whereas the laparoscopy was a little invasive but had the advantage of biopsying under direct visualization of the hepatic surface and managing bleeding, if any. Both the techniques could be easily used in routine practice to arrive at definitive diagnosis.

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**References**


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**Cutaneous Transmissible Venereal Tumor in a Dog and its Management**

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**Abstract**

A 3 year old St. Bernard bitch weighing 35 kg was presented with the history of multiple nodular lesions distributed over the cervical, caudal to the left shoulder and abdominal regions. The lesions were ulcerated and cauliflower like or nodular and subcutaneous, measuring up to 5 cm in diameter. Cytologic examination of the cutaneous mass revealed large round cells, discrete round to spherical nucleus with chromatin granules and multiple vacuoles in the cytoplasm confirmed as transmissible venereal tumor. Mitotic figures were also observed. Vincristine sulfate was administered weekly at 0.025 mg/kg, BW, intravenously for four weeks and the animal had an uneventful recovery.

**Key words:** Transmissible venereal tumor, skin, dog

Transmissible venereal tumor (TVT) is a naturally occurring allograft, usually transmitted during coitus and mainly occurs in young (2-5 years of age), sexually mature animals with incidence ranging from 2 to 43 per cent of...
all tumors in temperate and tropical climates (Prasad et al., 2007; Shiju Simon et al., 2014). It has been reported in the eyes, skin, brain, subcutaneous tissue, lymph nodes, tonsils, liver, spleen, oral mucosa, hypophysis, peritoneum, and bone marrow (Santos et al., 2008). The present paper reports on the occurrence of cutaneous transmissible venereal tumour in a St. Bernard dog.

Case History and Observations

A three year old St. Bernard bitch weighing 35 kg was presented with the history of inappetance, loss of body condition, depression and multiple nodular lesions distributed over the cervical, caudal to the left shoulder and abdominal regions since one month. The animal whelped three times and the occurrence of last oestrus cycle was four month ago. The owner also reported that the cutaneous mass was initially of peanut size and gradually enlarged to lemon size. On physical examination the two lesions were ulcerated (Fig. 1) (cervical and caudal to the left shoulder) and cauliflower like or nodular and subcutaneous, measuring up to 5x5 cm (each). Fine Needle Aspiration Cytology of the cutaneous mass revealed large round cells, discrete round to spherical nucleus with chromatin granules and multiple vacuoles in the cytoplasm confirmed as transmissible venereal tumor (Fig. 2). Mitotic figures were also observed. Radiography of thoracic lateral view confirmed no metastasis.

Treatment and Discussion

Vincristine sulfate was administered weekly @ 0.025 mg/kg, BW intravenously for four weeks along with the supplementation of Liv 52 and Dexorange 5 ml each BID and the mass regressed gradually after the first dose itself. Chemotherapy has been shown to be the most effective and practical therapy, with vincristine sulfate being the most frequently used drug and for complete remission usually required 2 to 8 injections (Nak et al., 2005).

These tumors are usually spread during coitus or other social behaviors such as sniffing and licking. Thus, the typical locations of these tumors are the external genitalia and the nasal and oral cavities. Other less common locations include the anal mucosa and the skin and subcutaneous areas (Von Holdt and Ostrander, 2006). A report of a multicentric, extragenital, cutaneous canine transmissible venereal tumor in a sexually immature 11-month-old virgin female mixed-breed dog suggests that transmissible venereal tumor cells can be inoculated into puppy skin lesions by the mother during social interactions such as grooming and other mothering behaviour (Marcos, 2006). Transmissible venereal tumor metastasis has been seen involving the lymph nodes, skin, eyes, liver, musculature, abdominal viscera, lungs, and brain. The frequency of extra-genital affection is 5 per cent. It rarely invades other organs but animals with poor health or immunosuppressed for various reasons might be more likely to have...
more aggressive or metastatic lesions (Shiju Simon et al., 2014). In the present case, we speculate that transmission of neoplastic cells occurred during cohabitation and social behavior between the dogs. Despite the atypical clinical presentation, response to chemotherapy with vincristine was excellent, leading to complete regression of the neoplasm without relapse even after 8 months. In the present case, the diagnosis was made early with cytological examination and the animal recovered uneventfully.

**Summary**

Cutaneous transmissible venereal tumor is reported in a St. Bernard dog and presented for record.

**References**


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**Performance of Soviet Chinchilla Rabbits in the Sub-Tropical High Altitudes of Kerala**

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**Abstract**

A Soviet Chinchilla population of the sub-tropical high altitudes was evaluated to formulate suitable breeding strategies. The mean litter sizes at birth and weaning, litter weights at birth and weaning, slaughter weight, carcass weight and carcass yield at 12 weeks were 5.85 ±0.41 and 4.28 ±0.37, 332.79 ±18.63g and 2582.58 ±278.19g, 2715.12g, 1545.35g and 56.17% respectively. During 6-14 weeks of age, mean body weights, the average daily gain and feed conversion ratios ranged from 723.18 ±26.31g to 2328.82±111.91g, 26.24±2.18g to 34.19±1.62g and 4.65 to 5.63 respectively. Season and litter size at birth significantly influenced growth and feed efficiency (P≤0.01).

**Key words**: Rabbit; feed, growth, carcass traits

Wayanad district of Kerala located at an altitude of 700-2100 above MSL with a sub-tropical climate is one of the leading regions for rabbit entrepreneurship programmes. Low growth rate of the litters and the consequent scarcity of superior breeding stock are the major constraints of rabbit breeding in the area. No scientific studies have been conducted on the litter, growth, feed efficiency and carcass traits of broiler rabbits reared in these hilly and difficult terrains till date. Hence, the present study was undertaken on the various economic traits...