



International Journal of Veterinary Sciences and Animal Husbandry



ISSN: 2456-2912

NAAS Rating (2025): 4.61

VET 2025; 10(11): 05-07

© 2025 VET

www.veterinarypaper.com

Received: 02-09-2025

Accepted: 04-10-2025

Dr. Shiva Krishna CH

M.V.Sc. Scholar, Department of
Veterinary Gynaecology and
Obstetrics, PV Narsimha Rao
Telangana Veterinary
University, Telangana, India

Dr. Vaibhavi K

M.V.Sc. Scholar, Department of
Veterinary Gynaecology and
Obstetrics, PV Narsimha Rao
Telangana Veterinary
University, Telangana, India

Dr. Sai Priya D

M.V.Sc. Scholar, Department of
Veterinary Gynaecology and
Obstetrics, PV Narsimha Rao
Telangana Veterinary
University, Telangana, India

Dr. Aruna Kumari A

Professor, Department of
Veterinary Gynaecology and
Obstetrics, PV Narsimha Rao
Telangana Veterinary
University, Telangana, India

Dr. Murali Mohan K

Professor & Head, Department
of Veterinary Gynaecology and
Obstetrics, PV Narsimha Rao
Telangana Veterinary
University, Telangana, India

Corresponding Author:

Dr. Vaibhavi K

M.V.Sc. Scholar, Department of
Veterinary Gynaecology and
Obstetrics, PV Narsimha Rao
Telangana Veterinary
University, Telangana, India

Transmissible Venereal Tumor (TVT) in a dog

Shiva Krishna CH, Vaibhavi K, Sai Priya D, Aruna Kumari A and Murali Mohan K

DOI: <https://www.doi.org/10.22271/veterinary.2025.v10.i11a.2688>

Abstract

A Canine Transmissible Venereal Tumor in a two year old Husky dog was presented to Veterinary Clinical Complex, College of Veterinary Science, Rajendranagar, Hyderabad. On clinical examination of the retracted penis-reddish cauliflower like pedunculated mass noticed at bulbus glandis. Fresh red blood was dribbling from the penile region. Treatment with Vincristine sulphate @ 0.025 mg/kg slow IV @ weekly intervals for four weeks along with supplements of liver tonic were given and dog recovered uneventfully.

Keywords: TVT, veterinary science, dog, husky dog, treatment

Introduction

Canine Transmissible Venereal Tumor (CTVT), also called as Transmissible Venereal Sarcoma, Stickers Sarcoma, Venereal granuloma and infectious sarcoma, is a contagious venereal tumor of a dog. First described by Hujard in 1820 in Europe. It is commonly observed in dogs that are in close contact with one another, or in stray or wild dogs that exhibits unrestrained sexual activity or through licking and sneezing. Transmissible Venereal Tumour (TVT) is usually a sexually transmitted disease of dogs, which mainly affects the external genitalia (Kumar *et al.*, 2024) ^[8] and occasionally the internal genitalia of dogs and are usually transmitted through coitus. There is extensive abrasion, bleeding of the penile mucosa and vagina making an easy way for transmission and transplantations through coitus (Aludin SN *et al.*, 2020) ^[11]. Abnormal number of chromosomes ranging from 57 to 64 and average of 59 were present in such cells, in contrary to normal 78 chromosomes found in species (Aludin SN *et al.*, 2020) ^[11]. Cohen D (1973) reported that immunologically compromised animals presented higher severity for developing the tumor and capacity of immunological response of the host animal plays a major role in expansion of the tumor.

Case History and Clinical examination

A two year male old dog was presented to the Veterinary Clinical Complex, College of Veterinary Science, Rajendranagar, and Hyderabad with a history of dribbling of fresh blood from the penile region and constant licking of penile region from last two days. History of unwanted crossing with a street dog two months back. The vital parameters were within the range. Timely deworming and vaccination of the dog was noted. On clinical examination fresh blood dribbling from the penile region and pain on palpation was noticed. Upon gentle examination by retracting penis reddish cauliflower like pedunculated mass noticed at bulbous glandis.

Diagnosis and Treatment

On through examination of the mass and suspecting that it could be Canine Transmissible Venereal Tumor, an impression smear of the base of the penis was taken. On examination of the impression smear cells with clear cytoplasmic vacuoles, large round cells with round nucleus and nucleolus along with few mitotic figures were observed suggestive of Canine Transmissible Venereal Tumor cells.

Based on the history of unwanted mating, clinical examination and laboratory findings, it was confirmed as Canine Transmissible Venereal Tumor. The dog was treated with injection Vincristine Sulphate @ 0.025 mg/kg diluted with 20ml of Normal Saline I/V at weekly interval for four

weeks. Injection Tribivet @ 1ml IM and injection Chlorpheniramine maleate @0.5mg/kg body weight intramuscularly given.

The dog was also advised for the supplementation of syrup Sharkoferol pet @ 5 ml and Liver tonic @5ml twice daily.



Fig 1: 1st day-gross



Fig 2: First week

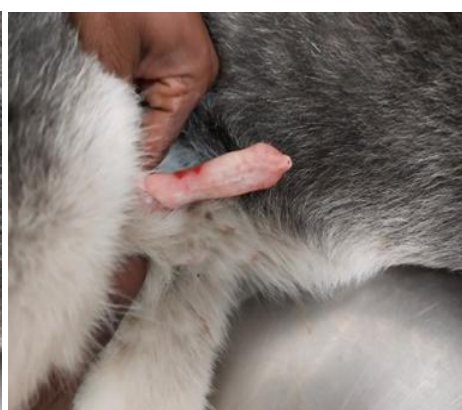


Fig 3: Second week



Fig 4: Third week**Discussion**

Among the most prevalent canine neoplasms, Canine Transmissible Venereal Tumor maintains endemic status across diverse regions for decades due to persistent risk factors such as free roaming and entire dog populations (Ayala *et al.*, 2019) ^[12]. The tumor cell is itself the infective agent. It is a benign reticuloendothelial tumor which affects external genitalia and rarely internal genitalia. It is typically transmitted during coitus, sniffing, licking of tumor mass. TVT cells are grafted cells means abnormal number of chromosomes ranging from 53-64 on an average of 59 in contrast to normal number of chromosomes in healthy cells 78. The tumor is cauliflower like, pedunculated, nodular, papillary or multilobulated (Ganguly B *et al.*, 2016) ^[7]. In male dogs, neoplastic lesions are located on the more caudal part and less on the shaft or tip of glans penis. Occasionally lesions may be present in other parts of the body without genital involvement. It bleeds profusely from the mass and metastasis also may occur. Vincristine sulfate continues to lie the gold standard, achieving high complete remission rates (over 93%) with weekly administration. In cases resistant to vincristine, second line options like doxorubicin or radiation therapy offer promise. Continuing treatments such as vincristine with ivermectin or autochemotherapy has shown enhanced tumor regression and favorable outcomes (Anusha A, *et al.*, 2022) ^[3]. Accurate early detection through cytology, Fine Needle Aspiration Cytology or impression smears enables effective treatment selection which improve outcomes and minimize adverse effects.

Conflict of Interest

Not available

Financial Support

Not available

Reference

1. Abedin SN. Canine transmissible venereal tumor: A review. *J Entomol Zool Stud.* 2020;8(2):596-9.
2. Díaz AS, Lima JR, Alcántara RKM, Lizano M, Muñoz CLJ, Hernández RDO, *et al.* Presence of Papillomavirus DNA sequences in the canine transmissible venereal tumor (CTVT). *PeerJ.* 2019;7:e7962. <https://doi.org/10.7717/peerj.7962>
3. Anusha A, Ramana KV, Reddy KCS, Swathi B. Studies on transmissible venereal tumour (TVT) in canines. *Pharma Innov J.* 2022;11(6):1544-1547.
4. Boscos CM, Ververidis HN. Canine TVT-clinical findings, diagnosis and treatment. *Proc 29th World Congr World Small Anim Vet Assoc.* 2004; [Accessed 2012 Apr 12].
5. Boscos C, Ververidis H. Canine TVT: clinical findings, diagnosis and treatment. *Sci Proc WSAVA FECAVA HVMS World Congr.* 2004;Rhodes, Greece:758-76.
6. Diagnosis of Transmissible Venereal Tumor (TVT) in dogs (*Canis lupus familiaris*) using the imprint method. *Res Soc Dev.* 2022;11(3):e51611321806. <https://doi.org/10.33448/rsd-v11i3.21806>
7. Ganguly B, Das U, Das AK. Canine transmissible venereal tumour: A review. *Vet Comp Oncol.* 2016;14:1-12.
8. Kumar PM, Murugavel K, Hemalatha H, Kantharaj S. Comparative efficacy of two different treatment protocols for canine transmissible venereal tumour. *Int J Adv*

Biochem Res. 2024;8(9S):1400-1402.

<https://doi.org/10.33545/26174693.2024.v8.i9Sq.2362>

9. Pimentel PAB, Giuliano A, Odatzoglou P, Ignatenko N, Wenceslau RR, Almeida IO, *et al.* Clinical guidelines for canine transmissible venereal tumour treatment: systematic review and meta-analysis. *Vet Comp Oncol.* 2025;23(2):125-40. <https://doi.org/10.1111/vco.13038>
10. Review on canine transmissible venereal tumor. Jimma University, College of Agriculture and Veterinary Medicine, Ethiopia.
11. Abedin SN (2020) described the pathology of canine transmissible venereal tumor.
12. Díaz AS, Lima JR, Alcántara RKM, Lizano M, Muñoz CLJ, Hernández RDO, *et al.* Presence of Papillomavirus DNA sequences in the canine transmissible venereal tumor (CTVT). *Peer J.* 2019;7:e7962.

How to Cite This Article

Krishna SCH, Vaibhavi K, Priya SD, Kumari AA, Mohan MK. Transmissible Venereal Tumor (TVT) in a dog. *International Journal of Veterinary Sciences and Animal Husbandry.* 2025;10(11):05-07.

Creative Commons (CC) License

This is an open-access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 International (CC BY-NC-SA 4.0) License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.