FELINE ORBITAL PSEUDOTUMOR: A MORPHOLOGIC REVIEW OF 14 CASES

C.M. Bell, C.S. Schobert, R.R. Dubielzig

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ACVP Annual Meeting
San Antonio, TX
Sunday Nov. 16, 2008
Feline Restrictive Orbital Sarcoma
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Background

• Named based on similarity to an idiopathic inflammatory condition in humans with orbital fibrosis and lymphoplasmacytic inflammation

• Reports in cats
  – JAVMA 2000—Case report (van der Woerdt, Miller and Bartick)
  – Veterinary Ophthalmology 2006—Series of 7 cases (Billson, Miller-Michau, Mould & Davidson)
Purpose

• Highlight clinical and diagnostic features
• Demonstrate features of a malignant neoplasm
• Propose a change in nomenclature:

Feline Restrictive Orbital Sarcoma (FROS)
FROS: Case definition

- Spindle cell proliferation in the orbit, eyelids and adjacent skin
- Severely restricted mobility of eyelids and/or globe within the orbit
- Lack of an obvious mass lesion
- Progressive disease despite treatment
  +/− local invasion to affect contralateral eye and/or oral cavity
Signalment—14 cases of FROS

• Breed:
  – 9 DSH
  – 3 DLH
  – 1 Maine Coon
  – 1 unknown

• Gender
  – MN = 5       FS = 9

• Age
  – Mean = 10.5 years, Median = 10 years
  – Range = 4 - 16 years

• Unilateral = 13       Bilateral = 1

• Oral lesions = 1
Clinical Characteristics

- Restricted mobility of globe and eyelids
- Thickened and distorted eyelids
- Profound corneal disease
Clinical Characteristics

- Thickening +/- ulceration of lips
- Proliferative gingival lesions (neoplastic?)
Initial Clinical Observations

- Unresponsive to treatment*: 10 yes, 0 no
- Corneal disease: 11 yes, 0 no
- Mass lesion: 2 yes, 9 no
- Restricted mobility: 10 yes, 1 no
- Decreased retropulsion: 10 yes, 1 no
- Thick immobile lids: 10 yes, 1 no
• Local Extension to adjacent tissues
• Thickening and effacement along fascial planes
• Severe corneal disease
• Dense, fibrous orbital tissues
• Globe spared
Sclera
Neoplastic proliferation
Second orbit from necropsy specimen

Tooth

Orbit
• Spindle cells in irregular short bundles with collagenous matrix
• Bland nuclear profile
• Mitotic activity virtually absent
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Clinical Progression & Survival

• 9 of 10 cases with adequate follow-up had spread to the contralateral eye and/or oral cavity/lips

• All cats (5) that were confirmed deceased were euthanized due to progressive disease

• Of 3 cats currently living, 2 have signs of progressive disease
Feline Restrictive Orbital Sarcoma: Summary

• Behavior is locally invasive and severely restricts the mobility of globe, eyelids and lips
• Morphology suggests an infiltrative (myofibro)sarcoma, seldom forms a mass lesion, lacks cellular atypia
• Diagnosis requires histopathology (preferably of affected skin) plus clinical picture
• Distribution and extent in the oral cavity and elsewhere in the head is under investigation
Thank You

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