

MANAGEMENT OF CUTANEOUS PAPILOMA IN AN ONGOLE (BOS INDICUS) CALF

S.P. Kurati¹, N.R. Srikanth², M.P. Kumar³ and M. Mutha Rao^{4*}

Livestock Research Station, LAM
Sri Venkateswara Veterinary University
Guntur – 522 034, Andhra Pradesh, India

ABSTRACT

A female Ongole calf aged one year and nine months was found to have nodular development around the left eye and neck region. Clinical examination revealed that the calf had cutaneous papilloma (wart), which was treated with autohemotherapy, ivermectin and levamisole injections along with placement of a ligature around wart's base. On the third day of treatment, a large papilloma on the left lower eyelid dried up and sloughed off. On the tenth day of therapy, the warts on the upper eyelid and neck began to dry and flake off, leaving behind barely visible scars at the original growth sites. The animal underwent an uncomplicated recovery and completely recovered from the ailment.

Keywords: *Ongole calf, cutaneous papilloma, ivermectin, levamisole, ligature and autohemotherapy*

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Bovine cutaneous papillomatosis is an infectious and neoplastic condition characterized by the presence of numerous benign tumors (papillomas) that will regress spontaneously or transform into malignant neoplasms (Feyisa, 2018). This condition primarily affects young animals (aged 1-3 years) and it occurs more frequently and

severely in bovines than in any other domestic species (Ankit *et al.*, 2017). Eyelids, neck and the lower abdomen portions are the frequent sites for the development of cutaneous warts, which may slough off on their own or progress to cancers of economic significance if left untreated (Suganya and Saranya, 2015).

CASE HISTORY AND OBSERVATIONS

A one-year-nine-month-old female Ongole calf was found to have wart like growths around the medial canthus of left eye and a little below the lower eyelid (Fig. 1). Clinical examination revealed that the animal's

¹Scientist

²Scientist

³Ph.D Scholar

⁴Professor and Officer- Incharge, corresponding author Email id: mutharaomurakonda@gmail.com



Fig. 1. Cutaneous papilloma around the left eye

temperature, respiratory rate and heart rate were all within the normal range. In addition to these wart-like nodular lesions observed on the eye, a minor nodular lesion was also found on the neck region. The condition was diagnosed as cutaneous papilloma (wart) and treatment was initiated.

TREATMENT AND DISCUSSION

The animal was treated with Ivermectin (0.2 mg/kg b.wt, s/c), Levamisole (2.5 mg/kg b.wt, s/c) and autohemotherapy was carried out, where the animal received an injection of its own blood on day one of treatment. Using 18G hypodermic needle and a disposable syringe, 12 ml of blood was drawn from the jugular vein, and then equal volume (6 ml) of collected blood was injected deep intramuscularly into the neck muscles on both sides (Bhavana and Sagar, 2021). In



Fig. 2. Day 10th of treatment

addition a ligature was applied at the base of the wart nodules. Injection Levamisole was given four more times on days 3, 5, 7, and 9 @ 0.2 mg/ Kg. body weight on each occasion. By day three, the papillomas around the medial canthus & the one below the lower eyelid was dried up and cast off leaving only one wart growth near the angle of medial canthus and by day ten complete shedding was noticed (Fig. 2). An uncomplicated recovery was seen and the animal was completely recovered from the ailment and has resumed its normal feeding and gait.

Medical management alone yielded 70-80% recovery rate which included the use of Inj. Lithium antimony thiomalate (Anthiomaline®; each ml contains 60 mg) with a total dose of 10- 15 ml intramuscularly for three alternate days (Kavitha *et al.*, 2014)

or Ivermectin @ 0.2 mg/kg b.wt, S/C twice in two weeks interval subcutaneously (Feyisa, 2018). To enhance the cellular immunity of the affected animal, levamisole was given @ 2.5 mg/kg b.wt, S/C for three alternative days (Feyisa, 2018). In the current case, affected animal was in the age group of 1-3 years, which is in line with previous reports (Ankit *et al.*, 2017; Feyisa, 2018 and Bhavana and Sagar, 2021). The affected animal had warts on its eyelids and neck, which is consistent with earlier reports (Suganya and Saranya, 2015; Bhavana and Sagar, 2021). It had been reported that autohemotherapy (Bhavana and Sagar, 2021) accompanied with ligature applied at the base of the wart could effectively treat cutaneous papilloma, which is consistent with our findings. Based on the findings in this case, it may be concluded that cutaneous papillomas can be successfully treated using autohemotherapy combined with ivermectin and levamisole injections, as well as ligature application at the base of the papilloma nodules within 10 days of initiating the treatment.

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