

## EPISCLERITIS VS SCLERITIS – A CASE REPORT

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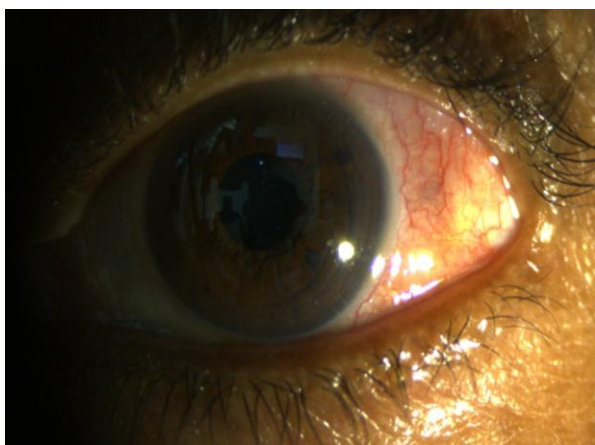
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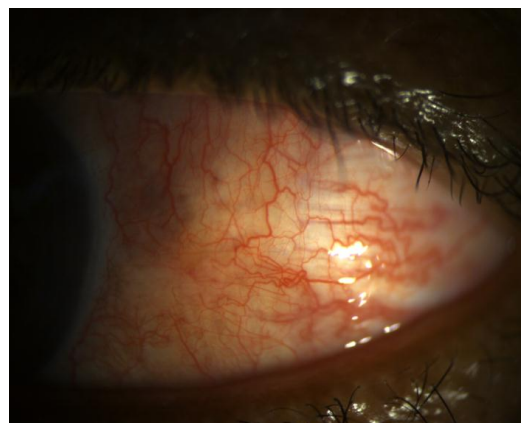
60 Year old female presented on 16-6-2024 with chief complaints of multiple episodes of redness in left eye for past 3 months Each episode lasting 3-4 weeks associated with slight pain with no radiation to brow, forehead or jaws doesn't awaken patient at night there was no history of any discharge, itching, eyelid swelling or matting together of eyelashes, No history of diminution of vision photophobia, painful eye movements, seasonal variation, chronic cough, evening rise of temperature. Patient gave history of multiple episodes of similar illness in the past with no history of any ocular trauma or surgeries in the past she was not a known case of Diabetes Mellitus, Hypertension. She gave history of both leg knee pain for past 10 years diagnosed later as both knee osteoarthritis there was no involvement of any other joints. She was also a known case of psoriasis (now under control). She gave no history of tuberculosis or contact with tuberculosis patients in the past, any other systemic illness in the past and no history of chronic intake of any medications.

On ocular examination the visual acuity of both eyes was 6/6 with both pupils normal size and normal reacting. The intra ocular pressure in right and left eye on Goldmann Applanation Tonometer was 14 and 16 mmHg off drugs. Lids and adnexa of both eyes were within normal limits. Anterior segment of right eye was normal whereas left eye has been shown in figure 1. Posterior segment of both eyes was normal.



**Figure 1: showing temporal redness in left eye.**

On history and ocular examination a differential diagnosis of episcleritis and scleritis was made followed by conjunctivitis and pingueculitis. On doing a Phenylephrine test (5 percent phenyl ephrine was used) the vessels were blanched confirming the diagnosis of episcleritis shown in figure 2.



**Figure 2 – phenyl ephrine test before and after.**



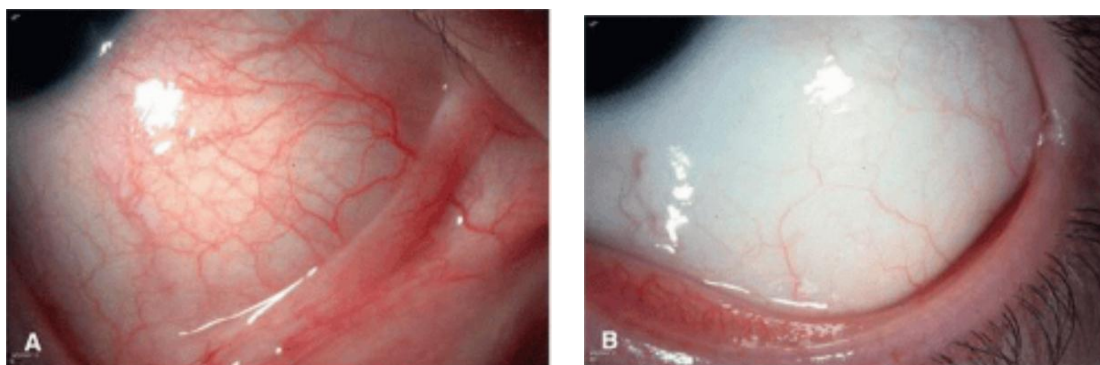
Investigations revealed normal CBC, ESR was 26 (raised) (normal 0-20mm/hr), CRP was normal with

raised Rheumatoid factor - 39 (raised) (0-20 IU/mL), Urinalysis was within normal limits and Chest X Ray was normal, the Mantoux test was negative and Anti-CCP was also normal (<20 units). The patient was prescribed Tab NAPROXEN 500 mg OD (with Tab PANTOPRAZOLE 40 mg OD BBF), Eye drops ketorolac 0.5% three times a day, Eye drops carboxymethylcellulose 4 times a day with cold compresses. Dermatology consultation was taken for psoriasis and Rheumatology consultation for rheumatoid arthritis and psoriatic arthritis.

Episcleritis is a benign self limiting condition categorised as Simple or nodular, not simply the mild version of scleritis, in adults there is no sex predilection whereas in pediatric group mostly male involvement is seen.<sup>[1][2][3]</sup> Bilaterality the types of episcleritis are simple 40%, nodular 13%. The episclera is comparable to synovial tissue comprising two layers the parietal layer which is more superficial vascularised by superficial episcleral capillary plexus, vessels are straight, radially oriented and salmon coloured. The other layer is Visceral layer which is more deep, vascularised by deep vascular plexus and criss cross appearance with bluish hue. There are two classic presentations of episcleritis the first presentation peaks at 24 hours with slow improvement in 5-10 days and a complete resolution is seen in 2-3 weeks

with 60% recurrence seen within 2 months and it continues for 3-6 years. In the second presentation there is no regularity to the intervals between the attacks. These attacks are milder with association of systemic illness.

Episcleritis is not very common and occurs at an age of around fourth to fifth decade with no sex predilection in adults. Scleritis on the other hand is more common in females and is seen as bilateral condition in 52% patients within age group between fourth to sixth decade. On physical examination episcleritis appears as brick red whereas avascular areas can be seen in scleritis. On topical phenylephrine test after using 10% topical phenylephrine the episcleral vessels blanch but not the deep vessels that are engorged in scleritis as shown in figure 3. There is mild discomfort and foreign body sensation during the episode of episcleritis but in scleritis the pain is more severe which radiates to forehead, jaw and awakens the patient during night. Photophobia is less common in episcleritis but is seen more in scleritis. There is diminution of vision in scleritis and tenderness on palpation is common in it. Scleritis is also commonly associated with systemic autoimmune diseases(40-50%) which is less commonly seen in episcleritis (26-36%).<sup>[4][5][6]</sup>



**Figure 3: showing blanching of episcleral vessels after instilling 10% phenyl ephrine.**

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