OCULAR SARCOIDOSIS CONFIRMED BY PULMONARY BIOPSY: A CASE REPORT

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PURPOSE

To report a case of ocular Sarcoidosis.

METHODS

Case report through analysis of medical records and multimodal exams.

RESULTS

44yo, female with history of ocular hypertension presented with ocular pain and bilateral low visual acuity (VA). Reported ocular history of uveitis of unknown cause and intermittent hypertensive ocular crises 1 year ago. BCVA in OU was 20/25 and IOP 17/28mmHg, respectively. Slit-lamp exam showed bilateral granulomatous keratic precipitates (fig.1) and bilateral iris nodules (fig.2). Fundoscopy revealed vitreous opacities, increased cup/disc ratio and peripheral hyper pigmented spots in OU. The inflammatory process of the eye was observed in UBM (fig.3), angiography (fig.4) and ultrasound. All infectious serology panels were negative, but a high level of ACE was observed. Chest X-ray showed mediastinal and hilar lymph node enlargement and non-calcified pulmonary lymph nodes, which led to a presumed diagnosis of sarcoidosis. The patient was treated with corticosteroids, responded well. Sarcoidosis was confirmed by biopsy in mediatinoscopy. The IOP was controlled with an Ahmed tube implantation. The patient maintains follow-up with ophthalmologist and other medical specialties.

DISCUSSION

Sarcoidosis is a systemic disease characterized by noncaseous granulomas that can affect many organs, including the lungs, skin, and eyes.

Ocular involvement typically presents as bilateral anterior uveitis, with signs such as granulomatous keratic precipitates, iris nodules and synechiae.
Fundoscopic findings may show vitreous opacities, choroidal granulomas, and periphlebitis. The diagnosis is based on clinical evaluation, multimodal imaging, and exclusion of other causes of uveitis, with systemic tests including ACE, lysozyme and chest X-ray. Biopsy confirmation is required.
Ocular Sarcoidosis can be the first sign of disease and may lead to severe complications. The knowledge of the disease allowed to avoid systemic and ocular complications.

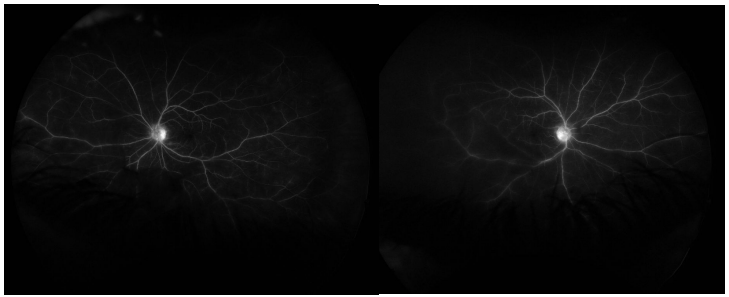

Fig.4 Early phase OU angiography shows hyperfluorescence of the optic disc, peripheral venous leakage and later hyperfluorescence of peripheral lesions

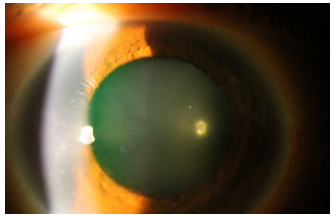

Fig.1 Granulomatous keratic precipitates in the corneal endothelium

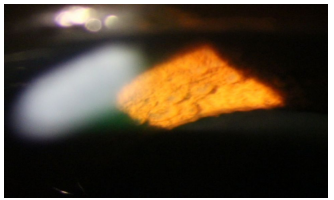

Fig.2 Presence of multiple iris nodules

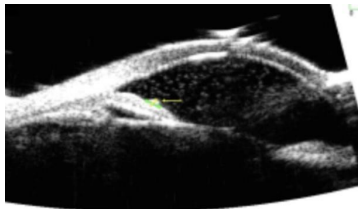

Fig.3 Iris nodules (arrows) and anterior and posterior cellularity.

REFERENCES

- Mahendradas P, Maruyama K, Mizuuchi K, Kawali A, Kitaichi N. Multimodal Imaging in Ocular Sarcoidosis. Ocul Immunol Inflamm. 2020 Nov 16;28(8):1205-1211. doi: 10.1080/09273948.2020.1751210. Epub 2020 May 12. PMID: 32396030.
- Allegri P, Olivari S, Rissotto F, Rissotto R. Sarcoid Uveitis: An Intriguing Challenger. Medicina (Kaunas). 2022 Jul 4;58(7):898. doi: 10.3390/medicina58070898. PMID: 35888617; PMCID: PMC9316395.