

## Sarcoidosis panuveitis: A case report



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### ABSTRACT

Sarcoidosis is an idiopathic multisystem granulomatous disease. Its ocular presentations include eyelid and conjunctival nodules and uveitis, accounting for 30 to 50% of its cases. In anterior uveitis, there is local inflammation of the iris and/or ciliary body. It may manifest with mutton fat keratic precipitates, nodules in the trabecular meshwork, and Koeppe and Busacca's nodules. Regarding the intermediate form, there is primary inflammation of the ciliary body, choroid, and peripheral retina, causing vitreous blurring in snowballs and pearl necklaces, and retinal perivasculitis. In posterior, there is primary inflammation of the choroid with multiple peripheral chorioretinal damage, solitary choroidal nodule, and optic disc edema. The diagnosis is made by alterations in imaging tests and high levels of angiotensin-converting enzyme (ACE) and/or serum lysozyme, considering the exclusion of other granulomatous pathologies. This report aims to describe the diagnostic process of sarcoidosis in the face of panuveitis.

**Keywords:** Sarcoidosis, Uveitis, Pan-uveitis.

## 1 INTRODUCTION

Sarcoidosis is an idiopathic multisystem granulomatous disease. Its ocular presentations include eyelid and conjunctival nodules and uveitis, accounting for 30 to 50% of its cases. In anterior uveitis, there is local inflammation of the iris and/or ciliary body. It may manifest with mutton fat keratic precipitates, nodules in the trabecular meshwork, and Koeppe and Busacca's nodules. Regarding the intermediate form, there is primary inflammation of the ciliary body, choroid, and peripheral retina, causing vitreous blurring in snowballs and pearl necklaces, and retinal perivasculitis. In posterior, there is primary inflammation of the choroid with multiple peripheral chorioretinal damage, solitary choroidal nodule, and optic disc edema. The diagnosis is made by alterations in imaging tests and high levels of angiotensin-converting enzyme (ACE) and/or serum lysozyme,



considering the exclusion of other granulomatous pathologies. This report aims to describe the diagnostic process of sarcoidosis in the face of panuveitis.

## 2 METHODS

This is a descriptive study based on a retrospective analysis of the medical records of a patient diagnosed with panuveitis caused by sarcoidosis.

## 3 RESULTS

A 48-year-old brown female patient was admitted to the ophthalmology service for recurrent uveitis and low visual acuity (VA) in the right eye (RE) for 7 months. The patient had a corrected VA of 20/400 in RE and 20/20 in the left eye (LE). On RE biomicroscopy, the patient manifested eyelid nodules, corneal keratic precipitates *in mutton fat*, anterior chamber reaction, iris nodules, and corectopic pupil with posterior iris synechiae; in LE, there were all the above-mentioned occurrences, except iris nodules. There was intraocular hypertension, with pressure of 28 mmHg in RE and 35 mmHg in LE, in addition to vitreitis in RE. The etiology was clarified by the high level of ACE, exclusion of other pathologies and chest tomography showing bilateral diffuse interstitial lesions, mediastinal lymph node enlargement and diffuse subcutaneous nodules. Topical treatment with corticosteroids and anti-glaucomatous drugs was introduced, with improvement of VA to 20/30 in RE and regression of inflammation.

## 4 CONCLUSIONS

The present case highlights the importance of the etiological diagnosis of sarcoidosis for the introduction of immunosuppressive treatment, multidisciplinary follow-up, and improvement of the ocular condition, to prevent long-term visual damage.



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