

AN UNUSUAL CASE OF TRANSMISSIBLE VENEREAL TUMOUR IN A CHIPPIPARAI DOG

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SUMMARY

The present case elucidates the successful diagnosis and management of transmissible venereal tumor (TVT) found at bulbous part of penis in a Chippiparai dog.

Keywords: Bulbous glandis, Chippiparai dog, TVT

Canine transmissible venereal tumor (CTVT), also called Sticker's tumour which is naturally occurring, horizontally transmitted round cell tumor affecting sexually active adult domestic dog (Das and Das, 2000; Murugan *et al.*, 2016). It mainly affects the external genitalia and occasionally the internal genitalia of both sexes (Kumar *et al.*, 2012; Ganguly *et al.*, 2016). The present case study records the successful therapeutic management of TVT with vincristine sulphate in a Chippiparai dog (Indigenous dog breed of southern Tamil Nadu).

A 4 years old Chippiparai male dog was presented to the Obstetrics and Gynaecology section of Veterinary Clinical Complex, Veterinary College Research Institute, Tirunelveli with an anamnesis of swelling at the ventral abdomen caudal to the inguinal region (Fig. 1), reluctant to walk, stranguria, bleeding from prepuce with no previous history of trauma and anorexia for the past four days. Clinical examination of the penis revealed inability of the prepuce to retract and there was no macroscopic lesion on the glans penis and prepuce. However, there was a hard mass at the root of the penis exhibiting swelling at the inguinal region lateral to the bulbus glandis portion of the penis. Digital examination was done to rule out prostatomegaly and there was no palpable prostate at the caudo-cranial region of the pelvis. Hence, it was decided to perform ultrasonography to know the ecographic characteristics of the mass and opt for Fine Needle Aspiration Cytology (FNAC). Sonogram of the mass revealed a hypoechoic to mixed echogenic texture which was measuring to an average of 30 mm (Fig. 2). FNAC of the mass at the inguinal region revealed typical round to slightly polyhedral cells, with rather eosinophilic vacuolated thin cytoplasm and a round hyperchromatic nucleus with a nucleolus (Fig. 3). Based on the suggestive (anamnesis, clinical signs) and supportive signs (USG,

FNAC findings), the case was diagnosed as Transmissible Venereal Tumour. The present case must be differential diagnosed with cystitis, prostatitis, urinary tract infection and involvement of regional lymph nodes which is frequent in males with large tumours (Ibrahim and Porter, 2012).

The dog was treated with Vincristine sulphate intravenous at the dose rate of 0.05 mg/m² weekly once for four consecutive weeks (Hoque, 1995; Amaral *et al.*, 2007). Prior to every shot of chemotherapy, complete blood count was taken to know the presence/absence of leucopenia or other abnormalities to rule out the possible complications of chemotherapy, preputial wash and impression smears were also taken to evaluate the clinical recovery (Purohit, 2009). Clinical recovery was assessed based on the reduction in the size of the mass and decrease in the number of cells per High-power fields. As a part of routine conservative therapy Tab. Enrofloxacin @3 mg/kg body weight, orally for five days and as supportive therapy Syp. Healthup Pro @ 0.5 ml/kg body weight were advised. After four weeks of chemotherapy, there was a complete remission of the mass and animal recovered uneventfully (Fig. 4).

The present communication highlights the differential diagnosis of vagaries of clinical conditions associated with urinary and reproductive tract, which include prostatomegaly, fracture of os penis, inguinal lymphadenopathy and subcutaneous inguinal abscess (Batamuzi and Kristensen, 1996). Anamnesis, signalment, and tumour location forms basis for the diagnosis of canine transmissible venereal tumours. In addition to this, certain imperative factors like clinical signs, proper diagnostic imaging techniques and cytological evaluation of tumours often had the decisive advantage to arrive at definitive diagnosis of canine transmissible venereal tumour.

REFERENCES

Amaral, A.S., Sandra, B.S., Isabelle, F., Fonseca, L.S., Andrade, F.H., Gaspar, L.F. and Rocha, N.S. (2007). Cytomorphological

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Fig. 1. Bilaterally enlarged bulbous glandis at ventral abdomen



Fig.2. Ultrasonographic appearance of enlarged bulbous glandis characterized by hypoechoic to mixed echogenic structures

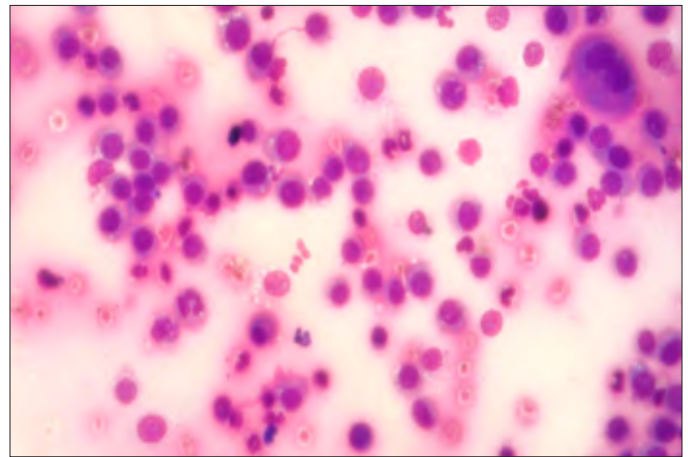


Fig.3. Cytomorphological appearance of Transmissible venereal tumor characterized by presence of cytoplasmic vacuoles and round cells (400X)



Fig. 4. Complete recovery after four weeks of post treatment

characterization of transmissible canine venereal tumor. *Rev Port. Cienc. Vet.* **102**: 253-260.

Batamuzi, E.K. and Kristensen, F. (1996). Urinary tract infection: the role of canine transmissible venereal tumour. *J. Small Anim. Pract.* **37**: 276-279.

Das, U. and Das, A.K. (2000). Review of canine transmissible venereal sarcoma. *Vet. Res. Comm.* **24**: 545-556.

Ganguly, B., Das, U. and Das, A.K. (2016). Canine transmissible venereal tumour : a review. *Vet. Comp. Oncol.* **14**(1): 1-12.

Hoque M. (1995). Different modes of therapy for canine transmissible venereal tumor. *Veterinarian.* **19**: 1-2.

Ibrahim, A.M. and Porter, B.F. (2012). Pathology in practice. Transmissible venereal tumor located on the bulbous glandis and body of the penis. *J. Am. Vet. Med. Assoc.* **15**: 707-709.

Kumar, A., Sangwan, V., Mahajan, S.K., Singh, N., Kiranjeet, S., Arun, A. and Saini, N. (2012). Transmissible venereal tumor induced paraphimosis in dogs. *J. Adv. Vet. Res.* **2**: 48-49.

Murugan, M., Sathiamoorthy, T., Ganesan A. and Lakshmikantan, U. (2016). Therapeutic management of perineal transmissible venereal tumor associated with sinus in a Chippiparai Dog. *Int. J. Sci. Res.* **5**: 1028-1029.

Purohit, G. (2009). Canine transmissible venereal tumor: a review. *Int. J. Vet. Med.* **6**: 1-6.