

A study of clinical profile of patients with rheumatoid arthritis

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Abstract

Background: Rheumatoid arthritis (RA) is a chronic inflammatory disease manifesting itself in various extra-articular signs and progressive articular damage. **Aims and Objectives:** To study Clinical profile of patients with Rheumatoid arthritis. **Methodology:** This was a cross-sectional study carried out in the patients with clinical features of rheumatoid arthritis at tertiary health care center during the one-year period i.e. January 2016 to January 2017. All the suspected patients with the clinical features of Rheumatoid arthritis were included into the study, all such patients were undergone clinical evaluation and RA test serologically and included into the study so during one-year period there were 57 patients of Rheumatoid arthritis were identified and included into the study. **Result:** The majority of the patients were in the age group of 30-40 were 49.12%, followed by 40-50-17.54 %, 50-60 were 15.79%, >60 were 12.28%, 20-30 were 5.26%. The majority of the patients were Female i.e. 73% and Male were 37%, the female to male ratio was 2: 1. The majority of the patients were having clinical features of Joint pain - 90%, Malaise -87%, Fever-86%, Joint swelling -85%, Limitation of movements -80%, Joint stiffness -75%, Generalized lymphadenopathy -60%, The most common radiological features were Soft tissue swelling- 80% followed, Joint space narrowing-78%, Juxta articular osteopenia -75%, Joint erosions - 42%, Intra-articular loose bodies -23%, Joint subluxation -11%. The most common extra articular manifestation were Episcleritis-9%, followed by Rheumatoid nodules-7%, Mitral regurgitation -5%, Pleuritis -4%, Coronary artery disease, 4%, Sjogrens syndrome in 2%. **Conclusion:** It can be concluded from our study that the majority of the patients were Female, the most common clinical feature were Joint pain, Malaise, Fever. The most common radiological features were Soft tissue swelling, Joint space narrowing, Episcleritis followed by Rheumatoid nodules. **Key Word:** Rheumatoid arthritis (RA), Sjogren's syndrome, RA-Factor.

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INTRODUCTION

Rheumatoid arthritis (RA) is a chronic inflammatory disease manifesting itself in various extra-articular signs and progressive articular damage.¹ Clinical onset of this disease may be variable; it generally begins with symmetrical involvement of the small joints, pain,

morning stiffness, and limitation of movement for more than 1 hour. Although the metacarpophalangeal (MCP) joints, the proximal interphalangeal (PIP) joints, the wrists, the metatarsophalangeal (MTP) joints and the knee joints are the most frequently involved joints, RA may also involve other ones. Rheumatoid arthritis affects approximately 0.5%-1% of the population, and, although not directly life-threatening, it causes a reduction in the patient's quality of life and severe economic damages to society.² It is more prevalent in women (female/man ratio of 2:1), and its incidence increases with age.³ Rheumatoid arthritis (RA) is a chronic autoimmune disease characterized by inflammatory arthritis, joint destruction and disability. In 2013, the United States Center for Disease Control and Prevention for Rheumatoid arthritis reported an overall 0.5-1% prevalence, with a female to male ratio of 2:1, with higher incidences occurring from the fifth decade onwards. RA is associated with high

morbidity, including physical and work-related disability and increased mortality, predominantly due to accelerated coronary artery and cerebrovascular disease⁴.

MATERIAL AND METHODS

This was a cross-sectional study carried out in the patients with clinical features of rheumatoid arthritis at tertiary health care center during the one-year period i.e. January 2016 to January 2017. All the suspected patients with the clinical features of Rheumatoid arthritis were included into the study, all such patients were undergone clinical evaluation and RA test serologically and included into the study so during one-year period there were 57 patients of Rheumatoid arthritis were identified and included into the study. All details of the patients like age, sex, radiological features, extra articular manifestation if any were recorded.

RESULT

Table 1: Distribution of the patents as per the age

Age	No.	Percentage (%)
20-30	3	5.26
30-40	28	49.12
40-50	10	17.54
50-60	9	15.79
>60	7	12.28
Total	57	100.00

The majority of the patients were in the age group of 30-40 were 49.12% , followed by 40-50 17.54 %, 50-60 were 15.79%, >60 were 12.28%, 20-30 were 5.26%.

Table 2: Distribution of the patients as per the sex

Sex	No.	Percentage (%)
Female	42	73%
Male	21	37%
Total	57	100%

The majority of the patients were Female i.e. 73% and Male were 37%, the female to male ratio was 2: 1.

Table 3: Distribution of the patients as per the clinical features

Clinical features	No.	Percentage (%)
Joint pain	51	90%
Malaise	50	87%
Fever	49	86%
Joint swelling	48	85%
Limitation of movements	46	80%
Joint stiffness	43	75%
Generalized lymphadenopathy	34	60%

The majority of the patients were having clinical features of Joint pain - 90%, Malaise -87% Fever-86%, Joint swelling -85%, Limitation of movements -80%, Joint stiffness -75%, Generalized lymphadenopathy -60%

Table 4: Distribution of the patents as per radiological features

Radiological feature	No.	Percentage (%)
Soft tissue swelling	46	80%
Joint space narrowing	44	78%
Juxtaarticular osteopenia	43	75%
Joint erosions	24	42%
Intra-articular loose bodies	13	23%
Joint subluxation	6	11%

The most common radiological features were Soft tissue swelling- 80% followed, Joint space narrowing-78%, Juxta articular osteopenia -75%, Joint erosions -42%, Intra-articular loose bodies -23%, Joint subluxation -11%.

Table 5: Distribution of the patients as per the extraarticular manifestation

Extraarticular manifestation	No.	Percentage (%)
Episcleritis	5	9%
Rheumatoid nodules	4	7%
Mitral regurgitation	3	5%
Pleuritis	2	4%
Coronary artery disease	2	4%
Sjogrens syndrome	1	2%

The most common extra articular manifestation were Episcleritis-9%, followed by Rheumatoid nodules-7%, Mitral regurgitation -5%, Pleuritis -4%, Coronary artery disease ,4%, Sjogrens syndrome in 2%.

DISCUSSION

Indeed, cardiovascular (CV) events occur approximately a decade earlier in RA patients 4, suggesting that RA, like diabetes mellitus, is a risk factor for premature CV disease 5. The increased CV risk in RA appears to be due to both chronic inflammation and traditional risk factors^{6,7}. Besides the increased risk of developing CV disease, there are additional factors occurring more frequently in RA patients that may worsen the clinical outcome of RA patients with a concomitant coronary artery disease (CAD), including an increased frequency of diffuse multivessel coronary artery disease, microvascular coronary artery disease 8and a disparity in the quality of care^{9,10}. The clinical picture of Rheumatoid arthritis is mainly related to the affection of peripheral joints. Symmetric involvement of hands, wrist, knee and feet are classically described. Extra-articular involvement of organs like skin, heart, lungs and eyes can also be significant. Prodromal symptoms such as fatigue, weight loss, transient pain in muscles and joints, sweating, paraesthesia and migrant swelling are often reported before the onset of the classical clinical picture.¹¹ In our study we have seen that the majority of the patients were in the age group of 30-40 were 49.12%, followed by 40-50, 17.54 %, 50-60 were15.79%, > 60 were12.28%, 20-30 were 5.26%. It was similar to Pradnya M Diggikar¹²

they found that the maximum incidence of rheumatoid arthritis was seen in the age group of 31 – 40 years (46%) and 41-50 years (30%). The majority of the patients were Female i.e. 73% and Male were 37%, the female to male ratio was 2: 1. Pradnya M Diggikar¹² they found that 84% cases with RA were females (84 cases) and 16% were males (16 cases) and F: M ratio-5.25:1. The majority of the patients were having clinical features of Joint pain - 90%, Malaise -87%. Fever-86%, Joint swelling -85%, Limitation of movements -80%, Joint stiffness -75%, Generalized lymphadenopathy -60%, Grassi et al reported that the commonest triad of symptoms indicted by synovitis includes pain in the joint, joint swelling and motion impairment.¹³ They also reported that Joint stiffness in the morning lasting at least 1 hour before maximal improvement is typical of RA.⁹ Fever was reported by 26% of the patients in this study.¹⁴ The most common radiological features were Soft tissue swelling-80% followed , Joint space narrowing-78%, Juxta articular osteopenia -75%, Joint erosions -42%, Intra-articular loose bodies -23%, Joint subluxation -11%. Pradnya M Diggikar¹² found commonest radiological changes were juxta articular osteopenia and soft tissue swelling (74%). Jacoby et al also reported that in their study on 100 patients, the most commonly involved joints were metacarpophalangeal joints , wrist joint, and proximal interphalangeal.¹⁵ The most common extra-articular manifestation were Episcleritis-9%, followed by Rheumatoid nodules-7%, Mitral regurgitation -5%, Pleuritis -4%, Coronary artery disease - 4%, Sjogrens syndrome in 2% .Pradnya M Diggikar¹² found Commonest manifestations were rheumatoid nodules (10%, 15 cases), episcleritis (10% 10cases), pleuritis (4 cases, 4%), coronary artery disease (4 cases, 4% mitral regurgitation (4 cases, 4%), sjogrens syndrome (4 cases, 4%), periodontitis (4 cases, 4%).

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