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Red flag: Ocular clues to systemic disease

A 23-year-old lady presented with complaints of recurrent painful redness in both eyes (OU). She had severe pain radiating to cheeks which kept her awake at night. Best corrected visual acuity was 6/6, N6 by Snellen chart OU with normal intraocular pressure. On examination, there was diffuse congestion seen temporally in OU, left [Fig. 1b] more than right [Fig. 1a]. There was no evidence of anterior chamber reaction. Fundus was unremarkable in OU.

What is your Next Step?

A. Instill phenylephrine 10% and look for reduction in redness
B. Autoimmune workup including rheumatoid factor, anti-cyclic citrullinated polypeptide (anti-CCP) antibodies, C ANCA and P ANCA
C. Ask for early morning joint stiffness and other systemic history
D. All of the above.

Findings

Phenylephrine 10% administration did not cause blanching of vessels or change in redness. B scan ultrasonogram was normal with no evidence of T-Sign in OU. Optical coherence tomography was also normal in OU. Uveitic workup evidenced raised C-reactive protein and positive rheumatoid factor (RF). Rheumatology opinion was obtained and she was diagnosed with early rheumatoid arthritis with positive anti-cyclic citrullinated polypeptide (anti-CCP) antibody following which the patient was started on oral tofacitinib, a Janus kinase inhibitor, 5 mg twice daily. She was prescribed weekly tapering doses of topical prednisolone acetate 1% with oral indomethacin 25 mg twice daily for pain relief. The patient had complete resolution of scleritis with treatment. She was followed up for a year, during which she remained asymptomatic and did not have any recurrence.

Diagnosis

Diffuse anterior scleritis OU.

Correct answer

D.

Discussion

Rheumatoid arthritis (RA) can have multiple inflammatory ocular manifestations like episcleritis, scleritis, peripheral ulcerative keratitis, and dry eyes. Patients with positive anti-CCP antibody have been shown to have a higher incidence of ocular involvement.[1] Approximately 5% of patients with RA may develop episcleritis, and 2% may develop scleritis.[2] Patients with recurrent or recalcitrant scleritis tend to have persistent circulating antibodies like RF, ANA, and ANCA.[3] It is mandatory to rule out infectious causes before treatment. Early detection and prompt multidisciplinary intervention by ophthalmologist in conjunction with a rheumatologist plays a major role in preventing complications which may be seen in 57% of patients, which includes decreased vision due to keratitis, CME, cataract, glaucoma, and scleral melting.

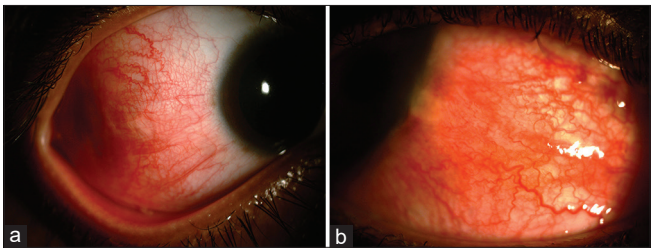

Figure 1: Temporal congestion with dilated scleral vessels in right eye (a) and left eye (b)

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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