Primary Tumors of the Canine Conjunctiva, Eyelids and Orbit

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Richard R Dubielzig
Anatomic Distribution of Canine Primary Ocular Neoplasia
(n = 6110)

- Globe: 3225 (53%)
- Conjunctiva: 1192 (19%)
- Eyelid: 1408 (23%)
- Orbit: 288 (6%)
Tumors of the conjunctiva = 1192 of 6110 total neoplasms, ~ 20%
Conjunctival Melanoma

- 204 cases
- Most are malignant by morphologic criteria
- Most recur elsewhere on the conjunctiva when removed
- They are less likely to metastasize than recur
- Those on the palpebral conjunctiva are more likely to metastasize
Conjunctival Melanoma
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Intraepithelial “Pagetoid” spread
Canine Conjunctival Squamous Papilloma

- 148 cases in the COPLOW database
  - 20 Golden Retriever
  - 19 Mixed breed
  - 11 Shih Tzu
  - 9 Labrador Retriever

- Characterized by pointed fronds of epithelium
- No underlying inflammation or neoplasia
- These are seldom correctly diagnosed clinically
Canine Conjunctival Reactive Papilloma

- 358 cases in the COPLOW database
  - 43 Labrador Retriever
  - 43 Golden Retriever
  - 28 Cocker Spaniel
  - 20 Shih Tzu
- Most often associated with tumors or inflammation, hence reactive
Canine Viral Papillomas

- 65 cases in the COPLOW database
  - Mixed breed 12
  - Pugs 4
- Young dogs predominate
  - 40/65 less than 3 years old
  - Can be as old as 14 years
- Can be conjunctival, corneal or eyelid

Koilocytes
Canine Conjunctival Hemangioma and Hemangiosarcoma

• 195 cases in the COPLOW database
  • 24 Mixed breed
  • 22 Boxer
  • 18 Australian Shepherd
  • 15 Basset Hound
  • 14 Border Collies
• Located either in the temporal bulbar or at the tip of the nictitans
• Benign and malignant determined by standard criteria
• Non-pigmented conjunctiva
• Suspect UV-light exposure is a risk factor
Canine Conjunctival Hemangioma and Hemangiosarcoma
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Canine Conjunctival Hemangioma and Hemangiosarcoma

exposure to UV light

- Exposure to UV light from the sun
- Non-pigmented Conjunctiva
- Out-of-doors dogs
Tumors of the eyelid = 1408 of 6110 neoplasms, or 23%
Tumors of the Meibomian Gland

• 1207 cases in the COPLOW database
  • 233 Mixed breed
  • 222 Labrador Retriever
  • 91 Golden Retriever
  • 66 Cocker Spaniel
  • 47 Shih Tzu
Tumors of the Meibomian Gland

Adenoma: 648 cases

Epithelioma: 576 cases
Tumors of the Meibomian Gland
Lipogranuloma
Eyelid Melanocytic Tumors

- 39 Cases in the COPLOW database
  - 7 Mixed breed
  - 6 Vizsla
  - 4 Golden Retriever
  - 3 Yorkshire Terrier
  - 3 Doberman (White)
Mast Cell Tumors

- 142 Mast Cell Tumors in the COPLOW database
  - 61 cases are conjunctival
    - 15 Mixed breed
    - 13 Labrador Retriever
    - 6 Golden Retriever
    - 3 Basset Hound
    - 3 German Shepherd
- Conjunctival tumors have a better prognosis than expected
- Grading systems are unproven in the conjunctiva
Conjunctival Lymphoma

• 30 cases in the COPLOW database
  • 5 Mixed breed
  • 6 Golden Retriever
  • 5 Labrador Retriever
  • 3 Boxer
• 9 cases of epitheliotrophic T-cell lymphoma
• 18 left eye and 7 right eye

CD3
Eyelid Histiocytoma

- 59 cases in the COPLOW database
  - 42/58 less than 6 years-old
- Breeds
  - 8 Mixed breed
  - 8 Labrador Retriever
  - 6 Boxer
  - 4 Bichon Frise
  - 0 Golden Retriever???
Eyelid/Conjunctival Plasmacytoma

- 20 cases of plasmacytoma in the COPLOW database
  - 4 Mixed breed
  - 2 each Golden, Cocker, Shih Tzu, & Yorkie
- 6 eyelid skin, 5 lid margin and 9 conjunctival

Lid Margin IgG
Canine Tumors of the Orbit (n = 285)

Tumors of the orbit = 285 of 6110 neoplasms, ~ 5%
Canine Orbital Meningioma

- 123 cases in the COPLOW database
  - 27 Mixed breed
  - 10 Labrador Retriever
  - 9 Boxer
  - 7 Chihuahua
  - 6 Poodle
  - 4 Scottish Terrier

- The tumor surrounds the nerve in a conical manner
- Slow growing, eventually grows into cavlarium
- Metaplastic bone, cartilage or myxoid tissue
- 66 left eye vs 44 right eye
- 62 males vs 56 females
Canine Orbital Meningioma
Canine Orbital Meningioma
Canine Orbital Lobular Adenoma

- 47 cases in the COPLOW database
  12 Labrador Retriever
- 5 dogs with bilateral disease
- Most cases recur in one to two years because it is difficult to remove

Canine Orbital Lobular Adenoma
Canine Orbital Lobular Adenoma
Clinical Presentation

• Swollen eye lids..........................5 cases
• Protrusion of the nictitans..........3 cases
• Retrobulbar masses...................2 cases
• Exophthalmia............................5 cases
• Resistance to retropulsion.........2 cases
• Strabismus...............................1 case
10/13 cases with follow-up had at least one recurrence

- Case 1 ..................240 days
- Case 3 ..................635d & 1300d (bilateral)
- Case 5 ..................90d
- Case 6 ..................365d & 515d & 995d (bilateral)
- Case 7 ..................600d
- Case 8 ..................Multiple (unknown periods)
- Case 10 .................660d
- Case 13 ..................370d
- Case 14 ..................315d
- Case 15 ..................210d & 565d
- Cases 2, 4, & 9 euthanized prior to recurrence
- Cases 11 & 12 lost to follow-up