PILOMATRICOMA IN A DOG
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Received: 05-03-2012 Accepted: 20-10-2012

ABSTRACT
The present communication deals with a rare case of pilomatricoma in a 9-year-old German Shepherd dog.

Key words: Dog, German Shepherd, Gross pathology, Histopathology, Pilomatricoma.

Pilomatricoma is a benign follicular tumour. It is a slow growing, non-invasive, and rarely metastasised tumour (Goldschmidt et al., 1981). Basophilic cells in association with ghost cells are important cytopathologic criteria that may provide a definitive cytologic diagnosis of pilomatricoma in dogs, and may help to avoid a false diagnosis of malignancy (Masserdotti and Ubbiali, 2002). The present report describes the occurrence of a rare case of pilomatricoma in a dog.

A 9-year-old female intact German Shepherd dog weighing 26.6 kg was presented to Madras Veterinary College Hospital, Chennai with a history of slow growing tumour in between left thoracic and cranial abdominal mammary glands. On palpation, a painless hard fluctuating mass was felt without being adhered to the underlying subcutaneous tissue. The dog also had mammary tumours in the left thoracic and cranial abdominal mammary glands. In addition, it was also suffering from generalised dermatitis. Temperature, respiration and pulse rates were found to be normal. Haematological and biochemical parameters were within the normal range. Radiograph of lateral thoracic region revealed no evidence of pulmonary metastasis. The mass was surgically excised and tissue pieces were collected in 10 per cent formalin for histopathological examination and paraffin tissue sections of 4 to 6 mm thickness were cut and stained with haematoxylin and eosin.

Gross examination of the excised mass revealed well circumscribed mass having a diameter of 3.2 cm. The cut section revealed lobulated surface with numerous gray white areas. Microscopic examination revealed variable sized nodules consisting of basaloid cells and basophilic cells (Fig.1). The cells were arranged in papillary to solid pattern and had vesicular cytoplasm. There was moderate stroma separating the tumour nodules. The neoplastic cells showed squamous transformation and partial keratinization. Some areas showed both basaloid and squamous cells (Fig.2). The basophilic cells resembled hair matrix cells found in the hair bulb of actively growing hairs and were hyperchromatic with scanty cytoplasm. Based on histopathological findings, the tumour was diagnosed to be pilomatricoma.

Pilomatricoma is extremely rare or non-existent tumour in other species of domestic animals (Pullay and Stannard, 1990) and occurrence of this tumour is very rare in dogs too. Nielsen and Cole (1960) reported that only 3 per cent of the epithelial skin tumours of dogs were pilomatricomas. Histopathogical examination revealed the presence of variably sized distinct basophilic cells in this case, while, Jackson et al. (2010) described the histopathological features of irregular islands, lobules, and nests of basaloid cells, which transitioned abruptly into large lakes of “ghost” cells with areas of ossification and calcification. Argolo

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Neto et al. (2009) described an alopecic, mobile, solid tumor, not adhered to the subcutaneous tissue, painless to palpation and histologically, epithelial proliferation arranged in lobes consisting predominantly of basaloid and shadow cells in pilomatricoma in dogs. The findings in the present case corroborated with the above descriptions of pilomatricoma in the earlier studies.

REFERENCES