SUCCESSFUL THERAPEUTIC MANAGEMENT OF CANINE TRANSMISSIBLE VENEREAL TUMOUR IN NATIVE BREED DOGS OF TAMIL NADU

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Received: 03-12-2021 Accepted: 12-11-2022

ABSTRACT

Canine transmissible venereal tumour (TVT) is a tumour of genital tract commonly occurring in dogs and foxes. Stray dogs act as reservoir for TVT. Incidence of TVT is higher in developing nations like India because of higher population density of stray dogs as well as due to lack of proper veterinary care in villages. The present paper places on record successful management of TVT, one in a male Chippiparai and other one in female Rajapalayam dogs belonging to Rajapalayam village of Tamil Naduwith chemotherapy using a plant alkaloid, Vincristine Sulphate at weekly intervals for 3 weeks. Both the animals recovered uneventfully.

Keywords: Transmissible Venereal Tumour (TVT), Plant alkaloid, Vincristine Sulphate, Rajapalayam, Chippiparai, Genital tract

INTRODUCTION

Transmissible venereal tumour is very common type of tumour among sexually active dogs of both sexes and it comprises about 2 to 43% of tumours found in temperate climates. This is a round cell tumour of reticuloendothelial origin and usually transmitted through coitus with affected animals. Its synonyms include “Sticker Tumour” and “Infectious sarcoma”. Dogs of any breed, age or sex are susceptible (Kimeto and Mugera,1974; Betamuzi, 1992). But it is most common in dogs aged above 1 year. The susceptibility for TVT is more in developing nations like India due to high population of stray dogs as well as due to lack of veterinary services. TVT is unique among other tumours because it was the first tumour transmitted experimentally by Russian Veterinarian Novinsky in 1876. The present paper places on record two different cases of TVT diagnosed and treated successfully in two native breeds in the Rajapalayam village of Tamil Nadu.

CASE HISTORY AND OBSERVATION

Case 1: A 4-year-old male Chippiparai dog was presented to Veterinary Clinic, Rajapalayam with the anamnesis of bleeding from the genital region since 3 days. General physical examination was found to be normal. Blood parameters were also normal with mild neutrophilia. Sanguineous discharge was noticed from penis and eversion of prepuce revealed a cauliflower like pedunculated mass on the caudal part of penis. The mass was about 5cm in diameter and showed mild ulceration also. Other regions including inguinal lymph nodes were carefully examined to rule out metastasis.

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Case 2: A 3-year-old female Rajapalayam dog was brought to the Veterinary Clinic, Rajapalayam with a history of a mass in the vaginal region and bleeding from the genital region since 4 days. Owner reported that the animal was mated recently with a breeder dog. Clinical examinations and the result of blood parameters were found to be normal. Detailed Vaginal examination revealed a pedunculated mass of about 4cm on the cranial part of vagina. Vaginal bleeding was also noticed.

CLINICAL APPROACH

The genital area was thoroughly cleaned with antiseptic solution. Fluid therapy was initiated with Ringer’s Lactate in female dog because it was found to be dehydrated. Chemotherapy was started using intravenous administration of Vincristine Sulphate at the dose rate of 0.025mg per kg body weight diluted with Normal saline for the both the dogs at weekly intervals. Care was given to avoid extravasation of Vincristine because that may cause localised necrosis. Rajapalayam female dog received 3 doses and Male Chippiparai dog was given two doses

Result and Discussion

The Figure 1 shows the picture of male Chippiparai on first week with intense bleeding and cauliflower like mass on caudal part of penis and Figure 2 shows clinical improvement on 2nd week of treatment with regression of mass and stoppage of bleeding. Figure (3),(4) & (5) are pictures of female Rajapalayam breed of dog taken on 1st,2nd and 3rd week consecutively. The size of the tumour was reduced after administration of Vincristine & bleeding was stopped after one week of treatment itself in both the dogs. The mass showed complete regression after 3rd dose of vincristine and both the animals were found to be perfectly normal. Owners were advised about

the transmission of TVT by indiscriminate breeding with affected animals

TVT is spread by the transplantation of tumour cells from affected areas to other mucous membrane that have lost its integrity. Female animals are more susceptible than males. There is no evidence of breed predisposition in dogs (Karlson & Mann,1952; Betamuzi,1992). According to Das and colleagues (1986) TVT is a naturally occurring allograft. Control of TVT is a tedious task because stray dogs act as reservoirs and controlling of stray dog population is a major need of the hour.

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Figure 1. Cauliflower like mass on caudal aspect of penis along with bleeding (Week-I)

Figure 2. The size of mass reduced with stoppage of bleeding (Week-II)

Figure 3. Pedunculated mass on cranial aspect of vagina (Week-I)

Figure 4. Reduction in the size of mass following treatment (Week-II)

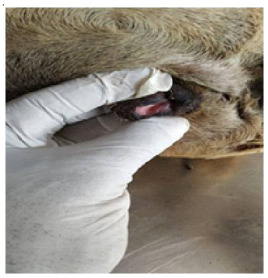

Figure 5. Complete regression (Week-III)