Tuberculosis Presenting as Polyarthritis

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Introduction

Tuberculosis is on the rise particularly in developing country like Pakistan. Lung is the most common site but extra pulmonary manifestation is not that uncommon, Joint involvement in TB is usually monoarticular but rarely it may present as polyarthritis. Here we present a case of TB with polyarthritis.

Case Report

A 34 years female was referred with a history of intermittent low to high grade fever with characteristic evening rise alongwith joint pains. There was symmetrical involvement of both small and largejoints of the body overthe preceding 6 months, with deterioration over preceding month so much so that she could not walk and became bed bound. The patient reported that her joints were stiff on waking. She did not have any rash or night sweats but hadaweight loss of 15kg over this period. She had used various medicines including herbal without relief, On examination, she was febrile (39°C) thin and weak. Her blood pressure was 100/70 mm Hg and a pulse 120/rn, respiratory rate was 24/mm. Few small left posterior ceivical lymph nodes were palpable. On musculoskeletal examinatkn, she was unable to make fists and range of movements were restricted in all joints. There were no signs of inflammationordeformities, crepituswasfelt in the left knee and there was generalized wasting more so of small muscles of the hands. Laboratory tests showed Hemoglobin of 8.5 g/dI, white blood cells 7000/cm^3, platelet count 604xlOE9fl. Liver and renal function tests were normal, ESR was 116 m.m/hr. Urine analysis showed 3 RBC's. Her A.N.A., A.M.A., A.S.M.A. and ANTI-DNA were negative and RA factor was also negative. Thyroid function tests were normal. Serum Albumin was 2.3 gm/dl with a Globulin of 5.9 gm/dl. Chest X-ray was normal. X-ray of hands showed periarticular osteopema and bony erosions involving metacarpophalangeal and phalangeal joints. She was discharged with the diagnosis of sero negative rheumatoid arthritis on non steroidal anti inflammatory drugs. Ten days later she was admitted again with high grade fever and neck rigidity. CSF examination, showed glucose of 94 mg/dl, protein2O4.8 mg/dl, Cl- 122 mm/I, TLC-14/cmni, N-l0/cmm, L-90/cmrn, RBC's 36/cmm. She was started on anti tuberculous therapy, antibiotics and steroids. Her urine, blood and CSF cultures were negative for AFB and fungus. She gradually improved and was discharged. At subsequent visits her steroids were gradually tapered and then stopped. Her temperature settled, joints pain subsided and she was mobile and gained weight.

Comments

Tuberculosis is common in this part of the world and it can present in different ways. Monarticular involvement by Mycobacterium tubereulosis is a well known entity but TB presenting as polyarthritis is unusual, Poncet in 1897 described the features of patients with tubereulosis presenting with polyarthritis which he named as Poncet's disease[1]. It is a rare disease which occurs in patients with active tubereulous infection but there is no direct mycobacterial involvement of joints and in which no other cause of polyarthritis can be found. Only 20 cases of Poncet's Disease have been reported in the English literature so far[2-13] and that's why many workers have questioned the existence of the disease[4]. The exact mechanism underlying polyarthritis is not known but induction of cell mediated immunity

and/or autoimmunity are possible postulation[14,15]. Almost all patients treated with antituberculous drugs had resolution of symptoms on therapy andourpatientalso impmved on AlT without use of non-stemidal inflammatory drugs. We suggest that Tuberculosis should be included in the differential diagnosis of polyazthritis.

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