Case report

UNILATERAL POSTERIOR UVEITIS IN A YOUNG JIA MALE

ABSTRACT:
A 15 y/M was referred from Paediatrics department to rule out uveitis in a suspected case of Juvenile idiopathic arthritis. He had no ocular complaints. There was history of left eye amblyopia since childhood and thick glass spectacle usage since 10 years. There was no history of ocular trauma, procedure or any systemic illness. BCVA was 6/9 in RE and 6/24 in LE, color vision and Amslers grid test were within normal limits in both eyes. On examination, anterior segment was within normal limits. Posterior segment showed myopic changes in both eyes with mild vitreous degeneration in right eye and vitreous debris, inflammatory debris in the inferotemporal quadrant, perivascular sheathing and snowbanking in superotemporal and inferior quadrant in left eye with no active macular edema. Systemic workup was done and the patient was started on oral steroids and immunosuppressant. JIA-associated uveitis rarely presents with complaints, a high index of suspicion is indicated in these cases due to poor prognosis and high rate of complications.

Keywords: JIA, Posterior uveitis, young

Introduction

Juvenile idiopathic arthritis (JIA), an autoimmune arthritis of undefined etiology, starts before 16 years and lasts for 6 weeks or more.[1] The most prevailing extra-articular manifestation of JIA is uveitis. Uveitis is reported in 5.6–24.4% of patients with JIA which often has a chronic, asymptomatic, and insidious onset, especially those with the oligoarthritis type (10–30%).[2] Ocular manifestations are seen due to the disease or associated steroid treatment comprising cataract, glaucoma, band keratopathy, posterior synechiae and macular edema.[3]

Here we report a case of a 15 year old male, case of JIA presenting with posterior uveitis.

Case Report

A 15 y/M referred from Paediatric department to rule out uveitis in a suspected case of juvenile idiopathic arthritis. Patient had no ocular complaints. There was history of left eye amblyopia and usage of thick glasses since 10 years. There was no history of ocular trauma or procedure or any systemic illness. Patient had acute non-resolving stomach ache and constipation. There was no history of joint pain. CT chest, CT abdomen and colonoscopy was within normal limits.Visual acuity in right eye(RE) was finger counting at 2meters improving to 6/12 with pinhole and in left eye(LE) was finger counting at 1meter improving to 6/24 with pinhole. Best corrected visual acuity was 6/9 in the RE with -6.25 sphere and -1.75 cylinder at an axis of 24 degrees and in the LE was 6/12p with -6.00 sphere and -2.50 cylinder at an axis of 170 degrees. Colour vision and Amsler's grid test was within normal limits in both eyes. Anterior segment examination of both eyes was within normal limits. Posterior segment showed myopic changes in both eyes (Figure 1 and 2) with mild vitreous degeneration in right eye and vitreous debris, inflammatory debris in the inferotemporal quadrant, perivascular sheathing and snowbanking in superotemporal and inferior quadrant in left eye with no active macular edema. Patient was started on topical cycloplegic drops. Systemic workup was done. Anti-nuclear antibody, rheumatoid factor and CBNAAT for tuberculosis were negative. Patient was then referred to a rheumatologist who started the patient on Tab. Prednisolone 20mg OD, Tab Methotrexate 15mg once a week. On regular follow up, patient started developing anterior uveitis along with intermediate and posterior uveitis in the LE.

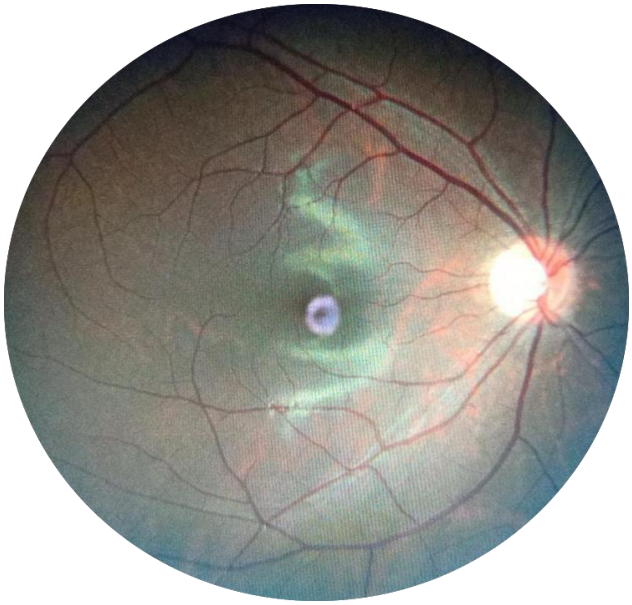

Figure 1: Fundus photograph of right eye showing myopic changes

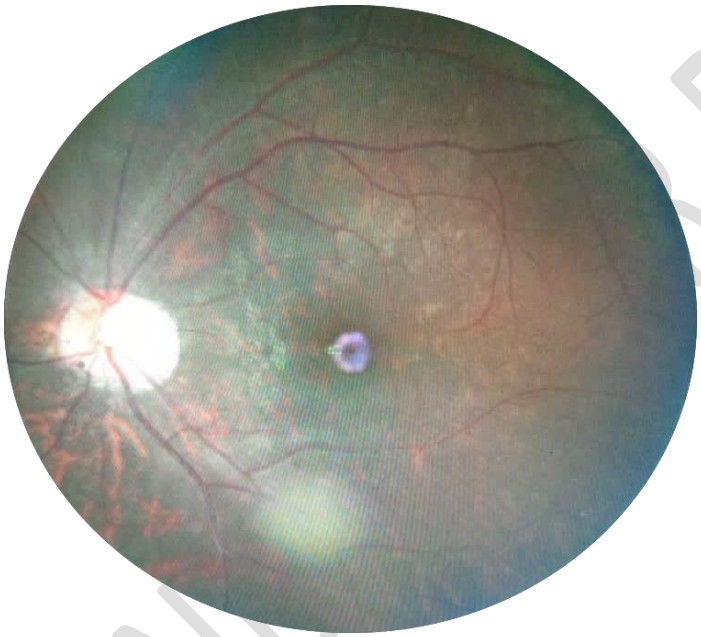

Figure 2: Fundus photograph of left eye showing myopic changes with mild vitreous degeneration in right eye and vitreous debris, inflammatory debris in the inferotemporal quadrant and perivascular sheathing.

Discussion

JIA the most common chronic rheumatic disease in children associated with variable clinical presentation, disease course, and outcomes.[4]

Kotaniemi et al concluded in a major review that about 10% patients with oligoarticular JIA have uveitis and 37.3% of JIA-associated uveitis patients suffer from complications due to the disease itself or associated steroid-treatment like cataract, glaucoma, band keratopathy, posterior synechiae, or macular edema. [2][3]

Marelli et al conducted a retrospective study among 125 patients with JIA-associated uveitis followed from 2009 to 2019 in which 96% patients had anterior uveitis, 1.6% patients had posterior uveitis and 2.4% three patients had panuveitis. Bilateral involvement was noticed in 67.2% subjects.[5]

Sudarshan et al conducted a retrospective chart study among 40 JIA patients between January 1988 and March 2004 and found that Twenty-six patients (65%) had bilateral presentation and 12 patients (30%) had a unilateral presentation. Chronic uveitis was seen in 39 eyes (61%), acute anterior uveitis was seen in 10 eyes (16%), panuveitis was seen in 7 eyes (11%) and intermediate uveitis was seen in 4 eyes (6 %). [6]

Hsin-Hui Yu et al conducted a population based cohort study in Taiwan among 2636 patients under 16 years of age to analyze the incidence, prevalence of JIA and the characteristics of JIA-associated uveitis and they found that Uveitis (all anterior uveitis) occurred in 125 (4.7%) patients with JIA. Only three patients with pan-uveitis had posterior segment manifestations.[7]

Foeldvari et al conducted a retrospective study including 25 patients with JIA-associated uveitis who were treated with methotrexate. They found that 21 patients responded to methotrexate therapy.[8]

The distinctiveness of our case is the presence of unilateral involvement and posterior uveitis with anterior uveitis developing at a later stage.

JIA-associated uveitis rarely presents with ocular complaints, a high index of suspicion with comprehensive eye examination is indicated in these cases due to poor prognosis and high rate of complications. Lack of predictive markers hinders early diagnosis and treatment of

uveitis in JIA patients. Therefore, all JIA patients must be referred routinely to rheumatologist and regular ophthalmic evaluation to prevent ocular complications.

Conclusion

Occurrence of Posterior uveitis though rare, high index of suspicion is indicated as it has potential to cause grave complications in JIA cases. Rheumatologist consultation is a requisite for complete management and prevention of potential complications.

References

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