CASE REPORT PROF-787

LATE SYPHILIS

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ABSTRACT... drfayyaz_hassan@hotmail.com A case of late syphilis involving cardiovascular system and eye is presented here. The patient presented with 2 months history of headache, visual disturbance and shortness of breath. He had aortic regurgitation with violaceous sclerae, only perception of light in left eye, 6/18 vision in right eye and disc swelling and exudative retinal detachment in left eye. Work up confirmed the diagnosis of syphilis for which specific and supportive treatment has been started and advised follow up.

Key Words: Syphilis, Aortic regurgitation, Retinal detachment

INTRODUCTION

Syphilis is a complex infectious disease caused by T. pallidum, a spirochete capable of infecting almost any organ in the body and causing protean clinical manifestation[1]. Sexual transmission is the rule in adult syphilis cases. The natural course is divided into two major clinical stages; early syphilis and late syphilis separated by a symptom free latent phase.

Early syphilis includes primary and secondary lesions, whereas late syphilis consists of granulomatous lesions involving skin, bones, viscera, CVS (aortitis), CNS and ocular syndromes. Although the incidence of syphilitic aortitis is on the decline, yet it is not uncommon[2].

Symptomatic lesions of CNS occur in 10% of untreated (late) syphilis, some 10-40 years after the initial infection. Aortic reflux is the commonest lesion[3]. Eye lesions include granulomatous iritis, chorioretinitis, optic atrophy and nerve palsies.

CASE REPORT

A 45 years old man reported with headache, visual disturbance and shortness of breath on exertion of 2 months duration. There is no history of fever, vomiting, joint pains, backache, any rash, cough, chest pain, syncope, swelling of feet, urinary complaints, weight loss or past history of hypertension, diabetes and heart disease. However, he confided to have an illicit sexual contact about 12 years ago.

On general physical examination he was a man of average built without any obvious distress, pallor, oedema, jaundice, rash, palpable lymph node, fever, or tenderness over temporal regions. He had a high volume collapsing pulse with a blood pressure of 120/50 mm of Hg, but with normal JVP. Both sclerae appeared violaceous.

Examination of heart revealed a heaving apex beat palpable in 6th intercostal space in midaxillary line with a grade 2/4 early diastolic murmur audible in the

aortic area on the left sternal edge and pistol shots over the femorals. Examination of lungs, gastrointestinal and nervous system was unremarkable.

Eye examination revealed normal reactive pupils, just perception of light in the left eye but 6/18 vision in the right eye. Fundoscopy showed disc swelling and exudative retinal detachment in the left eye.

Investigations revealed an ESR of 81 mm at the end of first hour. X-ray chest (PA view) showed enlarged heart shadow without any hilar shadows or lung lesions. ECG was normal. Serology for syphilis showed positive Venereal Disease Research Laboratory (VDRL) and Treponema Pallidum Haemagglutination (TPHA) tests. 2D-Echo cardiography confirmed aortic regurgitation with good LV function. Ultrasound B-scan of eyes revealed scleral thickening with classic T-sign in left eye consistent with scleritis.

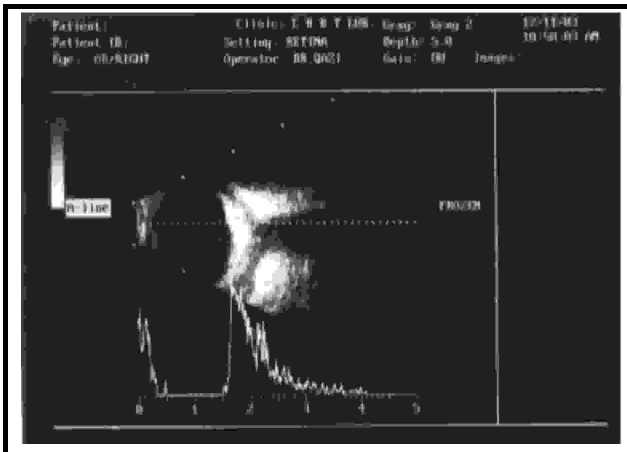

Fig-1. Ultrasound B-scan eye showing scleral thickening (T scan)

Blood counts, urine RE, LFTs, urea, electrolytes including calcium, abdominal ultrasound and CSF examination were all normal. Serology for hepatitis B and C virus, ANCA, ANF and RA factor was negative. Mantoux testing was non reactive.

Keeping in view multi-system involvement and positive serology for syphilis in the absence of clinical and laboratory evidence of any other disorder, he was diagnosed to have late syphilis with cardiac and ophthalmological complications.

A multidisciplinary approach was adopted to manage the patient by involving the cardiologist and ophthalmologist. The patient was put on penicillin G benzathine (2.4 MU) i/m weekly for 3 weeks after a test dose, enalapril 2.5 mg daily, nifedipine 10 mg twice a day, naproxen 500 mg twice a day, deltacortril 60 mg/day with tapering of dosage by 10 mg after every 3 days and famotidine 40 mg once a day. He was observed for the possible Jarisch Herxheimer reaction to penicillin. Close contacts of the patient have been examined and screened for syphilis but none is positive. The patient has been instructed to have regular follow up with the cardiologist and ophthalmologist with view to intervene further as and when indicated.

DISCUSSION

Syphilis is the great masquerader; the diagnosis requires high level of suspicion combined with appropriate laboratory tests. The incidence peaks at 15-34 years of age[4]. After world war II, there was a reduction in the incidence of syphilis due to public awareness but it has again increased since 70's except for mid 80's when it fell in response to AIDS epidemic[1]. All features are due to endarteritis. Since the infectious agents cannot be cultured in vitro, the diagnosis of syphilis relies mainly on serological testing, microscopic detection of T.pallidum, biopsies, lumber puncture and X-rays. Serological tests are non-treponemal (VDRL and RPR) and treponemal (FTA-ABS and TPHA); the former are used to assess the adequacy of therapy and the latter

are employed when there is suspicion of false positive non-treponemal tests. Our patient had positive both VDRL and TPHA tests.

Cardiovascular manifestations include typically syphilitic aortitis which is compounded by aortic regurgitation, coronary artery stenosis and aneurysm and is more common in men at 35-55 years of age in 75% of untreated cases but manifests in only 10% of those affected[5]. Cardiovascular syphilis occurs usually in relatively young persons, the mean age on autopsy being 36 years[6]. Nowadays cardiovascular manifestations are uncommon[7]. Central nervous system co-involvement often occurs[1] but in our case there was no neurological deficit and CSF examination was normal. Treatment includes penicillins and surgical repair besides symptomatic measures[8].

Scleritis is a rare condition as most ophthalmologists see only one or two new patients every year[9]. An underlying systemic disease is responsible for approximately 50% of cases who have scleritis[10] and the most common systemic disease is a connective tissue disorder[9]. Thickening of the posterior sclera can usually be seen on B-scan[11]. Management includes NSAIDs, steroids, immunosuppressive drugs and antibiotics where indicated.

Treatment of tertiary syphilis is the same as for latent syphilis[12]. Reversal of positive serological tests does not usually occur. A second course of penicillin may be given if necessary. There is no known method of eradication of treponeme from humans in late stages of syphilis[1]. Viable spirochetes can still be found in eyes, CSF and elsewhere even with adequate treatment. Patients with late syphilis who have normal CSF but confirmed penicillin allergy may be treated alternatively with doxycycline 100 mg twice a day for 4 weeks. However if CSF is abnormal the case should be treated with penicillin after desensitization[9]. The patient should be observed for Jarisch Herxheimer reaction after the first dose of penicillin. In addition, the close contacts of the patient should be examined and screened for syphilis with view to find cases and treat them at the earliest to avoid late complications.

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