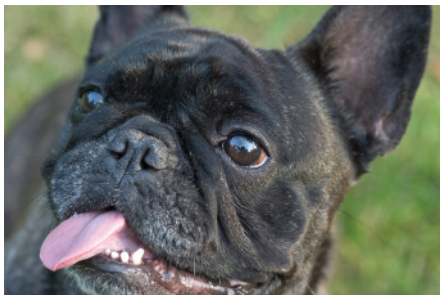
FOCUS Canine Eyelid Tumors

Granular cell tumors (GCTs) are rare, solitary, slowly growing benign tumors found in older dogs and have reportedly appeared on the tongue, ear, lip, palate, meninges, cerebral cortex, heart, lymph node, and skin. Clinical and pathologic features were analyzed in GCTs from the medial canthal eyelid of 8 dogs, ranging in age from 5–12 years (mean, 9.2 years). Presentations included swollen hyperemic eyelids (4/8 dogs), ulcerated skin overlying the mass (2/8), and red conjunctiva (7/8). All had firm masses extending from the palpebral conjunctiva to the eyelid margin at the medial canthus. Seven cases had follow-up data available; recurrence after mass excision was not seen.

Tumor histology demonstrates a highly collagenous matrix. Cells contain granular cytoplasm because of a lysosome accumulation and was positive on periodic Acid-



Schiff stain because of lysosome prevalence. Distinctive cytopathologic features allow for diagnosis on fine-needle aspirate cytology, but histopathology is the diagnostic standard. In dogs, GCTs should be a differential for tumors of the medial canthus. With proper excision, prognosis is excellent; recurrences have not been seen in humans or dogs.

Commentary

A consistent feature of the canine eyelid tumor is its medial canthal location. Although excision of this benign mass is reportedly curative, the tumor's proximity to the nasolacrimal puncta and canaliculi must be considered when formulating a surgical plan. The novice surgeon should consider referral to optimize preservation of the tear drainage system.

The eosinophilic granularity of the tumor cells' cytoplasm is attributed to an accumulation of lysosomes. This feature is sufficiently distinctive for a cytologic diagnosis of a fine-needle aspirate and is distinguishable from metachromatic cytoplasmic granules (eg, those found in mast cell tumors).—*Mary B. Glaze, DVM, MS, DACVO*

Source

Canine eyelid granular cell tumor: A report of 8 cases. Lu JE, Dubielzig R. *VET OPHTHALMOL* 15:406-410, 2012.

Allergens in Intradermal Tests

Intradermal skin tests (IDT) and/or serum allergy tests differentiate atopic-like dermatitis from atopic dermatitis, identify allergens to avoid, and are used for immunotherapy formulation. In humans, cross reactivity and cosensitization is well recognized, but it remains unclear if this occurs in dogs. In this study, IDT results from 651 dogs meeting the criteria for atopic dermatitis were evaluated. All dogs were tested with the same 53 allergens including dust or storage mites, epidermis, insect, tree, weed and grass pollen, and mold. Results revealed that most allergens within each group were significantly associated. The exceptions were cotton, cockroach, red clover, *Penicillium* spp, and grain smut. Excluding red clover and cotton, 94% of the tree, weed, and grass pollen allergens were statistically significant.

Commentary

This study emphasized that there is documented cross reactivity among dust and storage mites, weeds, grasses, and mold allergens. Although more work is needed, this can beneficially effect allergen selection for testing and immunotherapy formulations, potentially allowing for fewer allergens for allergy testing and/or for compounding allergen-specific immunotherapy. Intensely allergic dogs often have strong reactions to all of the allergens in a group, and trying to determine which is important is nearly impossible. Of interest, red clover did not cross-react with the other allergens; possible explanations include the fact that red clover is a legume and there were no other legumes in the test battery, that it simply has no related antigenicity between it and the other allergens, or the concentration used for IDT causes an irritant, nonallergen-specific reaction, explaining why positive reactions are so common.—*Karen A. Moriello, DVM, DACVD*

Source

Cross-reaction and co-sensitization among related and unrelated allergens in canine intradermal tests. Buckley L, Schmidt V, McEwan N, Nuttall T. *VET DERMATOL* 24:422-e92, 2013.

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