Incidence of Transmissible Venereal Tumours in Dogs – A Survey of 278 Cases

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Abstract
A survey was conducted on the incidence of transmissible venereal tumors (TVT) in dogs during August 2013 – July 2015. A total of 278 cases were reviewed and the incidence of genital transmissible venereal tumour (97.13 per cent) was more than the extra-genital TVT (2.87 per cent). The incidence was more common in Non-descript dogs (38.84 per cent) followed by chippiparai (21.58 per cent). Female dogs were found to be more affected (58.88 per cent) than male dogs (41.11 per cent). Extra-genital transmissible venereal tumour was more in male (87.50 per cent) than in female dog (12.50 per cent). Age wise incidence was in 2-3 years (22.01 per cent) followed 3-4 years (17.61 per cent).

Key words: Incidence, transmissible venereal tumor, dog

Transmissible venereal tumour (TVT) usually affects the external genitalia of both the sexes in adult dogs in tropical and subtropical climates (Prasad et al., 2007; Shiju Simon et al., 2014). It is rare in the nose, eyes, skin, brain, subcutaneous tissue, lymph nodes, tonsils, liver, spleen, oral mucosa, hypophysis, peritoneum, and bone marrow (Santos et al., 2008).

Materials and Methods
A study was conducted on the incidence of transmissible venereal tumour in dogs during August 2013 – July 2015. Cases with the history, clinical signs, Fine Needle Aspiration Cytology (FNAC) or impression smear suggestive of transmissible venereal tumour were included in the study.

Results and Discussion
A total of 278 cases of transmissible venereal tumours were recorded. The incidence of genital transmissible venereal tumour was more (97.13 per cent) than the extra-genital TVT (2.87 per cent). In the extra-genital TVT, nasal cavity was found to be more affected (75.00 per cent), followed by oral and cutaneous (12.50 per cent each). Other locations were the anal mucosa, skin and subcutaneous areas (Von Holdt and Ostrander, 2006). Nielsen and Kennedy (1993), recorded that the frequency of extra-genital affections to be 5 per cent. While in the present study it was only 2.78 per cent.

The incidence was more common in Non-descript dogs (38.84 per cent) followed by chippiparai (21.58 per cent), Spitz (12.94 per cent), Labrador Retriever (8.63 per cent), Alsatian (7.55 per cent), Rajapalayam (6.47 per cent), Doberman Pinscher (2.87 per cent), Golden retriever (0.71 per cent) and St. Bernards (0.35 per cent). Female dogs were found to be more affected (58.88 per cent) than male dogs (41.11 per cent). Extra-genital transmissible venereal tumour was found more in male (87.50 per cent) than in female dog (12.50 per cent). In the present study all the dogs were intact. Root Kustritz (2001), reported that there is no breed predisposition for this tumour. Prasad et al. (2007) opined that transmissible venereal tumour may develop in any breed of the dogs including stray dogs.

Highest incidence was found in the age group of 2 - 3 years (22.01 per cent) followed by 3 – 4 years (17.61 per cent), 9 months to 2 years (16.35 per cent), 4-5 years (13.83 per cent), 5-6 years (13.20 per cent), 6-7 years (7.4 per cent) and above 7 years (9.43 per cent) respectively. Prasad et al. (2007) reported that it mainly occurs in young (2-5 years of age), sexually mature animals. The present study is in accordance with the above finding.

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Summary
A survey was conducted to analysis the incidence of transmissible venereal tumour in dogs.

References


Pharmacological Evaluation of Ginger Extract and Dexamethasone in Experimental Ulcerative Colitis in Rats

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Abstract
The study was conducted to compare the effect of hydro-alcoholic extract of ginger and dexamethasone on experimental ulcerative colitis in rats (n=12 in each group). Group 1 was maintained as control, groups 2 through 4 were induced colitis by intra-colonic administration of 4% acetic acid (2ml), subsequently group 3 was treated with ginger extract (700 mg/kg/day po) and group 4 with dexamethasone (2 mg/kg b.wtip). Treatment groups revealed significant alterations in the colon weight, colon length and disease activity index, serum lactate dehydrogenase (LDH) and colonic alkaline phosphatase (ALP), and also attenuated the macroscopic colonic damages-induced by acetic acid. These results suggest that ginger may be effective in the treatment of UC through its scavenging effect on oxygen-derived free radicals.

Key words: acetic acid, colitis, dexamethasone, ginger

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Ginger (Zingiberofficinale) exhibits anti-inflammatory effects by inhibiting arachidonic acid metabolism in both cyclooxygenase and lipoxygenase pathways (Minaiyanet al., 2008). Dexamethasone shows decrease in activity of pro-inflammatory cytokines like TNF-α and IL-1β in colitis conditions (Baghaeiet al., 2010). Hence, a study was planned to compare the effects of ginger extract with standard drug dexamethasone on a rat model of colitis.

Materials and Methods
Adult male Wistar rats were divided into four groups consisting of 12 rats in each. Group 1 was control, groups 2 through 4 were administered with 2 ml of 4 % acetic acid trans-rectally by holding rats in trendelenburg position for 30sec to prevent leakage, after which fluid was withdrawn to induce colitis(Millar et al., 1996). Subsequently, groups 3 and 4 were treated with hydro-alcoholic extract of ginger (700 mg/kg/day po) and dexamethasone (2 mg/kg/day ip), respectively for 14 days. Subsequently, blood