

Calcinosis Circumscripta on Lingual Muscles and Dermis in a Dog

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Introduction

Calcinosis circumscripta and nutritional myopathy are rare diseases, but have been reported naturally and experimentally in dogs and cats respectively [1-3]. On rare occasions, each of them also occurs in the tongue [1, 4]. Present report describes the gross, serological and histopathological findings of calcinosis circumscripta on lingual muscle and dermis in a dog.

Materials and Methods

Biopsy was taken from the tongue for histopathology. Blood was analyzed by an analyst. Tissue was fixed immediately in 10% neutral buffered formalin for light microscopy and stained with hematoxylin and eosin (H&E).

Results

Grossly, two whitish prominences with diameters of 3 to 4 mm were found on the underside of the tongue. In serological examinations, most of serum enzymes and mineral contents were normal. Microscopically, in ulcerative epidermis, deposition of dense, amorphous granular basophilic calcium salts was separated by thin fibrous connective tissue containing mild inflammation. Many fascicles were characterized by replacement of degenerating myofibers with calcification.

Discussion

Calcinosis circumscripta, in clinical, appears as a single raised nodular firm to fluctuant mass surrounded by bands of connective tissue and located in the dermis and subcutis [5].

In this report, we described gross, serological and microscopical finding about calcinosis circumscripta on the lingual muscles and dermis in a dog, suggesting that

these findings in tongue were compatible with vitamin E deficiency and idiopathic calcinosis. There are no documented instances of calcium circumscripta on the lingual muscles and dermis in dog. Therefore, this case is also valuable information to veterinary practitioners likely to encounter cases of calcium deposition in dogs.

References

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