Successful Management of Transmissible Venereal Tumor in a Bitch using Doxorubicin - A Case Report

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Abstract
A two year old intact mongrel female was presented with the history of ulcerated and hemorrhagic wound at the tail region, growth at the vaginal passage and just above the left eye. The tail was amputated. The FNAC and histopathological examination of the growth confirmed it to be Transmissible Venereal Tumor (TVT). It was treated with Vincristine sulfate weekly at 0.025 mg/kg b.wt. intravenously for 5 weeks but the condition was not subsided. Then the animal was treated with doxorubicin at 1mg/kg b.wt. once in 21 days for 3 times and the animal made an uneventful recovery.

Key words: Transmissible venereal tumor, Vincristine, Doxorubicin, Bitch.

Transmissible venereal tumor (TVT) commonly called as sticker tumor is a neoplastic condition which mainly affects the external genitalia. The frequency of extra-genital affection is 5 % (Nielsen and Kennedy, 1993). It is transmitted from animal to animal mainly through sexual contact but can also be spread during sniffing and physical contact between dogs with existing tumor. Cohen (1985) and Johnston (1991) stated that the exfoliation and transplantation of neoplastic cells during physical contact provide the main mode of transmission onto genital mucosa, and also onto nasal or oral mucosa, during mating or licking of affected genitalia. Moulton (1990) described the TVT as cauliflower-like, pedunculated, nodular and papillary or multi lobulated masses. This paper reports a case of genital and extra genital transmissible venereal tumor of a dog and its successful management with doxorubicin.

Case History and Observations
A two year old female mongrel dog weighing 10 kg was presented at the Madras Veterinary College Teaching Hospital, with the history of hemorrhagic and ulcerated wound at the tail region, growth above the left eye (Fig.1) and pedunculated, nodular growth at the vagina (Fig.2). The tail was amputated. Diagnosis of Transmissible Venereal Tumor was made by FNAC of the ocular growth and by histopathological examination of the tail ulcerated mass. The cytoplasm of the neoplasmic cells contained vacuolation with distinct border on cytology. Histopathology of the cutaneous mass revealed sheet of neoplastic cells. Hematological and serum biochemical parameters were within the normal range. Plain radiography of thorax lateral view revealed no metastasis.

Treatment and Discussion
Chemotherapy with Vincristine @ 0.025 mg/kg b.wt. intravenously for 2-8 injections is most effective and practical therapy for TVT (Calvet

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Fig 1. Tumor mass was noticed above the left eye and masking vision
et al., 1982). In the present case, chemotherapy using Vincristine was injected at weekly interval for 5 weeks but the condition was not subsided. Then the animal was treated with Inj. Doxorubicin @ 1mg/kg b.wt. intravenously once in 21 days for 3 times and the animal had an uneventful recovery (Fig.3). The results of this study, corroborated well with the report of Amaral et al. (2007). In the present case, the diagnosis was made early with FNAC and histopathology and the animal recovered uneventfully with doxorubicin.

References