SURGICAL RESOLUTION AFTER MULTIMODAL TREATMENT IN A DOG WITH GRANULOMATOUS NODULAR EPISCLERITIS.

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Introduction

Granulomatous nodular episcleritis(GNE) is a mixed lymphocytic and granulomatous nodular inflammation of the conjunctiva or adjacent sclera[4], rarely described in dogs. Defined as an idiopathic conjunctiva and scleral primary disease, is presumed to be an immune-mediated disorder; although may also be derived from secondary disease[1].Clinically characterized by an elevated, non-painful, single or multiple nodular formations, is common in the temporal limbus and may also affect the conjunctiva, episclera and cornea[2]. In spite of highly suggestive clinical appearance, histopatological analysis is necessary to confirm the diagnosis[4]. Medical therapy consistis of topically and systemically administrations of corticosteroids and immunomodulators[3]. Beta-irradiation,cryotherapy and surgical removal may also be used[4].

Objectives

This paper aims to describe the case of a dog with GNE, submitted to multimodal therapeutic management, culminating in surgical resolution.

Methodology

A 10-year-old Brazilian Mastiff female dog, current on vaccinations and deworming, was consulted, presenting right eye with evidence of a nodular formation of red coloring and epiphora. In the ophthalmological examination, the right eye presented, moderate conjunctival hyperemia, vascularization extending from the conjunctiva to an elevated red colored neoformation, of about 1 cm, located in the region of the temporal bulbar conjunctiva and protruding externally between the eyelids. Lagophthalmia and secondary epiphora were also present. The Schirmer test showed 24mm/min and intraocular pressure a mean value of 16mmHg. Fundoscopy revealed no noticeable changes. The fluorescein test was considered negative and the rose bengal test stained a discrete corneal temporal band. The left eye was physiologically normal. Other diagnostic tests(Hematological and biochemical profile) were unremarkable. A presumptive diagnosis of GNE was considered and a

14 day medical therapy was instituted, based on a topical combination of dexamethasone, neomycin and polymyxinB every 6 hours and cyclosporine1.0% every 12 hours. From 15-30 day post-diagnosis topical dexamethasone associated to cyclosporine was maintained and oral therapy with prednisolone 2mg/kg/day was initiated. Between days 31-45 post-diagnosis, topical cyclosporine was maintained and oral therapy with doxycycline 10mg/kg/day was initiated. On day 46, surgical excision was performed, and from 46-56 days period, topically retinol acetate, methionine and chloramphenicol every 6 hours was started; and doxycycline was maintained. After day 56 onwards, topically 0.2% cyclosporine in continuous use was advised to owners and reassessments every 6 months was scheduled.

Results

In the period of day 0-45, the conjunctival hyperemia and the vascularization of neoformation was reduced. However, no size reduction of neoformation was observed, which kept protruding in between the eyelids, causing lagophthalmia and epiphora. From day 46-56, surgical healing occurred uneventfully. Histopathological examination revealed granulomatous and fibrous inflammatory infiltrate, composed of a mixture of histiocytes, lymphocytes, plasma cells and fibroblasts. Schiff periodic acid staining was negative for fungi. A definitive diagnosis of GNE was achieved and the topical use of cyclosporine was maintained, with no relapse to this date.

Conclusion

The primary etiology of this condition is presumed to be immunomediated. The surgical exeresis was effective when compared to immunosuppressive therapy(topical and systemic) employed in this case for resolution of GNE. Pathological analysis is always recommended for definitive diagnosis.

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