

PERSISTENT CUTANEOUS BOVINE PAPILOMATOSIS IN AN INDIGENOUS HEIFER AND ITS SUCCESSFUL MANAGEMENT

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Bovine cutaneous papillomatosis or warts are regarded as either hyperplasia or benign neoplasms caused by Bovine Papilloma Virus (Boiron et al., 1965). The lesions were often found in clusters and were more common on shoulder, head, neck and dewlap in cattle (Vahida and Jaya Kumar 1999). However, extensive generalized and or whole body papillomatosis are also not uncommon. The present communication recorded papilloma on the dewlap below the jugular furrow of a non descript heifer and its successful management.

Case history and Observation

An indigenous non-descript heifer aged about two and half years, was presented to the clinic with the complaint of a big, rough, horny, irregular, ugly looking wart growths having traumatic wound marks with discharge and maggot infestation on its dewlap below the jugular furrow for treatment. It was a non-responsive case to Thuja ® oral therapy as reported by the farmer. Based on the morphological appearance and clinical presentation of the tumorous out growths, the case was diagnosed as persistent cutaneous papilloma and surgical excision of these neoplasms was therefore mandatory.

Treatment and Discussion

The animal was restrained and secured in lateral recumbency. After through scrubbing and cleaning with Khorsoline ® (Glaxo) the growths were carefully excised from its base with sharp scalpel and bleeding were checked by potassium permanganate crystal cauterization. The wound was then washed with normal saline solution and closed by interrupted sutures. Excised tissue samples were preserved in 10% neutral buffered formal saline solution, fixed and processed for histopathological examination.

Broad spectrum antibiotic coverage with the intramuscular administration of oxytetracycline dihydrate-50 mg/ml (Intamycin ® Intas) @ 15 ml daily, for three days along with non-steroidal anti-inflammatory drug meloxicam (Melonex ® Intas) @ 1ml/10 kg body weight were administered consecutively for three days as an adjunct to antibiotic therapy. Herbal antiseptic ointment Charmil ® (Dabur Ayurved) was applied twice daily along the suture lines. Sutures were removed after ten days. The heifer made an uneventful recovery within two weeks. Microscopic examination of neoplastic tissues revealed irregular fronds of squamous epithelium with loose vascular connective tissue and some were filled with necrotic cellular debris. Marked epithelial hyperplasia with papillary projections and the neoplastic changes, those were prominent in tumour stroma had led to the diagnosis of cutaneous neoplasm as bovine cutaneous papillomatosis. The findings were in agreement with that of Sastry (1985) and Lancaster and Olson (1982) in bovine cutaneous papillomatosis.

In young animals warts usually resolved spontaneously. In the present case cure and regression of warts by the oral administration of Thuja did not occur. Although few small warts dropped off. The big warts caused concern due to repeated trauma and maggot infestations, and this could perhaps be due to the poor immune response of the individual animal. Surgical excision, here, was proved very effective. Recurrence of warts were not noted during sixty days post surgical observatory period. Cell mediated immune response was probably effective in suppression or regression of the papilloma (Somvanshi and Sharma 1996). Persistence of papilloma in the present case could be due to poor immune status of the animal or could be due to certain immunological tumour blocking factors. These aspects warrant further investigation.

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