Corneal squamous cell carcinoma in dogs with a history of chronic keratitis

Dick Dubielzig
Charles Schobert
Jennifer Dreyfus

C.O.P.L.O.W.
Wisconsin
Canine Squamous Cell Carcinoma

• 97 cases of canine SCC in the COPLOW collection out of a total of 6341 tumors in dogs

• 32 cases of Corneal SCC (25 of which are included in this report)
Corneal Squamous Cell Carcinomas diagnosed at COPLLOW
Clinical Appearance of Corneal SCC
Breeds affected (N=25)

- Pug … 8 cases
- Bulldog … 5 cases
- Boxer … 2 cases
- Shih-tzu … 2 cases
- Greyhound … 2 cases
- Pekinese … 2 cases
- Border Collie … 2 cases
- Other … 7 cases
Risk Factors

• 21 of 21 had superficial chronic corneal inflammatory disease most often diagnosed as keratoconjunctivitis sicca

• Treatment information
  – Cyclosporin alone … 10 cases
  – Tacrolimus alone … 4 cases
  – Combination of both drugs … 6 cases
  – Other drugs or unknown … 5 cases
Morphology

Superficial central corneal malignant transformation
Morphology

Superficial keratectomy is adequate treatment in most cases.
Morphology
Follow-up (N=23)

- Follow-up interval 5 days to 31 months
- Only one dog had recurrent disease because of dirty deep margins
Conclusions
Canine Corneal Squamous Cell Carcinoma

- The number of submissions is increasing
- Previous superficial inflammation is a strong risk factor
- The Pug and Bulldog are over-represented
- Relationship to cyclosporin &/or tacrolimus
- The disease remains superficial and is treatable with keratectomy
Thanks