Early diagnosis and treatment of ankylosing spondylitis in Africa and the Middle East

Bahiri Rachid, Bassel El Zorkany, Ehab Youseif & Mohammed Tikly
Abstract
Ankylosing spondylitis (AS) is the prototype for spondyloarthritis primarily affecting young men. Geographic and ethnic variations exist in the prevalence and severity of AS and relate to the wide disparity in the frequency of human leukocyte antigen (HLA)-B27, a major genetic risk factor. The strength of the disease association with HLA-B27 is lower in most Arab populations (25–75 %) than in Western European populations (>90 %), and there is no association in sub-Saharan Africa, where the prevalence of HLA-B27 is <1 %. Other epidemiologic differences between European and African populations are the apparent later age at presentation in sub-Saharan Africa, and the high rate of spondyloarthropathies associated with human immunodeficiency virus infection. Diagnosis of AS is often delayed 8–10 years; potential reasons for the delay in Africa and the Middle East include low awareness among physicians and patients, the requirement for radiographic evidence of sacroiliitis for diagnosis, and limited access to magnetic resonance imaging in some countries. Treatment should be initiated early to prevent or reduce skeletal deformity and physical disability. Nonsteroidal anti-inflammatory drugs are effective first-line treatment and anti-tumor necrosis factor-α drugs are indicated for patients who have an inadequate response to first-line therapy. In Africa and the Middle East, such treatments may be precluded either by cost or contraindicated because of the high prevalence of latent tuberculosis infection. Research is sorely needed to develop cost-effective tools to diagnose AS early as well as effective, inexpensive, and safe treatments for these developing regions.