Short communication

NAIL AVULSION IN A CAMEL-A CASE REPORT

Amit Sangwan¹, Garima Choudhary² and Rajendra Yadav³

^{1,3}Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar, Haryana, India ²Department of Animal Husbandry Dairying, Haryana, India

Camels are often used for draft or race purposes, which predisposes foot to injury. Camels are taken for open pastures, which may also lead to punctured foot or other foot injuries. Foot disorders and their surgical management in camels have been reported previously (Singh and Gahlot, 1997; Singh et al., 1980; Gahlot, 1984; Gahlot and Chauhan, 1992). However, foot disorders related to the nails of the foot are scarcely reported (Singh and Gahlot, 1997). Present communication deals with the successful surgical management of a case of avulsion of the nail in a dromedary camel.

Case history and treatment

A five year old male camel was presented at Haryana Pashu Vigyan Kendra, Mahendragarh (regional centre of Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar) with a history of avulsion of the nail in the medial toe of the left forelimb (Fig 1) one week ago due to injury while pulling a cart. The camel had severe pain and could not bear weight on the affected limb. The affected toe

The animal was kept off feed (for twenty-four hours) and off water (for twelve hours) prior to surgery. The animal was sedated using xylazine at a dose rate of 0.4 mg/Kg body weight, intravenously. Local anesthesia was achieved using 2% lignocaine hydrochloride. After cleaning the wound, the discolored toenail was resected at its caudal attachment to the coronet. The wound was debrided,

was soiled in the sand and appeared as an infected

wound. Surgical resection, aseptic bandaging, and

proper postoperative care were done, and the animal

attained appreciable functionality. It was decided to

the discolored toenail was resected at its caudal attachment to the coronet. The wound was debrided, and povidone-iodine was applied, followed by bandaging of the wound. A gunny bag was wrapped around the foot to protect it from soil contamination. The bandage was changed every alternate day for the first fifteen days for the next 15 days. The animal was administered oxytetracycline @ 5mg/kg wt intravenously for five days and meloxicam 0.2 mg/kg.

wt. Intramuscularly for three days, postoperatively.



Fig 1. Severely injured medial toe nail of left forelimb.



Fig 2. The fully grown medial to enail 48 weeks post-operatively.

SEND REPRINT REQUEST TO AMIT SANGWAN email: 90amitsangwan@gmail.com

The animal started proper weight bearing and working on the affected limb after one week, but the completely new nail with full strength became evident after one year, postoperatively (Fig 2).

Results and Discussion

The majority of foot affections found in camels are in the age group 5-10 years. However, the animal in the present report was 5 years old. The special anatomy of the foot of a camel permits it to walk through sandy and rough terrains (Bligh et al, 1976). The nails in camels are not traumatised so often. Hence reports could not be more detailed on this anatomical part of the foot. However, Singh and Gahlot (1997) have reported avulsion of the nails in camels, and possible etiology ascribed was infection and inflammation of traumatised coronary band. However, in the present case, the most likely etiology was infection and inflammation at the coronet. The treatment in the present case of avulsion of nails was in line with that reported by Singh and Gahlot (1997). However, it was observed in the present case that the formation of a new nail took more than 48 weeks, and keratinisation started from the coronet region. The lameness disappeared with in one week of the avulsion, comparable with the hoof avulsion in cattle (Greenough et al, 1981). More clinical studies are needed to understand the etiology and treatment of this rare clinical entity.

Conflicts of Interest

The authors declare no conflict of interest.

References

- Abbas B and Tilley P. Pastoral management for protecting ecological balance in Halaib District, Red Sea Province, Sudan. Nomadic Peoples. 1990; 29:77-86.
- Abdurahman OASh and Bornstein S. Diseases of camels (*Camelus dromedarius*) in Somalia and prospects for better health.Nomadic Peoples. 1991; 29:104-112.

- Al-Ani FK. The musculoskeletal system. In: Camel, Management and Diseases. Al-Sharq Printing Press, Jordan. 1st Edition. 2004; pp 324.
- Bligh J, Cloudsley-Thommpson JL and MacDonald AG. Environmental Physiology of Animals. Blackwell, Oxford (Cited by Yagil R, 1993). 1976.
- Gahlot TK. Surgical management of deep punctured wounds of foot in camel. Indian Journal of Veterinary Surgery. 1984; 5:140-142.
- Gahlot TK and Chouhan DS. Camel Surgery. Gyan Prakashan Mandir ikaner. 992; pp 67-114.
- Gauthier-Pilters H and Dagg AI. The Camel: it's Evolution, Ecology, Behaviour and Relationship to Man. Chicago Univ. Press. USA. 1981.
- Greenough PR MacCallum FJ and Weaver AD. In: Lameness in Cattle. 2nd Edn, Eds Weaver AD, Wright Scientechnica, ristol, England. 1981; pp 01, 151, 169, 171, 187, 20, 377.
- Hjort A and Hussein MA. Camel herd dynamics in southern Somalia: Long term development and milk production implications. Camel Forum. 1986; 18:1-28.
- Knoess KH. The camel as a meat and milk animal. World Animal Review. 1977; 22(1):39-44.
- Kohler-Rollefson I. The Raika dromedary breeders of Rajasthan: A pastoral system in crisis. Nomadic Peoples. 1992; 30:74-83.
- Schwartz HJ. Productive performance and productivity of dromedaries (*Camleus dromedarius*). Animal Research and Development. 1992; 35:86-98.
- Siddiqui MI and Telfah MN. Surgical oncology. In: A guide book of camel surgery. Abu Dhabi Food Control Authority (ADFCA). 2010; pp 189. ISBN 978-9948-03-773-6.
- Singh AP, Nigam JM and Chandana IS. A radiographic study of foot affections of camel. Haryana Veterinarian. 1980; 19(1):37-41.
- Singh Gopal and Gahlot TK. Foot disorders in camels (*Camelus dromedarius*). Journal of Camel Practice and Reseaerch. 1997; 4(2):145-154.
- Snow DH, Billah AM, Ridha A and Frigg M. Plasma concentrations of some vitamins in camels. Proceedings of First International Camel Conference Dubai, U.A.E. 1992; pp 335-338.