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## A Study of clinical profile of people with rheumatoid arthritis

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### Abstract

Rheumatoid arthritis is distinguished by recurrent inflammation of the joints, destruction of cartilage and bone, considerable activity restriction, a decline in quality of life, and frequently the development of systemic problems. In recent years, there have been a lot of advancements in diagnostic and treatment modalities that are available for RA. Additionally, better access to tertiary care centres in the country has contributed to these developments. The purpose of this study was to conduct an analysis of the current clinical profile of RA patients who were presenting themselves to a tertiary care centre in the south western area of India.

**Keywords:** Rheumatoid, arthritis, clinical, profile

### Introduction

Rheumatoid arthritis, also known as RA, is a chronic autoimmune illness that affects the entire body. The disease can progress in a number of different ways. A sizeable proportion of the population exhibits symptoms such as ongoing pain and stiffness, progressive joint degeneration, functional impairment, and increasing morbidity and death <sup>[1]</sup>. The disease is characterized by a persistent inflammation of the joints, as well as destruction to the cartilage and bone, which leads to a severe loss in the quality of life, significant activity limitations, and often systemic consequences <sup>[2]</sup>. In recent years, there have been a number of advancements in diagnostic and therapeutic methods that are accessible for RA. Additionally, increased access to tertiary care centres in the country has contributed to these improvements. The purpose of this study was to conduct an analysis of the current clinical profile of RA patients who were presenting themselves to a tertiary care centre in the south western area of India.

### Materials and Methods

This was a prospective observational study that took place in a hospital setting and was carried out in India within a tertiary care teaching hospital. Following authorization from the institution's ethics committee, the research was carried out over a period of six months, from January 2013 to July 2014. A predesigned questionnaire was used to conduct an assessment on each and every diagnosed consecutive case of RA that was seen in our OPD or admitted to one of our wards. The American College of Rheumatology Criteria-2010 for Rheumatoid Arthritis was utilised to diagnose every patient <sup>[3]</sup>. Patients who had any other type of joint disease, patients who were hesitant to participate in the trial, fractures that were at an acute stage, or patients who had a history of cancer were not eligible. The following categories were prioritised when collecting data: clinical history and presentation; articular and extra articular involvement.

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## Results

**Table 1:** Clinical Features

	Study population (n=200)	High Disease Activity (n=100)
	Percentage	Percentage
Fever	32	56
Joint Pains	100	100
Joint Swelling	93	97
Morning Stiffness	96	100
Joint Deformity	70	91
Limitation of Movement	76	100
Carpell Tunnel Syndrome	6	10
Lymphadenopathy	6	13
Splenomegaly	10	12

**Table 2:** Joint Involvement

	Study population (n=200)	High Disease Activity (n=100)
	Percentage	Percentage
PIP	82	91
MCP	95	98
Wrist	88	99
Elbow	52	69
Shoulder	35	54
Subtalar	31	41
Ankle	19	32
Knee	29	51
Cervical Spine	11	20

**Table 3:** Extra articular manifestations

	Study population (n=200)	High Disease Activity (n=100)
	Percentage	Percentage
Rheumatoid Nodules	9	23
Valvular heart disease	3	3
Sjogren Syndrome	3	4
Episcleritis	4	8
Periodontitis	4	9
Pleuritis	4	14
CAD	11	16

## Discussion

RA is a chronic disease that has an autoimmune cause and a varied course. It most commonly presents with joint involvement and can lead to significant morbidity as well as consequences in other parts of the body. The clinical picture of RA is characterised mostly by the involvement of peripheral joints, including hands, wrists, knees, and feet, in a symmetrical pattern. There is a possibility of significant extra-articular involvement of organs like the skin, heart, lungs, and eyes with this condition. Oftentimes, prodromal symptoms such as weariness, weight loss, transitory pain in muscles and joints, sweating, paresthesia, and migratory edema are present prior to the emergence of other symptoms and indications. Participation can be evident of any synovial joint in the body. The condition and its accompanying co-morbidities, which include cardiovascular disease (CVD), infections, depression, and gastrointestinal disorders, can become unmanageable if it is not treated [5]. RA sinusitis is distinguished pathologically by the presence of a leucocytic infiltration, a proliferative synovial membrane, and a neo vascularization, all of which contribute to the development of synovial hypertrophy. It is critical to get an early diagnosis of sinusitis since this pinpoints the location of the inflammatory process that occurs in rheumatic joints and provides a focus for therapeutic intervention [6]. The prevalence of RA varies from place to region, although the overall documented trends in the change in incidence and sex distribution are nearly identical across the

majority of populations [7] the majority of epidemiological investigations have been carried out in Western countries, where they have found a prevalence of between 0.5 and 1.0% in white people [8]. The incidence varies significantly among different racial and ethnic groupings. It has been claimed that Native American populations have a high incidence of between 5 and 6% [9]. In the city of Kinshasa, which is located in the Democratic Republic of the Congo, the whole black population has a prevalence of RA of 0.6%, while the prevalence of RA among black adults aged >18 years is 0.9% [10]. The discrepancies can be traced back to a complicated interaction between genetic and environmental factors, and as of right now, the majority of those components are still just theories. There were ten studies conducted in India, and the results ranged from 0.28% to 0.7% in prevalence. Community Oriented Program for the Control of Rheumatic Diseases (COPCORD) reported a prevalence of 0.51% for RA diagnosed with ACR criteria and 0.6% for RA diagnosed clinically in a study that was carried out in the year 1996 in the Bhigwan village of Pune district using surveys developed by WHO and International League of associations for Rheumatology (WHO-ILAR). This research was carried out using surveys developed by WHO and WHO-ILAR [11]. Mahajan *et al.* observed that the prevalence of the disease in Jammu was 0.7% [12]. The prevalence rate that was found in Ballabhgarh (Haryana) was 0.7% [13]. The urban region of Pune served as the location for the third COPCORD study.

They found that the prevalence of RA diagnosed according to ACR criteria was 0.28%, while the prevalence of RA diagnosed clinically was 0.45%. Among people who suffered from rheumatic illnesses of the musculoskeletal system, the prevalence of RA was found to be 3.5% [14]. The application of more recent diagnostic and therapeutic modalities has led to the development of novel treatment methodologies over time. Because rheumatoid arthritis (RA) causes the most damage in its first two years, early diagnosis and aggressive treatment are currently the top priorities. This study was carried out with the purpose of evaluating the clinical profile and disease activity evaluation of RA patients who were reporting to a tertiary care centre. Validated disease indicators were used for this purpose.

### Conclusion

Morbidity connected to RA continues to have a significant prevalence. The disease is more common in women, and a sizeable percentage of patients have a history of the condition in their families. The MCP and the wrists are the joints that are affected the most frequently, and the ulnar deviation of the digits is the malformation that we see the most frequently.

### References

1. Van Der Velde G, Pham B, MacHado M, Ieraci L, Wittman W, *et al.* Cost-effectiveness of biologic response modifiers compared to disease-modifying antirheumatic drugs for rheumatoid arthritis: A systematic review. *Arthritis Care Res.* 2011;63:65-78.
2. Premkumar B, Srinivasamurthy M, Rajagopal K. A retrospective study on clinical characteristics of rheumatoid arthritis patients. *Biosci Biotechnol Res Asia.* 2013;10:715-8.
3. Aletaha D, Neogi T, Silman AJ, Funovits J, Felson DT, *et al.* 2010 Rheumatoid arthritis classification criteria: An American College of Rheumatology/European League Against Rheumatism collaborative initiative. *Arthritis Rheum.* 2010;62:2569-81.
4. Mijiyawa M. Epidemiology and semiology of rheumatoid arthritis in Third World countries. *Rev Rhum Engl. Ed.* 1995;62:121-6.
5. Scott DL, Wolfe F, Huizinga TWJ. Rheumatoid arthritis. *Lancet.* 2010;376:1094-108.
6. Stenger AA, Van Leeuwen MA, Houtman PM, Bruyn GA, Speerstra F, Barendsen BC. Early effective suppression of inflammation in rheumatoid arthritis reduces radiographic progression. *Br J Rheumatol.* 1998;37:1157-63.
7. Myasoedova E, Crowson CS, Kremers HM, Therneau TM, Gabriel SE. Is the incidence of rheumatoid arthritis rising? Results from Olmsted County, Minnesota, 1955-2007. *Arthritis Rheum.* 2010;62:1576-82.
8. Tobón GJ, Youinou P, Saraux A. The environment, geoepidemiology, and autoimmune disease: Rheumatoid arthritis. *Autoimmun Rev.* 2010, 9(5).
9. Peschken CA, Esdaile JM. Rheumatic diseases in North America's indigenous peoples. *Semin Arthritis Rheum.* 1999;28:368-91.
10. Malemba JJ, Mbuyi-Muamba JM, Mukaya J, Bossuyt X, Verschueren P, *et al.* The epidemiology of rheumatoid arthritis in Kinshasa, Democratic Republic of Congo: A population-based study. *Rheumatology (Oxford).* 2012;51:1644-7.
11. Chopra A, Patil J, Billempelly V, Relwani J, Tandle HS; WHO-ILAR COPCORD Study. WHO International League of Associations from Rheumatology Community Oriented Program from Control of Rheumatic Diseases. Prevalence of rheumatic diseases in a rural population in western India: a WHO-ILAR COPCORD Study. *J Assoc Physicians India.* 2001;49:240-6.
12. Mahajan A, Jasrotia DS, Manhas AS, Jamwal SS. Prevalence of major rheumatic disorders in Jammu. *JK Sci.* 2003;5:63-6.
13. Malaviya AN, Kapoor SK, Singh RR, Kumar A, Pande I. Prevalence of rheumatoid arthritis in the adult Indian population. *Rheumatol Int.* 1993;13:131-4.
14. Joshi VL, Chopra A. Is there an urban-rural divide? Population surveys of rheumatic musculoskeletal disorders in the Pune Region of India using the COPCORD Bhigwan model. *J Rheumatol.* 2009;36:614-22.