The spectrum of rheumatic diseases seen at the Rheumatology Clinic, University Kebangsaan Malaysia.

G. L. Chin, MBBS(Mal), MRCP(UK)
A. B. Shukor, MBChB (Alexandria), MRCP(Ire), MRCP(UK)

Department of Medicine, Faculty of Medicine, Universiti Kebangsaan Malaysia, Kuala Lumpur

Summary

This paper discusses the spectrum of rheumatic diseases seen over a 24-month period from January 1986 to December 1987. Rheumatoid arthritis was the commonest rheumatic disorder seen, comprising of 47.1% of all cases and ankylosing spondylitis was among the least frequent (0.9%). Most of the rheumatic diseases reported in the West are also seen in Malaysia. However, results of this study which is based on the hospital population may not be representative of the spectrum of rheumatic diseases in the our population.

Key words: Epidemiology, occurence, rheumatic diseases, Malaysia.

Introduction

The spectrum of rheumatic diseases in Malaysia is not known. Musculoskeletal disorders or rheumatic complaints are commonly dealt with by general practitioners, orthopaedic surgeons or general physicians. Information on the patterns of rheumatic diseases in the literature has come largely from studies done in the Caucasian population. Studies of the distribution and prevalence of rheumatic diseases in developing countries may be useful in providing clues to their aetiology and pathogenesis. Epidemiological studies may trace significant differences in the incidence of the various rheumatic diseases and hence help to identify environmental or genetic risk factors. However, these studies have several drawbacks, which include illiteracy, lack of trained personnel, cultural differences in interpretation of symptoms, linguistic difficulties and lack of access to or inadequate basic serological services. All these may pose problems in using standard criteria for disease definition.

The purpose of this hospital-based study is to establish the spectrum of rheumatic diseases seen on an outpatient basis over a 24-month period at the Rheumatology Clinic, Universiti Kebangsaan Malaysia (UKM), Kuala Lumpur.

Materials and methods

The case records of all patients attending the Rheumatology Clinic of UKM during the 24-month period from January 1986 to December 1987 were reviewed by the authors and the findings

recorded. Particular attention was given to the following variables: age, sex, race, referring source and diagnoses. All the patients had been evaluated by a complete history, physical examination and basic laboratory investigations. These include full blood count, urinalysis, erythrocyte sedimentation rate, routine biochemical studies, basic serologic studies and x-rays of involved joints when indicated.

Rheumatoid arthritis (RA),[1,2] systemic lupus erythematosus (SLE),[3] progressive systemic sclerosis (PSS)[1], mixed connective tissue disease (MCTD),[4] polymyalgia rheumatica and giant cell arteritis (PMR/GCA),[1,5] ankylosing spondylitis (AS),[6] gouty arthritis,[7] psoriatic arthritis,[1] rheumatic arthritis,[1] and juvenile chronic arthritis (JCA)[8] were diagnosed using internationally recognised criteria. Osteoarthritis[1,9] was diagnosed in the absence of an alternative diagnosis and in the presence of radiological abnormalities.

Psychogenic rheumatism[1,10] comprises an interesting group of patients with typical symptoms, normal clinical examination, normal radiographs and absence of alternative pathology. Arthritis of undetermined etiology refers to the group of patients who had history of arthritis but normal clinical examination and was seen only once by either author. Results of investigations were not useful in such patients. This group could not be classified into any of the distinct rheumatic disease recognised by the American Rheumatism Association.[1,11]

Results

A total of 225 patients were seen during the 24-month period. The age of the patients ranged from 8 years to 76 years with a mean age of 39.4 years. A large proportion of the patients (67%) seen were in the second to fifth decade of life (Fig. 1). Only 7.5% of patients were above 60 years of age and 9.8% were below the age of 20 years. There was a female preponderance (176 females, 49 males) with a female to male ratio of 3.6:1. The ethnic distribution of the patients seen was as follows: 123 Malays (54.7%), 53 Chinese (23.5%), 40 Indians (17.8%) and 9 of other races (4%).

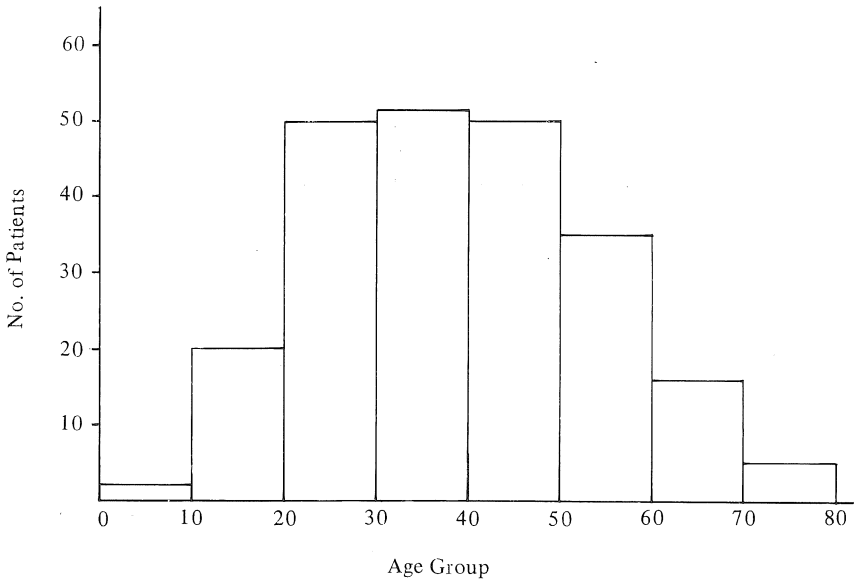

Fig. 1 Age distribution of patients with rheumatic complaints.

Table I

Spectrum of Rheumatic Diseases

Diagnosis	Number of Patients (%)
Rheumatoid arthritis	106 (47.1)
Degenerative joint disease	26 (11.6)
Undertermined etiology	14 (6.2)
Gouty arthritis	13 (5.8)
Psychogenic rheumatism	12 (5.3)
Juvenile chronic arthritis	11 (4.9)
Soft tissue rheumatism	11 (4.9)
Systemic Lupus Erythematosus	9 (4)
Mixed connective tissue disease	7 (3.1)
Psoriatic arthritis	6 (2.7)
Progressive systemic sclerosis	3 (1.3)
Polymyalgia rheumatica and giant cell arteritis	3 (1.3)
Rheumatic arthritis	2 (0.9)
Ankylosing spondylitis	2 (0.9)

The spectrum of rheumatic diseases seen in this clinic is as shown in Table I. Rheumatoid arthritis was the predominant chronic inflammatory joint disease seen occuring in 47.1% of the patients. Degenerative joint disease accounted for 11.6% and in 6.2% of cases, the etiology of the arthritis was undertermined. The connective tissue disorders included SLE (4.0%), MCTD (3.1%), PSS (1.3%), and PMR (1.3%).

The other inflammatory arthritis seen were gouty arthritis (5.8%), JCA (4.8%) and psoriatic arthritis (2.7%). Psychogenic rheumatism were diagnosed in 5.3% of patients. Soft tissue rheumatism[1] or extra-articular rheumatism accounted for 4.9% of cases seen. Ankylosing spondylitis (0.9%) and rheumatic arthritis (0.9%) were among the least frequent disorders seen.

An analysis of the referral sources indicated that most of the referrals came from general practitioners in Kuala Lumpur (27.1%), various clinical departments of the General Hospital, Kuala Lumpur (27.6%) and the UKM (37.8%). 32% of UKM referrals were from the Orthopaedic Department, 3.1% of the patients were self-referred and the source of referral was not recorded in 0.8% of the cases reviewed. Only 3.6% of cases seen had been referred directly from clinics or hospitals outside Kuala Lumpur.

Discussion

From this study, several interesting observations were made. The mean age of our patients of 39.4 years was similar to that of a comparable study done at a University Hospital in Riyadh, Saudi Arabia.[12] In contrast, the mean age reported by workers in Umea (Sweden)[13] and Southern California[14] was 50 years.

Table II

Ethnic distribution of population in West Malaysia, UKM physician's clinic and rheumatology clinic

	Malays (%)	Chinese (%)	Indians (%)	Others (%)
West Malaysia (Census 1980)[17]	55.4	33.8	10.2	0.6
UKM Physician's clinic (1986/87)	53.0	28.0	17.0	2.0
Rheumatology clinic (1986/87)	54.7	23.5	17.8	4.0

There was a predominance of female patients in our series. Likewise, in most other major series, there was a similar trend except for the study done at the Tri-Service Hospital in Taipei[15] which covers the military population there. However, no sex predilection was noted in patients with JCA. Those with gouty arthritis, psoriatic arthritis and ankylosing spondylitis were predominantly males. The ethnic distribution of patients seen in this clinic did not reflect their racial proportions in the population (Table II) but it did reflect closely the ethnic distribution of patients attending the physician's clinic of UKM. A wide spectrum of diagnostic categories were seen with varying frequencies in the different ethnic groups. The Malays were the most frequently represented in all the various rheumatic disorders seen. Rheumatoid arthritis was the commonest rheumatic disease seen in the 3 major races. Degenerative joint diseases accounted for a relatively small proportion of cases seen when compared to other major series. The reasons for this could be because a large percentage of our population do not seek medical attention for such rheumatic complaints and even when they do, they are often seen by traditional medical practitioners, general practitioners, orthopaedic surgeons or internists.

Although SLE is known to be common in the ASEAN region, we have only 9 patients in our series as the majority of them are being seen in the Lupus clinic of UKM under the care of the nephrologists. Acute arthritic problems such as infective arthritis requires hospital admission and hence are not seen in our clinic. For similar reasons, there were only 2 cases of rheumatic arthritis seen. Three cases of Reiter's Syndrome were seen as in-patients but were not subsequently followed-up in the clinic and thus were excluded from this study. The rarity of ankylosing spondylitis in our series could indicate a low incidence of HLA B27 in our population.

In 6.2% of our patients, a firm diagnosis could not be reached despite investigations. This emphasises the need for continued study of the patients which was not possible here as these patients did not come back for further follow-up. In contrast, the series from Southern California[14] and Central Java[16] had a higher percentage of undiagnosed cases (approximately 11% but both of these were private rheumatological practices).

Psychogenic rheumatism is an interesting group requiring further detailed study. The patients except for one, were females aged 21 to 50 years. None of them had clinical evidence of joint deformity or arthritis throughout their follow-up and the majority of them had rheumatic symptoms for more than 5 years.

Since this is a hospital-based study, it is limited by the use of a bias population. The population at risk is seldom known and hospital -based studies usually give a lower prevalence rate. Advantages of such a study are that it is based on more accurate diagnosis; hospital statistics are particularly useful for supply of data on rare diseases since it covers a wider population and it gives an indication of the relative incidence of the rheumatic disease. A better picture would be obtained if the attendances of patients at more than one hospital are used. Conclusions drawn from this study may not be representative and further epidemiological studies should be done.

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