

Original Research

Assessment of clinical profile of patients with Rheumatoid Arthritis

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ABSTRACT:

Background: Rheumatoid arthritis (RA) is an inflammatory rheumatic disease with progressive course affecting articular and extra-articular structures resulting in pain, disability and mortality. Hence; the present study was undertaken for assessing the clinical profile of patients with rheumatoid arthritis. **Materials & materials:** A total of 50 RA patients were enrolled in the present study. Complete demographic details of all the patients were obtained. A self –framed questionnaire was made and complete clinical and medical history of all the patients was assessed. Clinical examination was carried out of all the patients and clinical profile was recorded. Blood samples were obtained and complete haematological profile was obtained. **Results:** Joint pain was the most common clinical manifestation of RA found to be present in 50 percent of the RA patients. Morning stiffness and joint swelling were found to be present in 80 percent and 60 percent of the patient population. Limitation of movements and deformity were found to be present in 70 percent and 40 percent of the RA patients. Fever was found to be present in 24 percent of the patients. 70 percent of the patients of the present study were females while the remaining were males. **Conclusion:** Thorough knowledge of clinicians and physicians about the clinical profile of the RA can lead to early detection and early treatment planning thereby improving the prognosis of the disease. **Key words:** Clinical profile, Rheumatoid arthritis.

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INTRODUCTION

Rheumatoid arthritis (RA) is an inflammatory rheumatic disease with progressive course affecting articular and extra-articular structures resulting in pain, disability and mortality. Persistent inflammation leads to erosive joint damage and functional impairment in the vast majority of patient.¹⁻³

Inflammation and subsequent destruction of synovial joints is the hallmark of RA. Why the immune system is lured to attack and destroy still remains unknown, but great strides have been made in understanding how. Inflammation of the synovial tissue involves interactions between macrophages, T and B lymphocytes, synovial fibroblasts, and other cells of the inflamed synovium such as mast cells, dendritic cells and plasma cells.⁴ The initial presenting features of early RA do not substantially differ from other inflammatory arthritis. So prior to definite diagnosis patients with early RA are usually classified as

undifferentiated arthritis which difficultly can be discriminated from other inflammatory arthritis.⁵ Hence; the present study was undertaken for assessing the clinical profile of patients with rheumatoid arthritis.

MATERIALS & METHODS

The present study was conducted in the department of medicine of Prasad institute of Medical Sciences Lucknow, Uttar Pradesh, India. It included assessment of clinical profile of patients with rheumatoid arthritis. Ethical approval was obtained from institutional ethical committee and written consent was obtained after explaining in detail the entire research protocol. A total of 50 RA patients were enrolled in the present study. Complete demographic details of all the patients were obtained. A self –framed questionnaire was made and complete clinical and medical history of all the patients was assessed. Clinical examination

was carried out of all the patients and clinical profile was recorded. Blood samples were obtained and complete haematological profile was obtained. All the results were recorded in Microsoft excel sheet and all were analysed by SPSS software.

RESULTS

A total of 50 patients were analysed. 44 percent of the patients belonged to the age group of 31 to 40 years. 20 percent of the patients belonged to the age group of 51 to 60 years. 16 and 14 percent of the patients belonged to the age group of 41 to 50 years and more than 60 years. Mean age of the patients was 45.8 years. Joint pain was the most common clinical manifestation of RA found to be present in 50 percent of the RA patients. Morning stiffness and joint swelling were found to be present in 80 percent and 60 percent of the patient population. Limitation of movements and deformity were found to be present in 70 percent and 40 percent of the RA patients. Fever was found to be present in 24 percent of the patients. 70 percent of the patients of the present study were females while the remaining were males.

Table 1: Age-wise distribution of patients

Age group (years)	Number of patients	Percentage of patients
18 to 30	3	6
31 to 40	22	44
41 to 50	8	16
51 to 60	10	20
More than 60	7	14
Total	50	100

Table 2: Gender-wise distribution

Gender	Number of patients	Percentage of patients
Male	15	30
Females	35	70
Total	50	100

Table 3: Clinical profile of the patients

Clinical profile	Number of patients	Percentage
Fever	12	24
Joint pain	50	100
Joint swelling	30	60
Morning stiffness	40	80
Deformity	20	40
Limitation of movements	35	70

DISCUSSION

Rheumatoid arthritis (RA) is a chronic inflammatory multisystemic disease targeting the synovium. The condition exists worldwide and affects all ethnic groups at a rate of approximately 0.5% to 1% of the

adult population.⁷⁻⁹ A total of 50 patients were analysed. 44 percent of the patients belonged to the age group of 31 to 40 years. 20 percent of the patients belonged to the age group of 51 to 60 years. 16 and 14 percent of the patients belonged to the age group of 41 to 50 years and more than 60 years. Mean age of the patients was 45.8 years. Penserga EG et al described Filipino patients with rheumatoid arthritis (RA) entered in the Rheumatoid arthritis database and registry (RADAR) of the Philippine General Hospital. Data extracted were demographics, clinical presentation, laboratory tests, treatment and disease course. Means and proportions were used for population characteristics. There was symmetrical polyarthritis with high tender and swollen joint count and mean Disease Activity Score of 28 joints, erythrocyte sedimentation rate of 5.27 (3.39, 8.13). Rheumatoid factor was positive in 2/3 of cases. Hypertension, tuberculosis and diabetes were important co-morbidities. Treatment included prednisone, non-steroidal anti-inflammatory drugs and methotrexate. At 12 months of treatment, evaluable cases (< 20%) showed improvement from high to moderate disease activity. Methotrexate average dose was 8.6 mg/week. Nine cases received biologic agents. Factors affecting treatment included access to rheumatology centers, low socioeconomic status, presence of co-morbid diseases and treatment adverse events. This study reported a cohort of Filipino RA patients seen in a government arthritis unit whose disease characteristics are similar to what is reported worldwide.¹⁰

In the present study, Joint pain was the most common clinical manifestation of RA found to be present in 50 percent of the RA patients. Morning stiffness and joint swelling were found to be present in 80 percent and 60 percent of the patient population. Limitation of movements and deformity were found to be present in 70 percent and 40 percent of the RA patients. Fever was found to be present in 24 percent of the patients. 70 percent of the patients of the present study were females while the remaining were males. Fitzcharles MA et al assessed the outcome of patients with rheumatic diseases who were referred to a tertiary care pain center. Out of a total of 1120 new patients, 60 (5%) had a primary rheumatologic diagnosis to account for pain and referral. The diagnoses were as follows: fibromyalgia in 26 (43%), inflammatory arthritis 17 (28%), degenerative arthritis 9 (15%), and soft tissue rheumatism 8 (13%). The median age at presentation was 52 years and 47 (78%) were female. The mean pain scores according to the McGill Pain Questionnaire and the visual analog scale were 27 +/- 15 and 7 +/- 2, respectively. Patients were followed a mean duration of 10.6 +/- 15 months. Seventy-two percent were assessed by a psychologist and 52% by a physiotherapist or occupational therapist. New pharmacologic treatments were prescribed for 47 (78%) patients, with 47% receiving opioids, 37% antidepressants, 12% nonsteroidal antiinflammatory

drugs, 8% tranquilizers, and 18% other medications. Final outcome was described as follows: improved in 55%, no change in 43%, and worsened in 2%.¹¹

CONCLUSION

Thorough knowledge of clinicians and physicians about the clinical profile of the RA can lead to early detection and early treatment planning thereby improving the prognosis of the disease.

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