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# Cutaneous Histiocytoma in a Dog Carrying Calcinosis Circumscripta of the Tongue

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## Introduction

This benign canine histiocytoma was the most common single tumor type, followed lipoma, adenoma, soft tissue sarcoma, mast cell tumor and lymphosarcoma [2]. Canine cutaneous histiocytoma (CCH) most commonly occur as solitary lesions, head and pinnae are prefermential sites, that undergo spontaneous regression. The histologic appearance varies greatly, depending on the age of the lesion and the degree of necrosis and secondary inflammation. The age-specific incidence rate for CCH drops precipitously after 3 years, although histiocytomas occur in dogs of all ages [5]. Their etiology and pathogenesis are unknown. This case reports the gross and histopathological findings of canine cutaneous histiocytoma of observed in a young dog with localized calcification of lingual muscle.

## Materials and Methods

A 10-month old male Shitzu was presented with a erythematous nodule in the auricula. The animal had no significant history of disease and no clinical sign except calcification of the lingual muscle. Biopsy was taken from the auricula for hisopathological observation. Tissue was fixed in 10% neutral buffered formalin solution for light microscopy, processed routinely and embedded in paraffin. Sections were cut in to 4 ㎛ in thickness and stained with hematoxylin and eosin (H&E).

## Results

Grossly, the alopecic erythematous auricular nodule (about 7mm diameter) was circumscribed without discharge or pus. Microscopically, tumor cells were represented by a moderate amount of eosinophilic and light staining cytoplasm, pleomorphic nuclei with bean-shaped to oval nuclei and densely packed pleomorphic round cells arranged cords and sheets. There is little or no stroma and adnexal structrues are obliterated. Nuclear chromatin is finely granular and low grade of mitotic figures are identified at high power field.

## Discussion

CCH is most common, benign, spontaneous regressing Langerhans cells (LCs) tumor of the dog as solitary, less commonly, multiple, hairless, dome-shaped cutaneous tumors, which rarely may extend beyond the skin to local lymphnode [3,5]. CCH might represent a proliferative dermal disorder due to a yet unknown stimulus inducing dermal invasion and local proliferation of bone marrow-derived macrohages, accompanied by the development of functional characteristics of LCs within the dermis and epidermis [5]. Clinically, immunosuppressive therapy such as cyclosporine A or leflunomide effects on canine reactive histiocytosis [1]. Therefore, immune-dysregulatory mechanism are likely to be involved.

## References

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