J. Comp. Path. 2015, Vol. 152, 274–277

Available online at www.sciencedirect.com

ScienceDirect

ELSEVIER

www.elsevier.com/locate/jcpa

DISEASE IN WILDLIFE OR EXOTIC SPECIES

Angiofibroma in a Cockatiel (*Nymphicus hollandicus*)

G. A. Doss*, J. L. Miller†, H. Steinberg† and C. Mans*

** Department of Surgical Sciences and † Department of Pathobiological Sciences, University of Wisconsin–Madison School of Veterinary Medicine, 2015 Linden Drive, Madison, WI, USA*

Summary

Human angiofibromas are rare and arise typically in the nasopharynx. In veterinary medicine they have only been described in the dog. Microscopically, angiofibromas consist of irregular groups of blood vessels within a stroma of connective tissue, with oedema and secondary inflammation often present. A cockatiel (*Nymphicus hollandicus*) was presented with an oral mass that consisted of aggregates of blood vessels surrounded by a connective tissue stroma, with the presence of oedema and secondary inflammation. Tumours of the oral cavity are uncommon in birds and to the authors' knowledge this is the first case of avian angiofibroma.

© 2015 Elsevier Ltd. All rights reserved.

Keywords: angiofibroma; cockatiel; oral mass; psittacine

Angiofibromas are rare, benign tumours comprised of aggregates of abnormal blood vessels surrounded by connective tissue stroma (Burgess *et al.*, 2011). In man and dogs they are found within the nasal cavity or nasopharynx and are locally invasive, causing adjacent tissue damage (Glad *et al.*, 2007; Burgess *et al.*, 2011; Boghani *et al.*, 2013; Khoueir *et al.*, 2014). The expansile growth of angiofibromas can result in bone destruction and sinus or cranial vault invasion, resulting in a variety of clinical manifestations (Burgess *et al.*, 2011; Boghani *et al.*, 2013; Khoueir *et al.*, 2014). The most commonly reported clinical signs, however, are similar in dogs and man and include nasal occlusion, chronic nasal discharge and intermittent epistaxis (Glad *et al.*, 2007; Burgess *et al.*, 2011; Boghani *et al.*, 2013; Khoueir *et al.*, 2014).

An 11-year-old female cockatiel (*Nymphicus hollandicus*) was presented to the School of Veterinary Medicine, University of Wisconsin, Wisconsin, for evaluation of a mass adjacent to the left oral commissure (Fig. 1). The owner mentioned that the mass (3 mm diameter) had appeared several days prior to presentation, but the bird did not seem bothered by it. On examination the mass was moveable, round, pale pink and attached to the left commissure of the beak by a small stalk. Further diagnostic workup was declined on the initial visit and the bird was represented 33 days later for surgical removal. During this period the mass had doubled in size and changed in colour from pale pink to dark purple (Fig. 2). The bird had also begun to scratch at the mass and rub it on the side of its enclosure. Except for the mass, the bird was clinically normal on both visits and was still able to eat and drink normally.

The cockatiel was sedated with butorphanol and midazolam given by intramuscular (IM) injection and the mass was removed surgically by first ligating the stalk with non-absorbable suture then transecting it with electrocautery. Haemorrhage was not observed during the procedure. The sedation was partially reversed with flumazenil (IM) and recovery was uneventful. The mass was submitted in 10% neutral buffered formalin for routine histopathological examination.

After formalin fixation, the mass measured 6 × 6 × 4 mm and was dark red to brown in colour. A slight depression was present centrally on one side. On cut surface, approximately 40% of the tissue was white and associated eccentrically with the

Correspondence to: G. A. Doss (e-mail: gdoss@wisc.edu).

0021-9975/$ - see front matter
http://dx.doi.org/10.1016/j.jcpa.2014.12.015

© 2015 Elsevier Ltd. All rights reserved.

Fig. 1. Oral cavity, cockatiel. Pedunculated, moveable, round, pale pink oral mass protruding from the left commissure of the beak at initial presentation.

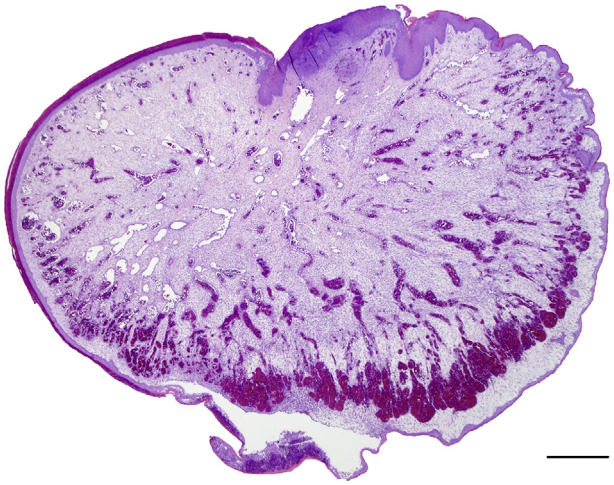

Fig. 3. Angiofibroma, oral cavity mass, cockatiel. Keratinizing stratified squamous epithelium surrounds an unencapsulated, well-delineated mass composed of clusters of numerous congested blood vessels separated by oedematous fibrous stroma. HE. Bar, 1 mm.

central depression, while the remainder of the mass was dark brown. Orthogonal sections of the mass were taken and all pieces were submitted for routine processing and embedding in paraffin wax. Sections (4–5 μm) were stained with haematoxylin and eosin (HE).

Microscopically, keratinizing stratified squamous epithelium surrounded an unencapsulated, well-delineated mass composed of clusters of numerous congested blood vessels lined by bland endothelial cells (Fig. 3). These vascular aggregates were separated by streams or haphazardly arranged spindle cells, as well as oedema and numerous heterophils (Fig. 4). The spindle cells had indistinct borders, scant eosinophilic cytoplasm and elongate nuclei with finely stippled chromatin and a single nucleolus. Mitotic figures were not present in either of the mesenchymal populations and anisocytosis and anisokaryosis were minimal. Multifocally, increased numbers of heterophils were adjacent to the epithelium, with some infiltrating and aggregating within

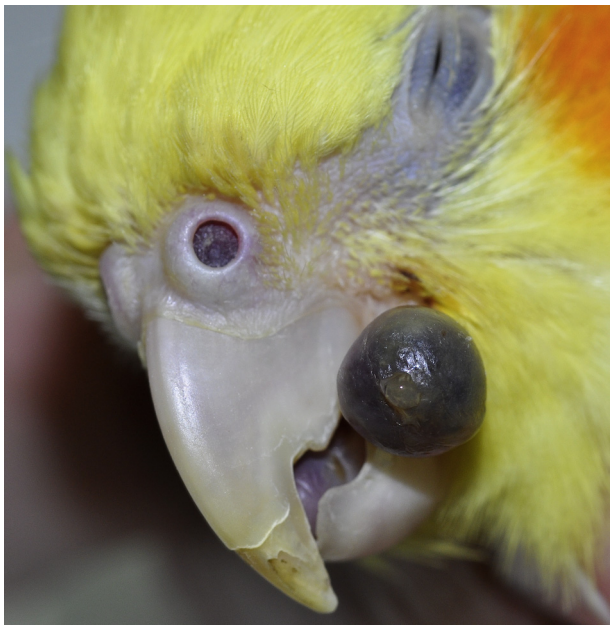

Fig. 2. Oral cavity, cockatiel. Same oral cavity mass 33 days after initial presentation that had doubled in size and become dark purple.

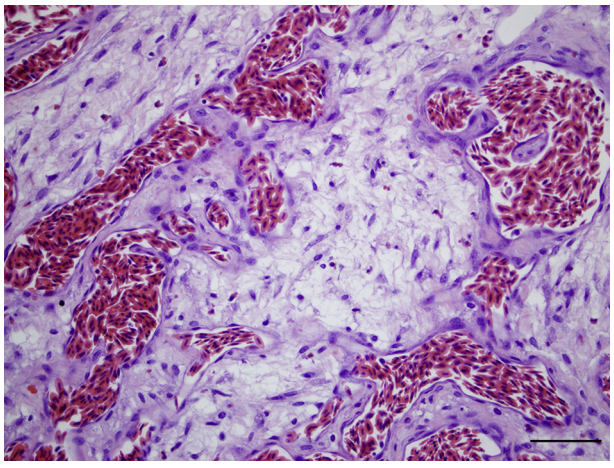

Fig. 4. Angiofibroma, oral cavity mass, cockatiel. Vascular aggregates are lined by bland endothelial cells and separated by streams or haphazardly arranged spindle cells, as well as oedema and numerous heterophils. HE. Bar, 60 μm.

Download English Version:

https://daneshyari.com/en/article/2437188

Download Persian Version:

https://daneshyari.com/article/2437188

Daneshyari.com