A TONGUE OSTEOLIPOMA IN A HOWLER MONKEY (ALOUATTA PALLIATA)

Alexis Berrocal¹, Fernando Alegre² 1 Histopatovet, (www.histopatovet.com) A.P. 904-3000-Heredia, Costa Rica. 2 Jaguar Rescue Center Foundation, Playa Chiquita, Limón, Costa Rica.

INTRODUCTION:

Lipomas are very common benign tumors located in any part of the body where fat tissue is normally present. In veterinary and human medicine several variants of lipomas have been described, depending on the type of tissue present, among them: fibrolipoma, angiolipoma, myxolipoma and chondrolipoma. Osteolipomas are a less frequent subtype that contains mature bone and adipose tissue, reported predominately in humans. Now, the first case involving the tongue in a Howler monkey is





presented.

RESULTS: A - Clinical findings:

A 2-month-old Howler monkey (*Alouatta palliata*) was found orphaned in the wild and raised in a rescue center for 5 months until he died from a digestive problem.

B- Pathological findings:

The veterinarian at the rescue center performed the necropsy. Samples of liver, lung, stomach, kidney and the tongue with two nodules of 3mm and 4mm in the dorsal base were sent. See fig.1. Tissues were processed for histopathological analysis and stained with H&E and Masson trichrome.





Figuere2. It shows the different histological wall components. (A) There is cartilage differentiation with bone formation. (B and D) It shows the part of the wall composed by osteoid tissue (C) There is trabecular bone tissue with bone marrow formation.

Figuere1. (A) The tongue showing two white nodules (arrows) one is near the epiglottis. (B and C) A long section in the middle of the nodule (upper) including normal tongue tissue was made. In both sections the wall component as well as the interior cavity adipocytes are seen. H-E. and Masson trichrome stains respectively.

Histopathology:

The tongue showed a circumscribed mass surrounded by collagenous tissue and pre-existing smooth muscular fibers. It had a thick wall composed primary of trabecular bone with bone marrow and cartilage differentiation. The rest of the mass was formed by mature adipocytes. See fig. 2. Based on the histopathological morphology the tongue nodule was diagnosed as an osteolipoma with cartilage and bone marrow formation. The remaining organs examined showed unrelated lesion to the osteolipoma.

In veterinary medicine several subtypes of lipomas have been reported among them fibrolipoma, angiolipoma, myxolipoma and chondrolipoma and two cases of subcutaneous osteolipomas (Ramírez, et al.). In human literature, the osteolipomas are reported less frequently than chondrolipomas and are present in different anatomic sites, including the scapula, neck, skull, etc. It has been described only seven cases in the oral cavity, and to our knowledge this is first case reported in the oral cavity/tongue in veterinary medicine. Because of the age of the animal we believe this tumor was congenital.

REFERENCES

- -Asproni,P, et al. A mammary gland chondrolipoma in the dog. J.Vet. Vet. Diag. Invest. 24(5) 1017-1020,2012
- -Alvimar-Lima de Castro, et al. Osteolipoma of the buccal mucosa. Med Oral Patol Cir Bucal.2010 Mar 1;15(2):e 347-9.
- -Piattelli, A, et al. Osteolipoma of the tongue. Oral Onclolgy 37(2001) 468-470.
- -Ramírez, G.A, et al. Chondro-osteoblastic Metaplasia in canine Benign Cutaneous Lipomas. J. Comp.Patho.2010, Vol. 142,89-93.







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