

BENIGN CUTANEOUS HISTIOCYTOMAS IN TWO DOGS

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Introduction

Cutaneous histiocytoma is a most common skin tumor of dogs (Goldschmidt, and Hendrick, 2002) and is reported to account for approximately 18 % of all canine skin tumours (Reddy, *et.al.* 2009). Roshini *et al.* (2013) recorded 8.6% incidence of canine cutaneous histiocytoma out of 41 canine tumourous growths studied and was second to mammary gland tumour. Particularly, the dogs below four years of age were most commonly affected, although dogs of any age can be affected (Goldschmidt, and Hendrick, 2002). The pure breed dogs were said to be more susceptible to cutaneous histiocytoma and includes Scottish terriers, Bull terriers, Boxers, English cocker spaniels, Doberman pinschers, and Shetland sheepdogs (Goldschmidt, and Hendrick, 2002). However, present investigation reports occurrence of cutaneous histiocytoma in Pug breed and non descript (ND) dog and therefore placed on record.

Materials and Methods

The growth of 2 cm in diameter at elbow joint from 1.6 year old Non-descript (ND) dog (Case 1) and another growth of 4x 5 cm size at knee joint from two year old black pug dog were surgically removed by local veterinarian in order to diagnose and rule out malignancy. The growths were presented to Department of Pathology, Bombay Veterinary College, Mumbai for histopathological opinion. The tissues were

preserved in 10% buffered formal saline. The pieces of these growths were processed by routine histopathological techniques.

Case history and discussion

Case 1: The growth at elbow joint measured 2 cm in diameter. On section, the growth was grey in colour and firm in consistency. Microscopic examination of growth revealed proliferating round cells with moderate amount of pale to basophilic cytoplasm. The nuclei were round and of variable sizes. The cells were arranged forming sheet. The proliferating cells were separated by thin rim of stroma (Fig. 1). Mitotic figures were few. At few areas, infiltration of lymphocytes and hemorrhages were also evident. On the basis of microscopic lesion, the case was diagnosed as benign cutaneous histiocytoma.

Case 2: A growth of 4x 5 cm size was present on knee joint and was grey in colour. On section, the growth was firm in consistency. Microscopic examination of growth revealed presence of round cells with round to oval nuclei. The nuclei of the cells were hyperchromatic showing mitotic figures. Inflammatory cells viz. neutrophils and lymphocytes were also noticed in the section. On the basis of microscopic lesion, the case was diagnosed as benign cutaneous histiocytoma.

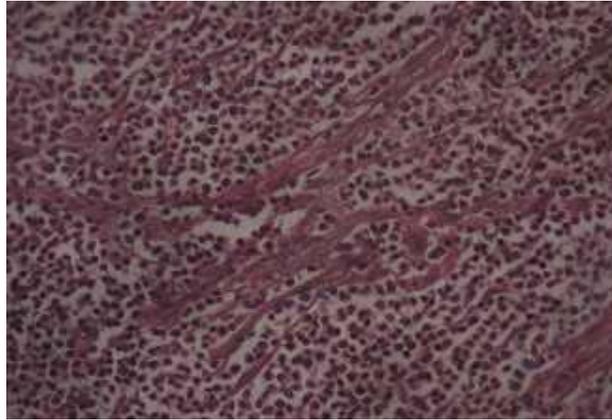


Fig. 3: Section of skin showing dense variable sized proliferation cells with round to oval nuclei (H & E x 200 X)

In the present investigation, age of the affected dogs was 1.6 year and 2 year. Similar to our observation, Goldschmidt and Hendrick, (2002) were of the opinion that the cutaneous histiocytoma were generally seen in dogs below four year of age. The growths were observed on elbow and knee joint. However, some authors have suggested that the tumor preferably arises on the head or pinna (Goldschmidt and Hendrick, 2002) or head, neck and foot (Baba and Toi, 2007). The solitary growths in cutaneous histiocytoma observed in the present investigations have been reported earlier (Goldschmidt and Hendrick, 2002). Baba and Toi (2007) were of the opinion that the growths of cutaneous histiocytomas were generally single and almost never multiple and tend to regress automatically. The histological features of cutaneous histiocytoma observed in the present investigation were similar to those described earlier (Goldschmidt and Hendrick, 2002; Baba and Toi, 2007; Reddy *et al.*, 2009; Roshini *et al.* 2013 and Palanivelu *et al.*, 2013).

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