An unusual case of orbital myositis in a patient with HLA B-27-associated uveitis

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A 41-year-old lady presented to us with complaints of redness, ocular pain in left eye, and seeing double for the last 3 months. She was diagnosed as acute anterior uveitis (AAU) and was started on topical corticosteroid, cycloplegic elsewhere. Binocular diplopia which was initially in all gazes had reduced and currently she complained of persistent diplopia mainly in up gaze. She complained of recurrent attacks of redness with ocular pain in left eye for last 1 year, but denied any history of diplopia. On enquiry, she also complained of mild backache for past six months. Her past surgical history included laparoscopic cholecystectomy with metal clips done eight years back.

On examination, her best corrected visual acuity in both eyes was 6/6. Slit-lamp examination of the right eye was unremarkable. Slit-lamp examination of the left eye revealed cells 0.5+, flare 1+, and pigments over anterior lens capsule suggestive of broken synechiae [Fig. 1]. Ocular motility examination of the right eye was within normal limit whereas left eye showed limited abduction [Fig. 2]. Fundus examination of both eyes was normal. She was investigated extensively to determine the possible etiology. Her HLA typing was positive for HLA B-27. Her other investigations which also included thyroid function tests were all normal. An orbital computed tomography (CT) scan suggested mild to moderate enlargement of left lateral and inferior rectus muscles suggestive of myositis [Fig. 3a and b]. She was also evaluated by a rheumatologist and started on oral corticosteroid (60 mg/day) and oral methotrexate (15 mg/week). She was seen again after two months. Slit-lamp examination of the left eye revealed a quiet anterior chamber and she was symptomatically much better. She was advised to continue the same treatment in tapering schedule. She was again seen after four months of initial presentation. Slit-lamp examination of the both eyes revealed quiet anterior chamber without any ciliary congestion. She had marked reduction in diplopia and CT scan of the orbit showed resolution of the muscle thickness [Fig. 3c and d].

Among the vast spectrum of ocular manifestations in HLA-B27-associated diseases, AAU remains the most common. Our patient had myositis and an extensive investigation ruled out all other possible causes of myositis. Myositis secondary to HLA-B27-associated uveitis is extremely rare. Sachdeva et al.[1] reported a case of enthesitis in a 29-year-old female with HLA-B27-associated spondyloarthropathy. Unlike our patient, the patient had recurrent orbital pain, periorbital edema, and proptosis, in conjunction with severe sacroiliitis and peripheral arthritis. Our patient presented with painful diplopia with history of recurrent attacks of acute anterior uveitis and had milder form of spondyloarthropathy as suggested by rheumatologist. We did not observe signs and symptoms of orbital involvement such as orbital pain, proptosis, or chemosis. CT scan to evaluate her diplopia revealed the myositis. Our patient presented to us two months after the acute episode of anterior uveitis. Thus, it will be difficult to speculate the initial inflammatory episodes of events. Her 2-month old medical records showed lid edema, restriction of the eye movement, and AAU. Lid edema and restriction of the eye movement can be suggestive of orbital myositis; however, detailed evaluation of the patient was not done or documented. Several systemic rheumatic diseases such as rheumatoid arthritis, systemic lupus, and erythematous have been reported in association with orbital myositis.[2] Another report describes a case of orbital

Figure 1: Slit-lamp photograph of the left eye showing pigments over anterior lens capsule
myositis in a 3-year-old female child with juvenile psoriatic arthritis, but child was tested negative for HLA-B27. Our report suggests that orbital myositis can be a rare association of HLA-B27-associated ocular disease and should be properly evaluated in patients developing painful diplopia.

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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Conflicts of interest
There are no conflicts of interest.

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