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GLAUCOMA IN POSNER-SCHLOSSMAN SYNDROME: A LITERATURE REVIEW

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Abstract: INTRODUCTION: Posner-Schlossman Syndrome is a unilateral inflammatory disease described in 1948 with great importance in the differential diagnosis of Glaucoma in adults. METHODOLOGY: Data collection research from articles and clinical trials was randomized on the PubMed platform, using the descriptors "glaucoma" and "Posner-Schlossman syndrome". DISCUSSION: This condition is predominantly unilateral and affects young adults with recurrent episodes of chamber inflammation. anterior without formation of synechiae, with mild ocular discomfort and occasional reduction in visual acuity. Treatment ranges from the use of corticosteroids and topical cycloplegics to filtering surgeries. Cytomegalovirus has recently been implicated as a protagonist in the development of the condition, with studies promising results demonstrating the reduction of intraocular pressure with the use of antivirals.
Keywords: Posner-Schlossman Syndrome, Glaucoma.

INTRODUCTION

Researchers Posner and Schlossman published in 1948 a series of nine cases with a characteristic presentation of open-angle glaucoma associated with unilateral increases in intraocular pressure (IOP). This condition was later observed by peers in other parts of the world and was conventionally treated as Posner-Schlossman Syndrome.

Posner-Schlossman Syndrome, also known as glaucomatocyclitic crisis, consists of a rare form of unilateral increased intraocular pressure caused by inflammation. Among the possible etiologies proposed, autoimmunity stands out, as well as allergic and infectious phenomena. Although it is controversial, Cytomegalovirus infection in the anterior chamber is related to this condition in a large proportion of cases, and a good outcome has been observed with treatment using antivirals in selected cases.

METHODOLOGY

It consists of a study carried out through a bibliographical survey with data collection from the aforementioned sources, as well as based on the experience lived by the authors when carrying out a literature review. The study population consisted of men and women regardless of age diagnosed with Posner-Schlossman Syndrome. The search was carried out on the PubMed (National Library of Medicine) portal, with the descriptors "Posner-Schlossman Syndrome" and "glaucoma". The inclusion criteria were case report articles between 2010 and 2023, as well as randomized clinical trials, resulting in 9 articles.

DISCUSSION

Posner-Schlossman Syndrome is characterized by predominantly affecting one of the eyes, being observed mainly in adult males between the second and fifth decades of life. The disease typically manifests itself as recurrent episodes of different intensities, varying from one individual to another.

During the crisis period, the most reported symptom is mild unilateral eye discomfort, followed in some cases by a slight reduction in visual acuity and the appearance of colored halos. Furthermore, in biomicroscopy, heterochromia is observed in some cases, in addition to anisocoria with increased pupillary diameter in the affected eye. This finding differs from the presence of pupillary contraction, which is common during iritis attacks.

When performing gonioscopy in these patients, it is possible to observe the open drainage angle in the four quadrants and the absence of synechiae. Intraocular

pressure remains normal in the unaffected eye, regardless of attacks. In the eye with the disease, the increase expected during glaucomatocyclitic crises often occurs one to two days before the onset of ocular inflammation.

Regarding the proposed treatments, the use of corticosteroids has been shown to be effective in controlling inflammation and can be combined with intraocular pressure reducers, as suggested in the literature. In some cases, however, the disease can present more frequent and intense episodes of glaucomatocyclitic crises, leading to epithelial edema and a consequent reduction in visual acuity, a fact that can lead to filtering surgeries as a way of controlling intraocular pressure.

Studies over the last decade have detected the presence of CMV-DNA in variable proportions of patients with Posner-Schlossman Syndrome. Since then, new research has demonstrated that the use of antivirals, notably Ganciclovir and Valganciclovir, leads to a reduction in inflammation and normalization of IOP in certain patients.

Regarding the differential diagnosis, primary acute glaucoma must be considered in particular and, in more complex cases, other forms of inflation such as Fuchs Heterochromic Iridocyclitis and infectious causes of hypertensive uveitis such as Herpes Simplex Virus (HSV) and Toxoplasmosis.

CONCLUSION

Posner-Schlossman Syndrome, although it initially presents as a self-limited condition, can lead to chronic open-angle glaucoma that is difficult to clinically control and has irreversible consequences for vision. In addition to this, the fact that it is a rare pathology and has a longitudinal diagnosis makes it difficult to monitor and act at the appropriate time. For this reason, it is imperative that the ophthalmologist pays attention to clinical signs and differential diagnoses to propose an effective approach for the patient. The use of hypotensive eye drops, mild cycloplegics and corticosteroids is useful in the inflammatory phases of the disease, and surgical procedures must be reserved for refractory cases. The detection of CMV-DNA and the use of antivirals have shown to be a promising strategy in the treatment of this condition, which can reduce inflammatory episodes and slow the progression of the disease.

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