

DIAGNOSIS AND SURGICAL MANAGEMENT OF FIBROMA IN A CAMEL (*Camelus dromedarius*)

S. Purohit¹, V. Malik¹, N.K. Gangwar² and R.P. Pandey¹

¹Department of Surgery and Radiology, ²Department of Pathology, College of Veterinary Science and Animal Husbandry, Pandit Deen Dayal Upadhyaya Pashu Chikitsa Vigyan Vishwavidyalaya Evam Go-Anusandhan Sansthan (DUVASU), Mathura - 281001, U.P., India

Fibromas are benign tumour composed of fibrous or connective tissue. The majority of the tumours are round to oval intradermal or subcutaneous masses (Hendrick, 2002). Chest pad fibromas in camels have been described previously (Purohit *et al*, 1986; Gahlot, 2000; Gahlot and Chouhan, 1990). Present report deals with successful surgical management and histo-pathological diagnosis of fibroma durum in a dromedary camel.

History and Clinical Examination

A 6-year-old male camel (*Camelus dromedarius*) of about 600 Kg body weight was presented to Teaching Veterinary Clinical Complex, Kothari Veterinary Hospital, DUVASU, Mathura with a history of large hard swelling at left lateral aspect of sheath since 8 months (Fig 1). Owner reported that medicinal management at his doorstep was not fruitful to resolve the swelling. The swelling was increased in size with time. There was ulceration on ventral aspect of the swelling. Surface bleeding had also been reported occasionally. Maggot infestation was also reported by the owner that was treated successfully. Upon arrival at the referral clinic, the temperature, pulse rate and respiratory rate of the animal were within normal physiological limits. The camel felt some pain and discomfort in hind limb during the movement. Owner also reported decrease in feed and water intake. The camel was initially examined for evaluation of the hard swelling. History and clinical findings suggested it to be a fibroma. The tumour was excised surgically.

Treatment

The camel was restrained in sternal recumbency and sedated with xylazine, 140 mg, intravenously. After securing it in right lateral recumbency the site was aseptically prepared using soap and water, and painted with povidone

iodine solution. About 20 ml of 2% lignocaine hydrochloride was infiltrated locally at the site before the surgical procedure. An elliptical skin incision was made around the base of the swelling. Following a blunt dissection the blood vessels were ligated using chromic catgut no 2. Complete enucleation of tumour mass weighing 3.5 kg was done. The skin incision was closed with horizontal mattress suture pattern using silk no 2. Broad spectrum antibiotic for 5 days and analgesic for 3 days were given parenterally. Injection containing vitamin A, D, E, 20 ml was also administered intramuscularly on alternate days 3 times. The mild suppuration was observed at suture line on day 5. Two sutures were removed at dependent part of the wound and irrigated with 0.1% povidone iodine solution daily. The sutures were removed on 12th postoperative day. The open wound healed in 3 weeks. Animal showed comfort in sitting one week later to the operation.

Gross examination of excised tumour revealed it to be hard, smooth over the surfaces and whitish



Fig 1. Large suspected tumour mass on left lateral aspect of sheath.

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in colour. Histo-pathological examination revealed cells with hyperchromatic nuclei spindle shaped with abundance collagenous fibres. The cells were uniform in nature but arranged in dysplastic manner. The proliferating blood vessels were present in abundance (Fig 3). Gross and microscopic examination revealed it as fibroma durum (Jones and Hunt, 1983).

Discussion

Mesenchymal tumours of the skin and soft tissues comprise a wide range of entities, some of which are of uncertain classification. Fibromas

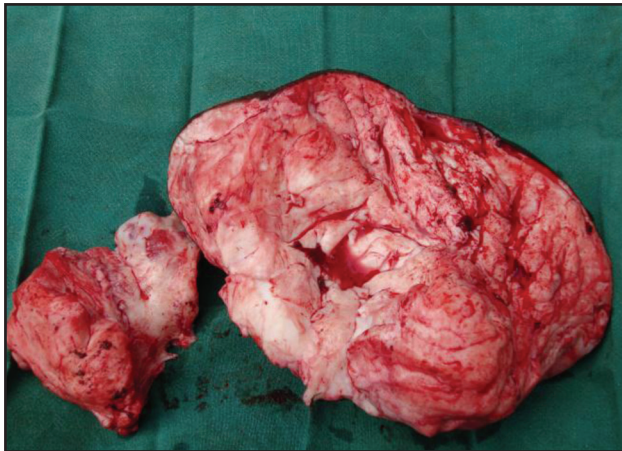


Fig 2. Excised tumour mass.

are benign neoplasms of fibrocytes with abundant collagenous stroma which has a rare occurrence in large animals (Jones and Hunt, 1983). They often occur in adults, sex and species have no effect on its prevalence. The majority of tumours are round to oval intradermal or subcutaneous masses. The secondary bacterial infection was controlled with broad spectrum antimicrobial therapy and dressing with povidone iodine solution in this case.

The treatment undertaken in present study were also described by Gahlot (2000) and Quazi and Gahlot (2012). However, the chest pad wounds need

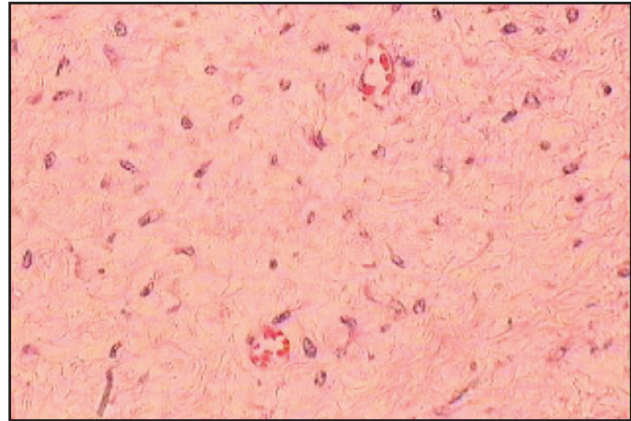


Fig 3. Histomicrograph showing abundant elongated fibroblast in the fibroma located at inguinal region of a camel (H&E 40X).

a protection from getting soiled during healing period as this practice prevents contamination.

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