

Therapeutic Management of Perineal Transmissible Venereal Tumor Associated with Sinus in a Chippiparai Dog

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Abstract: *A five year old intact chippiparai female dog weighing 17.4 Kg presented with history of non healing wound at perineal region since two months and the case was treated by local Veterinarian. Fine needle aspiration test of the wound confirmed transmissible venereal tumor. Vincristine sulphate was administered at 7 days interval at the dose rate of 0.025mg/kg body weight intravenously for three weeks and sinus was flushed with povidone iodine antiseptic solution and the dog had an uneventful recovery.*

Keywords: Perineal transmissible venereal tumor, Sinus, Vincristine, Chippiparai dog

1. Introduction

Tumor that occurs on the perineal region is similar to the tumor that grows on other haired region of the body. A transmissible venereal tumor (TVT) on perineal region associated with sinus is uncommon and occurs in sexually active free roaming dogs. It is an infectious tumor, spread by mating of infected animals (VonHoldt and Ostrander, 2006). The incidence ranges from 23.5 to 42.8 per cent of the tumors and more common in 2-5 years of age. There is no breed predisposition for this tumor (Das *et al.*, 1991). The present case report deals with the very rare occurrence of perineal transmissible venereal tumor associated with sinus in a chippiparai dog.

2. Case History and Clinical Observation

A five year old intact chippiparai female dog in good health weighing 17.4 kg was presented to Gynaecology unit of Teaching Veterinary Clinical Complex, Veterinary College and Research Institute, Tirunelveli with the history of non healing wound at perineal region (Fig.1) since two months. The owner also reported that animal was treated by local Veterinarian. On clinical examination the animal was apparently healthy and all the vital parameters were within normal range. Physical examination of mass revealed cauliflower like growth associated with foul smelling sanguineous discharge from the sinus. Vaginal examination revealed the reproductive tract was clear and patent. Haematological and blood picture was within the normal range. Cytological examination of the impression smear and fine needle aspiration tests revealed large round cells, discrete spherical nucleus with chromatin granules and multiple vacuoles in the cytoplasm confirming as transmissible venereal tumor (Fig.2).

3. Treatment and Discussion

The canine transmissible venereal tumor has been reported from many regions of the world but commonly occurs in sexually active intact free roaming dogs in tropical and subtropical climates (Das and Das, 2000; VonHoldt and Ostrander, 2006). The incidence ranges from 23.5 to 42.8 per cent of the tumors and more common in 2-5 years of age. The canine transmissible venereal tumor is unicellular asexually reproducing but sexually transmitted between dogs through coitus, licking, sniffing and biting of infected area (Das and Das, 2000; Girma Birhan and Mersha Chanie, 2015). The signs include cauliflower like growth with foul smelling sanguineous discharge from the sinus. Sinus is a blind ending tract from epithelial surface into the surrounding tissue associated with draining of serous fluid or pus. The sinus may acquire due to presence of recurrent neoplasm, foreign body, haematoma and microbial infection (Silen and Glotzer, 1974; Girma Birhan and Mersha Chanie, 2015).

Several treatments including surgical excision, radiotherapy, immunotherapy and chemotherapy have been used to treat the canine transmissible venereal tumor but chemotherapy has been shown to be the most effective and easily available practical therapy. The Chemotherapeutic agents such as vincristine, vinblastine, doxorubicin and cylophosphamide have been used but vincristine is considered one of the most effective therapy for canine TVT (Das *et al.*, 1991; Feldman and Nelson, 1996; Girma Birhan and Mersha Chanie, 2015). In the present case, the animal might have acquired the disease during copulation of the infected male. The TVT was diagnosed and treated with intravenous administration of Vincristine sulphate (cytocristine[®]) 0.025 mg/kg body weight at 7 days interval for three weeks and sinus were flushed with povidone iodine antiseptic solution and oral supplementation therapy of Liv 52 and Dexorange 5ml each BID with an uneventful recovery.

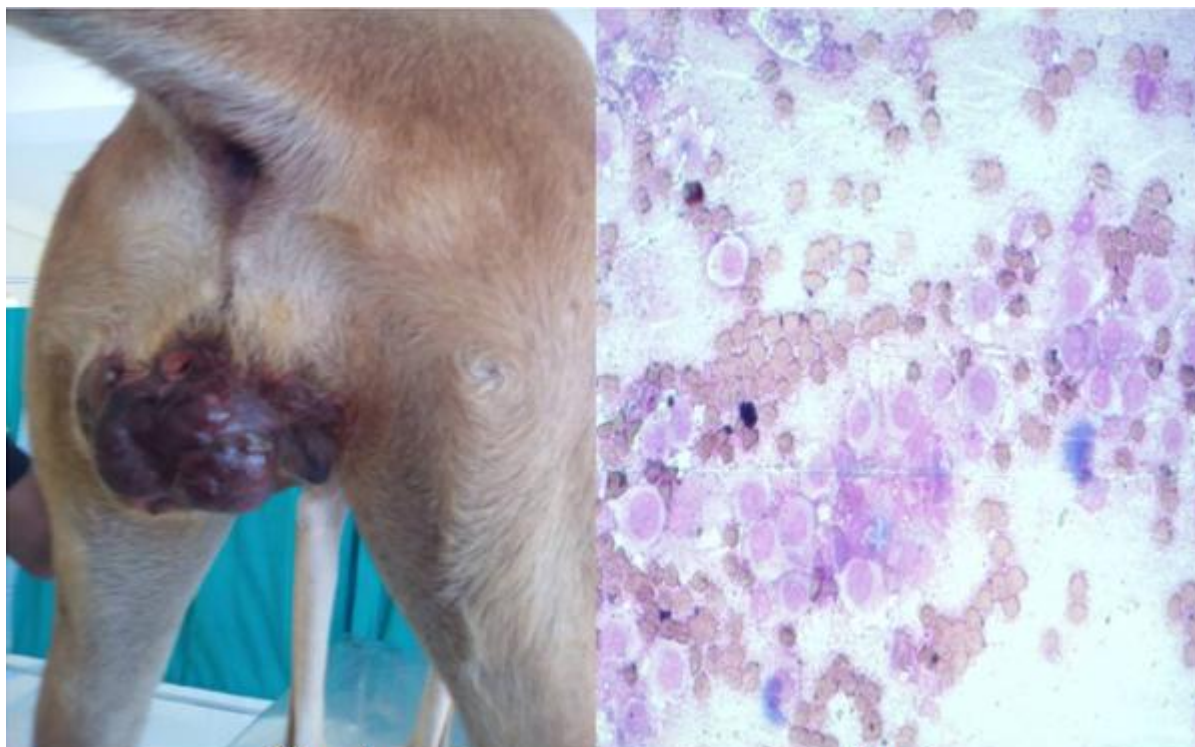


Figure 1

Figure 2

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