Feline Conjunctival Melanoma: Histopathological Characteristics and Clinical Outcomes

CS Schobert, RR Dubielzig
Dept of Pathobiological Sciences, School of Veterinary Medicine University of Wisconsin, Madison WI

Purpose: Conjunctival melanoma is a rare tumor in cats, with scant literature reports (3,4). We report on the morphology and clinical features of 11 cases. Also reported are results on the behavior and clinical outcome of this neoplasm.

Methods: 24 cases of feline conjunctival melanoma were selected from the COPLOW collection, which includes almost 3000 neoplastic specimens in cats. The authors examined H & E sections from each case and tabulated parameters such as location of the tumor, extent of pigmentation, cell shape, presence of giant cells and mitotic index. Surveys were sent to referring ophthalmologists to obtain further information about each case such as recurrence, metastasis and survival time after diagnosis. Completed data sets were tabulated for 11 cases out of the original 24 and these cases make up the focus of this study.

RESULTS:
Age: range 2 to 15 years, mean of 11
Gender: 7 neutered males, 4 spayed females

Gross appearance and distribution:
6 of 11 on bulbar conjunctiva (54%)
2 of 11 on third eyelid (18%)

Histologic appearance:
6 tumors pigmented, 5 amelanotic
8 tumors consisted of round cell only
6 of the 8 tumors contained giant cells
mitotic figures per HPF ranged from 0 to 40, mean of 7.7

Clinical Outcomes:
6 cats had died by the time of the survey (55%):
-1 showed metastasis, 2 had recurrence
-5 were round cell tumors, 1 was a mix of round and spindle
-3 cases contained giant cells
-Survival time post-diagnosis: range 0.5 to 15 months, mean 6 months

5 cats alive at time of survey:
-1 with metastasis, 1 with recurrence (same cat)
-3 round cell, 2 spindle(round, all 5 contained giant cells
-follow-up time post- diagnosis at time of survey: range 1 to 36 months, mean 6 months

CONCLUSIONS:
1. Location: Bulbar in cat, third eyelid in dog
2. Histologic: Round cell with giant cells predominate
3. Clinical significance
   Higher mortality rate in cats than dogs (55% vs 5%)
   (see references 1 and 2 for canine data cited above)

References: