Early Diagnosed Case of Ankylosing Spondylitis with Anterior Uveitis in a Young Female

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Abstract: Ankylosing spondylitis and Anterior Uveitis are autoimmune inflammatory disorders having common association through HLA B 27. Ankylosing spondylitis is a chronic inflammatory disorder of axial skeleton. It usually begins in 2nd or 3rd decade with male to female prevalence between 3:1. It is important to establish the diagnosis of Ankylosing spondylitis early before development of irreversible deformity i.e bamboo spine. Anterior Uveitis is an acute inflammatory disorder of the eye which can lead to pupil block glaucoma hence should be diagnosed early. We are reporting a case of ankylosing spondylitis with anterior uveitis in a young female diagnosed early before development of irreversible complications such as bamboo spine and glaucoma respectively. Treatment involved immunosuppressives and corticosteroids.

Keywords: spondylitis, spondylitis, inflammatory disorders

INTRODUCTION

The human leukocyte antigens (HLA) of class 1 (including HLA- A, B and C) are surface recognition markers on almost all nucleated cells and have an important antigen presenting function. The genes for the HLA types are located within the major histocompatibility complex (MHC) on chromosome 6p and there is therefore autosomal inheritance of HLA types explaining in part an incidence of familial inflammations in those carrying HLA B27. The preponderance of this subtype is higher in males, which explains the higher incidence of both these conditions in males [1].

CASE REPORT

A 25 year old female, tailor by occupation, presented with back pain since 2 years. Two years back, she had sudden onset pain in the left girdle region radiating upto left knee for which she went to a nearby doctor who treated her with analgesics. Pain relived for 4 days. After three months she had similar complaints of pain in right girdle region radiating to right knee again for which she was given analgesics but pain did not relieve. Four months after that, she had difficulty in getting up from lying down position in bed in the morning. Additionally, she also gives history of difficulty in changing position in bed from right to left and vice versa. In between, she had an episode of fever which was intermittent, high grade not associated with chills and subsided on its own. There is no history of headache, vomiting, chest pain, breathlessness and pain in abdomen. There is no history of consanguineous marriage of her parents.

General and Systemic examination: No abnormality was detected.

Local examination: SLRT – Negative, Schober test – positive, Gaenslens test – positive, Lab reports - CBC, urea, creatinine, BSL, total protein, albumin, Sr. calcium – WNL. Suspecting autoimmune disorder, her Serum ANA was sent which came Negative.

MRI of Pelvis with both Hip joints = Subtle marrow oedema across the right sacro-iliac joint as well as on the iliac aspect of left sacro-iliac joint. Significant erosions seen involving the articular surface of both sacro-iliac joint, more on right side. No evidence of any abnormal soft tissue noted adjacent to both sacro-iliac joints – these findings favour possibility of systemic inflammatory arthropathy, a sero negative spondyloarthropathy suggesting Ankylosing spondylitis. Then her HLA-B27 was sent which came Positive. As this established the diagnosis of Ankylosing Spondylitis, we started her on NSAID’S considering side effects of immunosuppressive agents.

Five days following this, she presented with congestion of right eye which was associated with pain...
and was acute in onset for which she was referred to an Ophthalmologist. She gave history of similar episode in her left eye one year back.

**Ocular examination:** Right eye visual acuity – 6/36 partial, not improving with pinhole,

**SLIT LAMP examination:** Right eye- Ciliary injection Cornea- hazy, anterior chamber cells – 2+ (1mm by 1mm slit). Anterior chamber flare -2+,Pupil - sluggishly reacting with membrane present in pupillary area. Intraocular pressure – 10.2 mm Hg (measured with schiotz tonometer), Left eye – Anterior segment – WNL. She was diagnosed with anterior uveitis and was started on topical and systemic steroids. Immunosuppressive agents were now added.

**DISCUSSION**

Ankylosing Spondylitis is an inflammatory disorder of unknown cause that primarily affects the axial skeleton and peripheral joints. The disease usually begins in 2nd & 3rd decade; male to female prevalence is between 2:1 & 3:1. There is no definite laboratory test for diagnosis of ankylosing spondylitis, it shows a striking correlation with HLA-B27 and occurs worldwide roughly in proportion to the prevalence of B27 [1]. There are 2 criteria for diagnosis ankylosing spondylitis: Modified New York criteria and ASAS classification criteria [2]. In recent studies, MRI sacroiliitis and HLA B27 positivity is highly predictive of radiographic progression at sacroiliac joint after eight years. These findings support the concept that MRI is of great use for early diagnosis of ankylosing spondylitis & it has prognostic value [3]. The rate of progression from nonradiographic axial spondyloarthritis to ankylosing spondylitis has been estimated as approximately 10% over 2 year. Poddubnyy et.al. found a rate of progression of 11.6% over 2years [4]. Treatment options include, NSAID’s, glucocorticoids, immunosuppressive agents etc. It may also present with extra articular manifestations. Uveitis is the most common extra articular manifestation of Ankylosing spondylitis. It occurs in 20 to 30% of patients with of Ankylosing spondylitis [5].

Anterior Uveitis (Iridocyclitis)is inflammation involving the anterior uveal tract- the iris and pars plicata of the ciliary body. Acute anterior uveitis (AAU) is the most common presentation of which HLA B-27 related and idiopathic forms make up the largest proportion [7]. Subsequent untreated attacks frequently lead to scleusion papillae, pupil block glaucoma and blindness but early and effective treatment eliminates pain, resolves inflammation and minimizes complications. Posterior uveitis in association with HLA B27 is very uncommon [6]. Diagnosis is established with detailed slit lamp examination and Intraocular pressure check up. As AAU tends to exhibit worse prognosis when associated with HLA B27, aggressive treatment is necessary which include topical mydriasis, cyclopegia, steroids and systemic analgesia and steroids. Recurrent AAU is fairly common most often in the same eye [6]. Thus it’s a case of mild to moderate anterior uveitis diagnosed early and uncommon because of its recurrence in the other eye in a young female.

**CONCLUSION**

MRI can be considered as a reliable diagnostic tool for early diagnosis of ankylosing spondylitis thus avoiding its irreversible complications. Also early administration of immunosppressive agents can help prevent extra articular manifestations like anterior uveitis

**REFERENCES**