THE SPECTRUM OF RHEUMATIC DISEASES IN SAUDI ARABIA

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SUMMARY

The spectrum of rheumatic diseases seen in Saudi Arabia appeared to be broadly similar to that seen in the West although interesting differences were noted. Rheumatoid arthritis was the predominant inflammatory joint disease, but was less severe. Ankylosing spondylitis is probably rare among the Saudis. Brucellosis was an important cause of acute back pain. Osteoarthritis was characterized by frequent involvement of the knee while the hip was rarely involved. Environmental factors may be responsible for this disease pattern. Regional pain syndromes, associated with obesity, bad posture, and poor physical fitness were also frequent problems.

KEY WORDS: Epidemiology, Arthritis, Saudi Arabia, Brucellosis, Rheumatoid arthritis, Osteoarthritis.

Much of the information on the patterns of rheumatic diseases in the literature has come from studies of Caucasian populations [1]. This paper records the pattern of diseases in a mainly Arab population in Riyadh, Saudi Arabia.

PATIENTS AND METHODS

The case records of in- and out-patients with rheumatic diseases seen by the author during the 12-month period 1982-3 were reviewed, and the findings recorded.

Rheumatoid arthritis (RA), ankylosing spondylitis (AS), and systemic lupus erythematosus (SLE) were diagnosed using international criteria [2-4]. The diagnosis of scleroderma and polyarteritis nodosa (PAN) were confirmed by histology. Osteoarthritis (OA) was diagnosed only in the presence of radiological abnormality and in the absence of an alternative diagnosis. Regional pain syndromes were based on typical symptoms, absence of alternative pathology and normal radiographs.

RESULTS

Altogether, 194 patients (85 male, 109 female) with musculoskeletal symptoms were seen in the 12 months under review. Their mean age was 40.3 years. Eighty (42%) had inflammatory diseases of the locomotor system (Tables I and II), while 114 had noninflammatory conditions (Table III).

All eight patients with brucellosis were men aged 20-30 years who presented with similar symptoms, namely, acute pain, poorly localized to one side of the lower back, accentuated by weight-bearing, and causing difficulty in walking by virtue of pain rather than neurological deficiency.

Nine patients had collagen vascular diseases four with SLE, two with scleroderma, one with PAN, one with mixed connective tissue disease (RNP +ve), and one with Takayasu's disease, confirmed by arch aortography.

Table IV details the pattern of large-joint involvement in OA. Knee involvement was frequent, but hip disease was rare. The three patients with hip OA had a history of childhood trauma.

Saudi nationals were by far the most frequently represented in all of the diagnostic entities except for seronegative spondarthritides, where none was a Saudi. A Moroccan, Syrian, Jordanian and Egyptian formed the group of four patients with AS.

DISCUSSIONS

The conclusions drawn from this study are limited by the use of a hospital population which may not be representative. However, primary health care is in its infancy in Saudi Arabia, so that patients do tend to come to hospital seeking initial medical attention.

It can be concluded that most rheumatic disorders seen in the West also occur in the Saudis. The important exception may be seronegative spondarthritides, particularly AS which was seen only among non-Saudis. This may reflect the low prevalence of HLA-B27 among Saudis which is 1-2% [5]. However, AS did occur among non-Saudi Arabs.

Another disorder not encountered was polymyalgia rheumatica. On the other hand, RA was common, although it appeared to be less severe than that encountered in the West. (A detailed comparison is at present being undertaken.)
Another distinctive feature of the series was the frequency of spinal brucellosis as a cause of acute low back pain. This often caused such severe symptoms and disability that lower-limb paralysis was suggested.

The frequency of knee OA and the striking paucity of OA involving the hip is also in variance with experience in the West [7]. A low incidence of hip OA has been observed among Chinese [8, 9], Nigerians [10] and East Africans [11] but a high incidence of knee involvement occurs in Africans [10].

Frequent squatting and sitting on the ground, which spreads the intra-articular pressure evenly on the hip articular cartilage, may be responsible for the low incidence of hip OA in some communities [8, 9].

In comparison to similar series from Australia [12] there was a high proportion of patients with regional pain syndromes. Obesity, bad posture, and poor physical fitness were thought to be the major factors responsible because they often responded to therapeutic exercises, weight reduction and postural advice. This aspect of locomotor morbidity in Saudi Arabia may be remedied by greater community awareness of the importance of physical fitness and the adverse effects of obesity.

REFERENCES