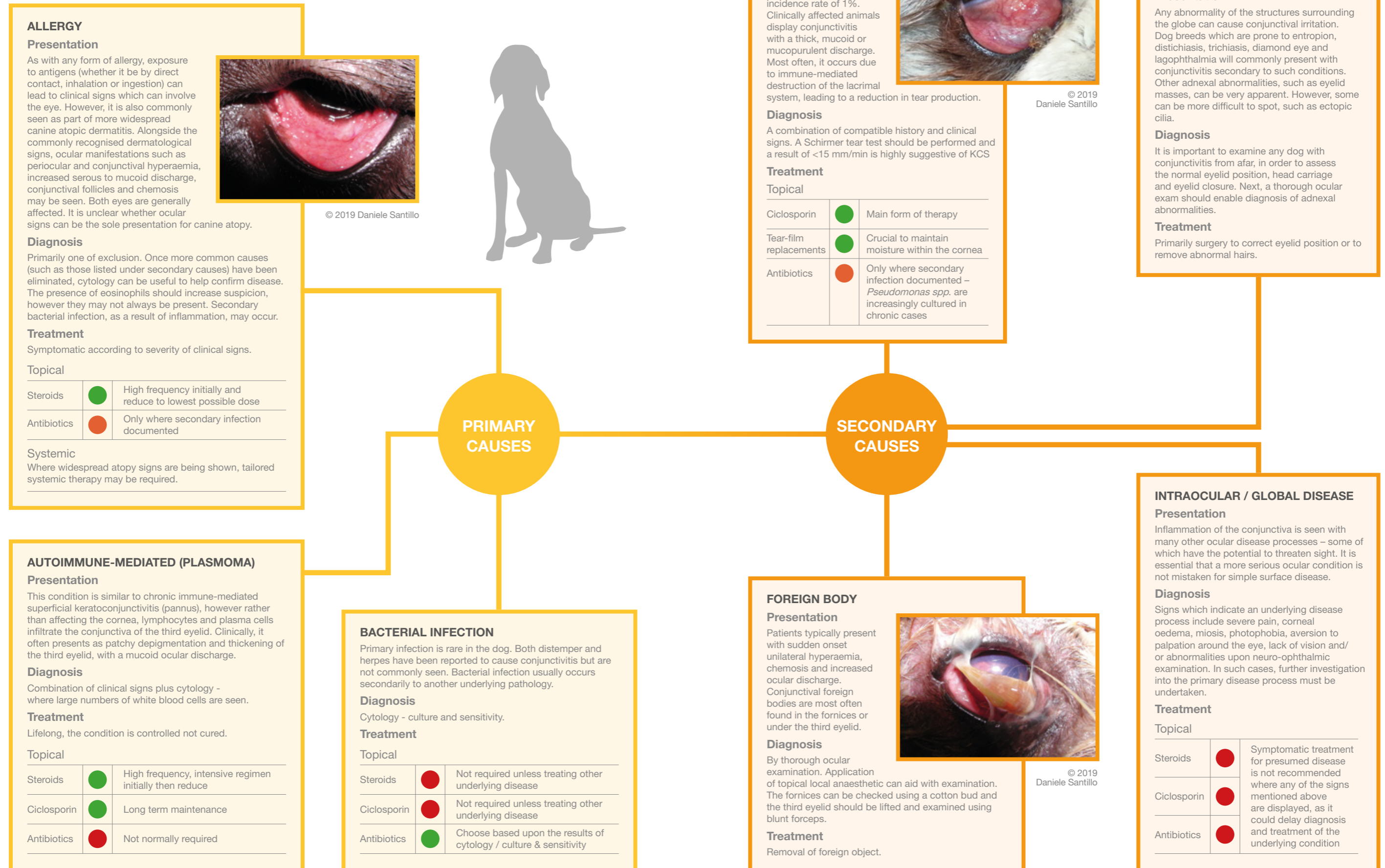


Canine Conjunctivitis

The diagram below details some of the primary and secondary causes of conjunctivitis in dogs, which may be encountered in practice. For further information on other causes, please refer to the further reading. Where you are unsure with regards to any ocular case, consultation with, and/or referral to a veterinary ophthalmologist should be considered.



ALLERGY

Presentation

As with any form of allergy, exposure to antigens (whether it be by direct contact, inhalation or ingestion) can lead to clinical signs which can involve the eye. However, it is also commonly seen as part of more widespread canine atopic dermatitis. Alongside the commonly recognised dermatological signs, ocular manifestations such as periocular and conjunctival hyperaemia, increased serous to mucoid discharge, conjunctival follicles and chemosis may be seen. Both eyes are generally affected. It is unclear whether ocular signs can be the sole presentation for canine atopy.



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Diagnosis

Primarily one of exclusion. Once more common causes (such as those listed under secondary causes) have been eliminated, cytology can be useful to help confirm disease. The presence of eosinophils should increase suspicion, however they may not always be present. Secondary bacterial infection, as a result of inflammation, may occur.

Treatment

Symptomatic according to severity of clinical signs.

Topical

Steroids	●	High frequency initially and reduce to lowest possible dose
Antibiotics	●	Only where secondary infection documented

Systemic

Where widespread atopy signs are being shown, tailored systemic therapy may be required.

PRIMARY CAUSES

AUTOIMMUNE-MEDIATED (PLASMOMA)

Presentation

This condition is similar to chronic immune-mediated superficial keratoconjunctivitis (pannus), however rather than affecting the cornea, lymphocytes and plasma cells infiltrate the conjunctiva of the third eyelid. Clinically, it often presents as patchy depigmentation and thickening of the third eyelid, with a mucoid ocular discharge.

Diagnosis

Combination of clinical signs plus cytology - where large numbers of white blood cells are seen.

Treatment

Lifelong, the condition is controlled not cured.

Topical

Steroids	●	High frequency, intensive regimen initially then reduce
Ciclosporin	●	Long term maintenance
Antibiotics	●	Not normally required

BACTERIAL INFECTION

Primary infection is rare in the dog. Both distemper and herpes have been reported to cause conjunctivitis but are not commonly seen. Bacterial infection usually occurs secondarily to another underlying pathology.

Diagnosis

Cytology - culture and sensitivity.

Treatment

Topical

Steroids	●	Not required unless treating other underlying disease
Ciclosporin	●	Not required unless treating other underlying disease
Antibiotics	●	Choose based upon the results of cytology / culture & sensitivity

KERATOCONJUNCTIVITIS SICCA (KCS)

Presentation

KCS is one of the most common causes of conjunctivitis in dogs, with an estimated incidence rate of 1%. Clinically affected animals display conjunctivitis with a thick, mucoid or mucopurulent discharge. Most often, it occurs due to immune-mediated destruction of the lacrimal system, leading to a reduction in tear production.



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Diagnosis

A combination of compatible history and clinical signs. A Schirmer tear test should be performed and a result of <15 mm/min is highly suggestive of KCS

Treatment

Topical

Ciclosporin	●	Main form of therapy
Tear-film replacements	●	Crucial to maintain moisture within the cornea
Antibiotics	●	Only where secondary infection documented - <i>Pseudomonas spp.</i> are increasingly cultured in chronic cases

SECONDARY CAUSES

FOREIGN BODY

Presentation

Patients typically present with sudden onset unilateral hyperaemia, chemosis and increased ocular discharge. Conjunctival foreign bodies are most often found in the fornices or under the third eyelid.



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Diagnosis

By thorough ocular examination. Application of topical local anaesthetic can aid with examination. The fornices can be checked using a cotton bud and the third eyelid should be lifted and examined using blunt forceps.

Treatment

Removal of foreign object.

ADNEXAL ABNORMALITIES

Presentation

Any abnormality of the structures surrounding the globe can cause conjunctival irritation. Dog breeds which are prone to entropion, distichiasis, trichiasis, diamond eye and lagophthalmia will commonly present with conjunctivitis secondary to such conditions. Other adnexal abnormalities, such as eyelid masses, can be very apparent. However, some can be more difficult to spot, such as ectopic cilia.

Diagnosis

It is important to examine any dog with conjunctivitis from afar, in order to assess the normal eyelid position, head carriage and eyelid closure. Next, a thorough ocular exam should enable diagnosis of adnexal abnormalities.

Treatment

Primarily surgery to correct eyelid position or to remove abnormal hairs.

INTRAOCULAR / GLOBAL DISEASE

Presentation

Inflammation of the conjunctiva is seen with many other ocular disease processes - some of which have the potential to threaten sight. It is essential that a more serious ocular condition is not mistaken for simple surface disease.

Diagnosis

Signs which indicate an underlying disease process include severe pain, corneal oedema, miosis, photophobia, aversion to palpation around the eye, lack of vision and/or abnormalities upon neuro-ophthalmic examination. In such cases, further investigation into the primary disease process must be undertaken.

Treatment

Topical

Steroids	●	Symptomatic treatment for presumed disease is not recommended where any of the signs mentioned above are displayed, as it could delay diagnosis and treatment of the underlying condition
Ciclosporin	●	
Antibiotics	●	