

Successful Management of Extra Genital Transmissible Venereal Tumor in a Dog

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The canine transmissible venereal tumor (CTVT), also referred to as infectious sarcoma, venereal granuloma, transmissible lymphosarcoma, or sticker tumor, is a contagious neoplasm of unknown origin. It is sexually transmitted and naturally occurs only in dogs, primarily targeting the external genitalia of both male and female animals (Mukaratirwa and Gruys, 2003). Based on the location of the mass, the tumor is categorized into two types: genital TVT and extragenital TVT. The tumor commonly appears as ulcerated masses on the penis, prepuce, or vulva, which tend to bleed easily. Additionally, it may occur in other locations, such as the nasal cavity, oral cavity, eyes, and subcutaneous areas of the skin. Transmission among dogs and other canids can occur through coitus, licking, biting, or sniffing the affected areas (Das and Das, 2000; Rugmini *et al.*, 2025). The neoplasia has a global distribution but is more prevalent in tropical and subtropical regions (Ferreira *et al.*, 2000), particularly in countries with significant populations of stray dogs (Papazoglou *et al.*, 2001). Asodiya *et al.* (2024), analysed 562 canine neoplasms recorded over 2017 to 2021 at Teaching Veterinary Clinical Complex, Anand (Gujarat, India), and recorded CTVT in 68 (12.09%) cases.

CTVTs are immunogenic tumors, with the host's immune response playing a critical role in their progression and metastasis. These tumors are more likely to metastasize in young dogs, immunosuppressed dogs, and those in poor physical condition. Metastases have been documented in various sites, including the nasal and oral cavities, skin, sclera, brain, subcutaneous tissue, lymph nodes, tonsils, liver, spleen, peritoneum, and bone marrow, occurring in 5-17% of cases (Prasad *et al.*, 2007; Santos *et al.*, 2005; Palanisamy *et al.*, 2023; Rugmini *et al.*, 2025). This case describes the extra genital form of CTVT in the thigh of a dog.

HISTORY AND CLINICAL OBSERVATIONS

A four-year-old female nondescript dog, weighing 20 kg was presented to VCC, Chennai for evaluation of an ulcerated lesion on the medial aspect of the left hind limb, which the owner had noticed 2 months ago. Clinical examination revealed a large ulcerated mass with discharge in the medial aspect of the thigh (Fig. 1). Impression cytology of ulcer showing neoplastic cells with punctuate cytoplasm and mitotic figure was suggestive of CTVT (Fig. 2). Ultrasonography revealed no metastasis. Haemato-biochemical parameters revealed

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leucocytosis, all other parameters were in normal range. Based on the cytological findings, this ulcerated lesion was diagnosed as extra genital form of CTVT.

TREATMENT AND DISCUSSION

The dog was administered Inj. Vincristine @ 0.025 mg/kg b.wt. at weekly interval for 6 weeks. Inj. Ceftriaxone @ 10 mg/kg b. wt. IV and Inj. Ringers lactate @ 20 mL/kg b. wt. IV was followed for 5 days. Regular dressing of the lesion was done with povidone iodine. A marked reduction in the size after 4 cycles of treatment and complete recovery after 6 cycles of treatment was observed (Fig. 3, 4).

Canine transmissible venereal tumor (CTVT) naturally occurs on the genitals of both male and female dogs. While it is most commonly transmitted during mating, it can also spread through routine sniffing or other physical contact when an existing tumor on one dog comes into contact with abraded skin on another, leading to the development of extragenital TVT (Rugmini *et al.*, 2025). In the present case, extragenital TVT may have resulted from self-licking of the dog's own genital TVT or from contact with another animal.

Extragenital TVT typically occurs in the nasal or oral cavities, skin, and conjunctival mucosa, often alongside genital TVT, likely as a result of social behaviours (Do Amaral *et al.*, 2007; Rugmini *et al.*, 2025). Kumar *et al.* (2014) stated that extragenital TVTs have also been reported in the skin and subcutaneous tissue of canines similar to this case.



Fig. 1: Large hyperemic and ulcerated mass and discharge at medial aspect of thigh in a dog.

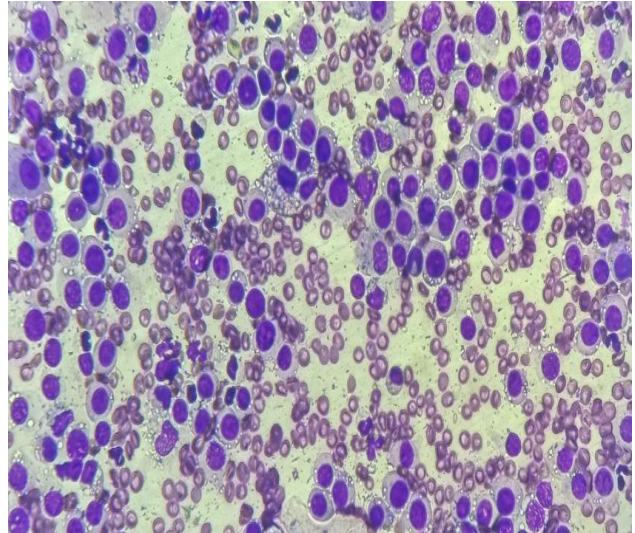


Fig. 2: Impression cytology of extra genital CTVT mass showing neoplastic cells with punctuate cytoplasm and mitotic figure. Diff-Quick stain, 100X.



Fig. 3: Healing of the wound at the 4 weeks of the treatment.



Fig. 4: Complete healing of the wound after 6 weeks of the treatment.

Vincristine sulphate is the preferred drug for treating canine transmissible venereal tumors (Parikh *et al.*, 2023). Rugmini *et al.* (2025) successfully treated 4 cases of ocular TVT in dogs with Vincristine sulphate @ 0.025 mg/kg b.wt. at weekly interval in four sessions. The response to vincristine sulphate was good in the present case also.

Ulcerated lesions of undiagnosed CTVT are often treated as abscess / wound in most cases in routine clinical practice without specific drug for more than two months with no clinical improvement.

This case describes the importance of cytology to be incorporated in routine practice when there is an ulcerated lesions even though there is no genital lesions (like the present case) which helps to make precise diagnosis, prompt therapy and faster recovery.

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