek tooth where the feed straw got accumulated during mastication and these straws repeatedly injured the oral mucosa at this level leading to buccal fistula and or buccal cum salivary fistula. Therefore feed straw should be removed from the wounds of buccal fistula.

CASE HISTORY AND OBSERVATION

A 6-year old female camel was presented to the Teaching Veterinary Clinical Complex (T.V.C.C.) of Arawali Veterinary College, Sikar with a history of escape of partially masticated feed materials from the opening at right side cheek from last one year. The camels had normal appetite, but showed some irritation at the time of feeding. Owner reported that it was previously treated and sutured by a local para-veterinarian but suture broke down the same day and wound healing did not occur.

The clinical examination revealed 3 cm chronic wound was found about 2 cm below the lower eye lid on right side of cheek. Partially masticated feed and watery fluid was coming out through the openings at right side cheek [Figure- 1].

Careful clinical examination revealed that small pocket was present inside oral cavity and partially masticated feed material was stored inside pocket. These partially masticated feed such as straw repeatedly injured the oral mucosa at this level.

TREATMENT AND DISCUSSION

Camel was secured in sternal recumbence and fistula was repaired under xylazine sedation. Xylazine @ 0.3 mg/kg body weight administered intramuscularly and local infiltration of 2% Lignocaine was made. Partially masticated feed material was recovered from the buccal fistula along with pocket by help of allies forceps and pocket was emptied. The fistula was debrided. One soft circular leather piece of size slightly greater than diameter of fistula was placed on inner oral mucosal opening along with thread which was come out through buccal fistula opening [Figure- 2]. The wound edge was freshened with B.P. blade to improve vascularity. Buccal fistula was repaired with catgut no. 2 and skin was sutured with silk thread. Another rectangular hard leather piece of size slightly greater than diameter of fistula was placed on outer skin opening of fistula and knot was secured on the outer hard leather piece [Figure- 3].



Fig:1. Buccal fistula and partially masticated feed coming out through the opening in camel.



Fig:2. One soft circular leather piece of size slightly greater than diameter of the fistula.

Oral cavity was irrigated daily with light potassium permanganate solution. On the day of surgery animal was kept on fluid therapy 5 liters of Dextrose Normal Saline and 5 l Ringer's Lactate. Oxytetracycline 2500 mg administered intravenously for 7 days and Phenylbutazone 3000 mg, intramuscularly for 3 days, postoperatively. The animal was offered soft dry leaves of KHEJARI tree with minimum wet straws from the second day of surgery. The diameter of fistula reduced remarkably in three week time and leather pieces removed after 4 week. The fistula dressed with 5% Povidone iodine and Charmil spray. Complete healing took place in 5 weeks.

Peculiarities of anatomy and physiology of head of camels are such as mandible, soft palate and long neck predisposes the animal. Gahlot and Chouhan [5] reported that camels suffer from variety of surgical affections of head and neck region which markedly affect the value of the animal, draft capacity and overall performance. The results of the present study were in agreement with the observations of Kumar [1], Gahlot [2] and Purohit et al. [4].



Fig:3. Rectangular hard leather piece of size slightly greater than diameter of fistula was placed on outer skin opening of fistula and knot was secured on the outer hard leather piece.

CONCLUSION

Careful clinical judgement, early surgical management with gentle handling of tissue, aqua therapy or through wound irrigation, effective topical medication and sufficient rest bring quick and better recovery in clinical and surgical wounds in the camels

CONFLICT OF INTEREST

There is no conflict of interest.

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FINANCIAL DISCLOSURE

None declared.

REFERENCES

- [1] Kumar P. [2013] A Clinical Study on Surgical Affections of Head and Neck Region of Camels (*Camelus dromedarius*). M.V.Sc. Thesis submitted to Rajasthan University of Veterinary and Animal Sciences, Bikaner.
- [2] Gahlot TK. [2000] Surgery of the dromedary camel. In: Selected Topics on Camelids. 1st ed., The Camelid Publishers, Bikaner, India. pp. 378-430.
- [3] Patel SS, Parikh PV, Patil DB, Kelawala NH, Patil VN, Jhala SK. [2007] Survey of surgical affections in camels 1996–2007. Camel Conf-Book, International Camel Conference. Feb. 16–17, College of Veterinary and Animal Science, Bikaner. pp. 73.
- [4] Purohit S, Chaudhary SR, Mistry J, Patel PB Siddiquee GM, Patel JS. [2011] Surgical management of buccal fistula in a camel (*Camelus dromedarius*). *Journal of Camel Practice and Research*, 18(2):345-346.
- [5] Gahlot K and Chouhan DS. [1992] Camel Surgery (1st ed.), Gyan Prakashan Mandir, Bikaner, India, 30-155.