Malignant Melanoma in a Dobermann Dog – A case report

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Abstract
A ten year old male dobermann dog was presented in lateral recumbency with the history of inappetance and polyuria. Clinical examination revealed swelling of left hind limb and enlarged popliteal lymph node. Radiography revealed metastasis of lungs and lymphadenopathy. Hematological values were within the normal range except for leukocytosis and neutrophilia. Serum biochemistry revealed an increase in globulin level. Fine needle aspiration cytology (FNAC) of mass revealed melanoma.

Key words: Dog, Melanoma, pulmonary metastasis

Melanomas are common tumours of the oral cavity, digits and skin in dogs. They have extremely diverse biologic behaviours depending on a variety of factors including size, stage, site and histologic parameters (Spangler and Kass 2006). The present paper reports melanoma in a dog with metastasis to lungs.

Case History and Observations
A ten year old male dobermann dog was brought to the Madras Veterinary College Teaching Hospital with the history of inappetance, lateral recumbency and polyuria. Anamnesis revealed that hard mass in the left fore digits were removed one year back. Clinical examination revealed swelling of left hind limb with enlarged popliteal lymph node (Fig 1). Vital signs were normal. Radiography revealed metastasis of lungs and lymphadenopathy. Hematological values were within the normal range except for leukocytosis and neutrophilia. Serum biochemistry revealed an increase in globulin (4.9 mg/dl). Fine needle aspiration cytology (FNAC), was taken from the left hind limb mass and stained with Leishman’s and Giemsa staining, which revealed Melanoma. The FNAC smear showed presence of varying sizes of brown to jet black melanin granules in cytoplasm often masking the cellular details (Fig 2). The nuclei were paracentral with round to oval in shape.

Treatment and Discussion
The animal was managed with fluid therapy Ringer’s Lactate @ 10 ml/kg b.wt IV, Ampicillin and cloxacillin @ 10 mg/kg b.wt IV, frusemide @ 2 mg/kg b.wt IV and Vitamin B1, B6 and B12 1 ml IM for 4 days. During the course of treatment, the animal collapsed at home hence, it was not possible to perform post mortem examination.

Melanomas are one of the commonly diagnosed tumours in dogs that originate from melanin producing cells. Most melanomas at dermal sites are behaviourally benign and metastasis or recurrence after adequate excision is rare. In contrast, melanomas of the oral cavity, digits and mucocutaneous junctions are associated with a poor prognosis due to a high degree of local invasiveness and metastatic propensity (Schultheiss 2006).

Commonly affected sites are the oral cavity (56%), lip (23%), skin (11%), and digits (8%) (Smith et al., 2002). Clinical biological malignancy is mainly attributed to both oral and digit (subungueal or nail bed) melanomas. However, some differences exist between these two locations. Practically all oral melanomas are considered malignant (metastatic rate up to 80%), whereas the subungueal or nail bed forms spread to regional lymph nodes and other organs, including lungs, in up to 50–58% of cases (Vail and Withrow, 2007).

Dogs with melanoma of the digits without
lymph node or further metastasis treated with digit amputation are reported to have median survival times of 12 months, with 42 to 57% alive at 1 year and 11 to 13% alive at 2 years (Henry et al., 2005). Unfortunately, metastasis from digit melanoma at presentation is reported to be 30 to 40%, and the aforementioned outcomes with surgery suggest that subsequent distant metastasis is common even when no metastasis is found at presentation/digit amputation.

References


Antibiogram of Pathogens of Mastitis from Chittoor District: Andhra Pradesh

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Abstract

The purpose of study is to identify the bacterial causes of mastitis by their isolation from milk samples of crossbred cows affected with mastitis in and around Tirupati and to evaluate their antibiogram profile. 132 milk samples from clinical cases of mastitis were studied for bacterial isolation and their antibiogram profile during the year 2015. The major pathogens isolated were S.aureus 105 (83.33%), E. coli 10 (7.94%), Pseudomonas sp. 5 (3.96%), Salmonella sp. 3 (2.38%). Antibiogram profile indicated

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