INFECTIOUS SARCOMA IN A CASTRATED MALE DOG

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[Received: 28.9.2016; Accepted: 03.4.2017]

A castrated adult mongrel was presented with a swollen penis and oozing of fresh blood from the penis. Clinical examination revealed tender, cauliflower like mass which sloughed upon evaluation. The Histopathological reports of cytological examination of impression smear from the mass, revealed typical round to polyhedral cells with nucleus centrally placed and presence of punctate vacuoles in the cytoplasm. The dog was administered vincrystine injection at the dose rate of 0.025 mg per kg body weight at a weekly interval for three consecutive weeks with complete recovery post treatment.
Keywords: Transmissible venereal tumour, Vincrystine, Giemsa Stain and Dog.

Infectious sarcoma also known as transmissible venereal tumour or sticker cell tumour is a sexually transmitted neoplasm in dogs and usually localized in the external genitalia (Das and Kumar, 2000). Sticker cell tumours are most common during the period of maximum sexual activity in dogs and the animals are particularly at highest risk when females exhibit the signs of oestrus. Dogs of any breed, age or sex are susceptible (Betamu -zi, 1992). Canine transmissible venereal tum our is most common in dogs between 2-5 yea -rs of age. During rapid tumour growth, the colour is bright red owing to extensive vascul arization. The tumour often oozes a serosangu inous or simple haemorrhagic fluid and event ually becomes ulcerated, with a necrotic appe arance (Das and Kumar, 2000). Complete surgical excision and or chemother -apy with vincristine sulfate (0.5 mg/m2) I/V once per week for 3 – 6 weeks is effective (Johnson, 2005). Alternatively radiation thera -py has been shown to be effective against transmissi ble venereal tumours resistant to chemotherap -y and at metastatic sites (Rogers *et al*., 1998) .

Materials and Methods

A 6 year old, castrated dog weighing 20 kg was presented to Veterinary dispensary Hunasihal Tq. Kushtagi, Dist. Koppal with a complaint of swollen penis and oozing of blood from the penis (Fig.1 and Fig.2). On examination of the dog, revealed normal rectal temperature and heart rate. Examinatio -n of penis by exteriorizing the penis from prepuce revealed large cauliflower like mass attached to the penis and sloughed easily upon handling. The mass was washed with normal saline and an impression smear was taken from different areas of tumour mass for further cytological examination. The Histopathological Reports revealed that there were homogenous round individual cells arranged in a sheet-like pattern. The nucleus of the tumour cells was round to oval in shape and centrally placed. The nuclear chromatin pattern was coarse to reticulate. The most prominent cytological feature of TVT is the presence of distinct, clear, cytoplasmic vacuoles often referred to as punctate vacuoles with a delineated outline.The

Fig.1. and Fig.2.Swollen penis and oozing of blood

nuclear to cytoplasmic ratio of tumour cells was large suggesting it as a case of infectious sarcoma.

The dog was treated with vincrystine injection at 0.025mg per kg BW diluted in 20 ml of normal saline and given intravenously for three weeks at 7 day interval. Mild side effects like in appetence and vomiting were observed after the first injection which was treated with Inj. Pantadoc 40 mg total dose sid and Inj. Emeset at 0.5 mg per kg BW. The swelling of the penis reduced drastically with the first dose of vincrystine. The oozing of blood completely stopped after the second treatment.

Results and Discussion

Transmissible venereal tumour is one of the most commonly occurring round cell tumours and poses great difficulties in differentiation because this tumour may have similarities with its close entity, such as a mast cell tumour. Surgery is impracticable in cases of generalized and deep seated canine transmissible venereal tumour. Furthermore, recurrence following traditional surgery is not uncommon. The vincristine sulphate at the rate of 0.025 mg/kg body weight intravenously was found most effective in this case it is in accordance to the reports of Singh *et al.* (1996). In the present case transient side-effects, such as anorexia, vomiting or diarrhoea, were found after the start of the treatment, animal showed signs of gastritis and treated with antiemetics however symptoms were disappeared after completion of therapy and animal recovered uneventfully.

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