Bones and Joints Tuberculosis

Haider Abdul-Lateef Mousa MB ChB, MSc*

Tuberculosis appears to be increasing throughout the world after years of continuous decline, despite the introduction of effective chemotherapy. This resurgence is related to the increasing number of patients immunocompromised by chemotherapeutic agents used to treat other diseases or AIDS; the appearance of multiple drug-resistant strains of tuberculosis, and aging population. Several species of mycobacteria other than *Mycobacterium tuberculosis* or *M. bovis* are known to cause infections of bones and joints. The predisposing factors are malnutrition, environmental conditions and poor living standards. Musculoskeletal tuberculosis arises from haematogenous seeding of the bacilli soon after the initial pulmonary infection. The clinical symptoms are insidious onset, pain, swelling of the joint and limited range of movements. Investigations for suspected cases include: Mantoux test, radiological imaging, fine needle aspiration biopsy, surgical biopsy, bacteriological examination, histopathological examination, and polymerase chain reaction (PCR) of a suitable specimen. The mainstay of treatment is multidrug antitubercular chemotherapy. Surgical intervention is indicated in patients with abscess formation, intractable pain, neurological deficit, spine instability, kyphosis, and unsatisfactory response to chemotherapy. The main reason for poor outcome is delayed diagnosis.

*Bahrain Med Bull 2007; 29(1):*

Tuberculosis (TB) is still the second most frequent infectious disease after malaria on a worldwide basis and remains a major cause of skeletal infection in many parts of the world\(^1\,\!^2\). Each year, 3.8 million new cases of tuberculosis are reported globally, the vast majority in the developing countries\(^3\). The tubercle bacillus infects one-third of the world’s population. It is the most common single agent causing death in young adults and causes two million deaths each year around the world\(^4\). In developed countries the incidence of TB, which had been declining over the past decades, has shown an alarming resurgence, due to several factors, which include arrival of immigrants from area where TB is endemic, the rise in the number of people who have immunodeficiency, outbreaks of TB in facilities, the advent of multidrug-resistant (MDR) TB, an aging population, and an increase in the number of health care workers who are exposed to the disease\(^1\,\!^2\,\!^5\). Some developing countries in Africa and Asia and some new states of the former Soviet Union have experienced dramatic increases in the number of pulmonary tuberculosis cases\(^6\). Therefore, an increase in the incidence and prevalence of joint and bone tuberculosis can also be suspected. Tuberculosis of bones and joints accounts for approximately 10% to 15% of all extrapulmonary forms of tuberculosis\(^7\).

* Lecturer
  College of Medicine, University of Basrah
  Basrah, Iraq