SQUAMOUS CELL CARCINOMA OF HORN IN A BULLOCK – A CASE REPORT

P. Veena, R.V. Suresh Kumar, P. Sankar*, N. Dhanalakshmi and S. Kokila

Department of Veterinary Surgery and Radiology, College of Veterinary Science, Sri Venkateswara Veterinary University, Tirupati - 517 502, India.

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ABSTRACT

A case of surgical management of squamous cell carcinoma of horn in a bullock is reported.

Key words: Squamous cell carcinoma, Horn, Bullock.

Squamous cell carcinoma is a common tumor of cattle affecting the horn and eye (Satpute et al.2002). Horn cancer is generally a disease of adult cattle between 5 to 10 years of age and it is commonly observed more in long horned (Kulkarni, 1953) white coat breeds of cattle. High prevalence of horn cancer has been observed in castrated bullocks. The predisposing factors for occurrence of horn cancer or irritation due to yoke, trauma, tying the rope at the base of the horn, rubbing against hard object, fighting, pairing of horns, painting, solar radiation, genetic predisposition and sex hormone imbalance (Yadav et al.2002 and Bamne et al., 2007).

Case History and observations

An eight year old Hallikar bullock was presented to Department of Veterinary Surgery and Radiology, College of Veterinary Science, Tirupati (AP) with the history of bleeding from the right nostril, head shaking, rubbing against hard object and keeping its head down. The temperature, respiratory rate, heart rate, haematobiochemical values were within physiological limits. Physical examination revealed pain on palpation on the base of the right horn, bloody discharge from the ipsilateral nostril and tilting of affected horn (Fig: 1). The observed cauliflower like growth was infected with maggot. This case was tentatively diagnosed as horn cancer and surgical excision was decided to remove the growth.

Treatment and discussion

The animal was restrained in a trevis and right horn was prepared for aseptic surgery. Regional anaesthesia was achieved by corneal nerve block by administering 10 ml of lignocaine hydrochloride and local infiltration around the base of the horn. Elliptical incision was made around the base of the horn immediately below the coronary band. The underlying tissues and skin all around the base of the horn was separated and skin flap was made. Cornual blood vessel was ligated and horn was removed from the base with the help of gigly wire. A stillete polythene tube having fenestration was introduced through the frontal sinus opening into the nasal passage till its end comes out through the nostrils and then suture was applied to keep the catheter in position. Intrasinus irrigation with physiological saline removed the neoplastic tissue through catheter. The two edges of the skin was apposed with horizontal mattress suture pattern using silk thread no.1 later, post operatively animal was given enrofloxacillin @ 5.0mg/kg body weight

*Corresponding author’s email : sansurvet@gmail.com
for 7 days and melonex @0.50mg/kg body weight for 5 days. The antiseptic dressing of surgical wound was done with povidone-iodine solution once in two days. Excised mass was subjected to histopathological examination and it was confirmed to be a squamous cell carcinoma (Fig 2). The animal made uneventful recovery within 15 days after surgery. The specific chemotherapy including antineoplastic drugs could not be undertaken due to the economic considerations and lack of owner consent. Bhowmik and Nandi (1986) reported squamous cell carcinoma in the skin and horn of buffaloes. Horn cancer is predominantly reported in bullocks and less in cows (Yadav et al., 2002).

REFERENCES