Conjunctival swelling and intermittent vomiting in a dog

A Labrador Retriever presented with a sudden onset of a pruritic swelling of the left upper conjunctiva and eyelid, and intermittent vomiting of bile-stained fluid. Physical examination was otherwise unremarkable. In this case report we will discuss main differential diagnoses for ocular tumours and work-up, prognosis and therapy for conjunctival mast cell tumours. Details of clinical staging, treatment and clinical follow-up will be given together with a brief update on clinical management of canine mast cell tumours.

Key words: conjunctiva, mast cell tumour, vomiting, dog, vinblastine

Clinical Presentation

A 7 year-old female, entire, 34.5 kg, yellow Labrador Retriever presented to the veterinary surgeon with sudden onset of a pruritic swelling of the left upper conjunctiva and eyelid and intermittent vomiting of bile-stained fluid. The dog was regularly vaccinated and wormed.

General physical examination was unremarkable with rectal temperature at 38.5 °C.

Ocular examination showed a 1.5 x 1.5 cm soft raised mass in the superior left palpebral conjunctiva with palpebral fissure distortion. The inferior and nictitating conjunctiva and ocular surface were normal. The remaining ocular examination (eye retroprolapse, fundic examination, direct/consensual papillary light reflex, palpebral reflex, menace reaction) and right eye were normal. Submandibular lymph nodes were small in size.

Problem List and Differential Diagnosis

Presence of a conjunctival mass and intermittent vomiting were the main two problems based on the initial history and physical examination.

The conjunctival mass may represent a neoplastic (primary or metastatic) or non-neoplastic lesion (subconjunctival fat prolapse, parasitic/inflammatory granuloma, foreign body, cyst, less likely: nodular granulomatous episclerokeratitis or fibrous histiocytoma).

Vomiting may result from primary gastrointestinal diseases involving stomach or small intestine and rarely colon (e.g. such as dietary disturbances, mechanical, inflammatory, neoplastic/paraneoplastic disease, infection) or extra-intestinal diseases (metabolic, neurologic, cardiovascular disease).

Diagnostic Testing

A tissue diagnosis for the conjunctival lesion could be reached by cytological or histological examination. Although cytological examination is not a substitute for histological examination, it can help to distinguish a neoplastic from a non neoplastic lesion and in many cases be sufficient to reach a diagnosis. A cytological sample of the conjunctival mass was obtained by fine needle aspiration and a cytological diagnosis of a mast cell tumour was made (Figure 1).