

# PERIPHERAL RETINAL CHANGES IN A PATIENT WITH SARCOIDOSIS-RELATED UVEITIS



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# PURPOSE

To report a chronic sarcoidosis-related panuveitis associated with perivascular sheathing and complicated with glaucoma and epiretinal membrane

# INTRODUCTION

Sarcoidosis is a multi-system granulomatous inflammatory disease of unknown etiology. Ocular disease is reported in ~12% to 25% of patients, and uveitis is the most common ocular manifestation.

#### **CASE REPORT**

A 42-year-old woman was referred to our department with a history of acute bilateral blurred vision. The patient was undergoing a systemic investigation in Dermatology after presenting diffuse hypopigmented skin lesions associated with painful submandibular lymphadenopathy. A systemic investigation revealed elevated serum angiotensin-converting enzyme (ACE) levels and urinary calcium. A skin tissue biopsy demonstrating non-caseating epithelioid giant cell granuloma consistent with sarcoidosis was identified. The exclusion of differential diagnoses was performed, including tuberculosis and syphilis.

The ophthalmologic examination revealed a best correct visual acuity of 20/20 in both eyes (OU). Anterior segment biomicroscopy revealed fine keratic precipitates and anterior chamber cells reaction 2+/4 OU. Intraocular pressure was 28/15 mmHg.

The fundoscopic examination showed vitreous snowballs and peripheral retinal vascular sheathing (Fig. 1). Noninvasive multimodal imaging was performed. Angiography fluorescein was not performed due to a history of allergy. The patient was treated with oral prednisone therapy at immunosuppressive doses, topical steroids, and antiglaucoma eye drops. During follow-up, there were uveitis relapses during oral corticosteroid tapering. The patient complicated with posterior synechia, glaucoma, and epiretinal membrane (Fig. 2).

# DISCUSSION

The course of uveitis related to sarcoidosis is often bilateral and chronic. Uveitis may be associated with increased intraocular pressure, either due to the ocular inflammation itself or caused by the treatment. The classic perivascular sheathing is associated with a poorer visual prognosis and more frequent relapses. Inflammation can cause epiretinal membranes, leading to retinal tears and detachment. Close patient monitoring is crucial.

# Bibliography

- Standardization of Uveitis Nomenclature (SUN) Working Group. Classification Criteria for Sarcoidosis-Associated Uveitis. Am J Ophthalmol. 2021 Aug;228:220-230
- (2) Giorgiutti S, Jacquot R, El Jammal T, Bert A, Jamilloux Y, Kodjikian L, Sève P. Sarcoidosis-Related Uveitis: A Review. J Clin Med. 2023 Apr 29;12(9):3194.



**Figure 1**. Ultra-wide field fundus photograph (A, B) and ultra-wide field autofluorescence (C, D) showing peripheral retinal changes. Peripheral color photograph exhibits the presence of perivascular sheathing and infiltrates, called "candle wax dripping". (zoomed red square).

# At presentation After 10 months С А D В

Figure 2. (A) Color retinography and macular SD-OCT at presentation (A, B) and after 10 months (C, D) showing the development of epiretinal membrane in both eyes.