ORIGINAL RESEARCH PAPER

Volume-7 | Issue-10 | October-2018 | PRINT ISSN No 2277 - 8179

INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

COMORBID CONDITIONS IN PATIENTS WITH RHEUMATOID ARTHRITIS : A PROSPECTIVE OBSERVATIONAL STUDY IN A TERTIARY CARE HOSPITAL.

General Medicine

Dr Shahbaz Khan Senior Resident Deptt. Of Medicine Gmc Jammu.

Dr Annil Mahajan* Prof. And Head Deptt. Of Medicine Gmc Jammu.*Corresponding Author

Dr Vishal Tandon Asstt. Prof. Deptt. Of Pharmacology Gmc Jammu.

ABSTRACT

Background :Rehumatoid arthritis is a systemic disease characterised by inflammation the principal hallmark of which is symmetric polyarthritis with main involvement of the small joints in hands and feet.In this prospective study a total of 110 patients were taken and various comorbid conditions associated with RA were noted. Rheumatoid arthritis (RA) is a systemic disease whose morbidity exceeds its mortality.

Materials and methods: In this prospective study conducted over one year a total of 110 patients who were diagnosed cases of rheumatoid arthritis were observed and various comorbid conditions present in these patients in addition to rheumatoid arthritis were noted so as to find incidence of the comorbid conditions. Inclusion of patients was done of those patients who fulfilled ACR/EULAR criteria for diagnosing rheumatoid arthritis.

Results: In this prospective study of 110 patients it was found that the most common comorbid condition was hypertension followed by diabetes followed by anaemia and hypothyroidism which is in accordance with most of the previous studies.

Conclusions: The current study highlights Rheumatoid arthritis to be very common rheumatological problem presenting commonly in 5th to 6th decade of life with female predominance. It vindicates the fact that various comorbid conditions in patients with rheumatoid arthriris are on rise and contributes to increase in mortality and morbidity in patients with rheumatoid arthritis.

KEYWORDS

Rehumatoid Arthritis,Depression,Quality Of Life,Comorbidities.

INTRODUCTION

Rheumatic diseases have a gross impact on the economic and social burden in addition to the impairment of quality of life in individuals in almost all domains of quality of life.Most rheumatic diseases are associated with high levels of pain and reduced physical function. Rehumatoid arthritis is associated with long-term disability, and accountable for a considerable part of the total health care costs in western countries. Rheumatoid arthritis, one of the very important rheumatic disorders, has been shown to have alarming increase in its prevalence in worldwide studies and is known to cause physical, social and economic burden **Malviya *et al,* Chopra *et al,*, Mahajan *et al,* (1,2,3).** Its prevalence has been reported to vary from. 0.3 to 2% whereas incidence varies from 0.9 to 1.5 per 1000 per year. Rheumatoid arthritis (RA) is a systemic disease whose morbidity exceeds its mortality. Survival in RA patients is significantly lower than expected. The strongest predictors of survival appear to be those related to RA disease complications, specifically, extra-articular manifestations of the disease and comorbidities **Gabriel *et al,*(4)**. Due to presence of systemic manifestations in patients of RA and presence of various co-morbid conditions among patients of RA there is usually polypharmacy and complexity of treatment regime, leading to increase in the potential of possible drug-drug interaction, drug-disease interaction and increased incidence of adverse drug events. All of these factors directly or indirectly carry a potential to affect overall compliance of treatment and quality of life. **Matcham *et al,* (5)** in their study found that RA has a greater impact on physical HRQoL than mental well-being. Furthermore, patients with RA have notably reduced levels of physical function, and bodily pain in comparison to other health conditions (hypertension, congestive heart failure, type 2 diabetes, myocardial infarction and clinical depression).

METHODS AND MATERIALS

The present prospective observational and cross-sectional one point analysis study entitled **Comorbid conditions in patients with rheumatoid arthritis : A prospective observational study in a tertiary care hospital** , was conducted from Nov. 2014 to Oct. 2015. The study group comprised of patients attending Medicine OPD in Govt. Medical College, Jammu. . The said project was approved and permitted by the Institutional Ethics Committee GMC Jammu vide Ref. No. IEC/ 2015/ 187.

INCLUSION CRITERIA

Diagnosis of rheumatoid arthritis was done on basis of 2010-ACR-EULAR classification criteria for RA.

In case of any diagnostic dilemma patients were suggested for:

1) Rheumatoid factor by nephlometry.
2) Anti CCP antibodies.
3) ESR/CRP.

EXCLUSION CRITERIA

- Patients who needed hospital admission or those with any other forms of lower limb immobility or abnormality such as paraplegia.
- Critically ill patients, pregnant women, lactating women.

In the present study the demographic profile of all the patients was taken example-age, sex, weight, BMI, urban verses rural ,disease severity, Duration of disease, occupation, any sports activities etc. Detailed history about Rheumatoid Arthritis was taken. History about any other coexistence disease was taken. Detailed examination of the patients was done.

RESULTS: The present study was carried out on 110 patients of the Rheumatoid Arthritis as diagnosed on the basis of ACR-EULAR criteria. The mean age of study population was recorded as 51.34 years. There was a female predominance as 79.1% of the patients were females in comparison to 20.9% males with a male to female ratio of 1:3.78 . Using DAS score, most of the patients (54.54%) were found to have moderate disease activity followed by 24.54% of patients which were in disease remission phase. Using VAS score severe (50%) to very severe (37.3%) pain was seen in most of the patients. Many patients were having more than one comorbidities. The clinical profile of patients revealed that comorbidities were seen in 76 (69.1%) patients out of the 110 study group, with maximal patients having two comorbidities i.e. 36.36% (n=40). One comorbidity was seen in 26.36% (n=29) of patients, three comorbidities in 5.45% (n=6) of patients and four comorbidities were seen in 0.9% (n=1) of patients. Hypertension was the most common comorbidity seen present in 37.72% (n=36) patients. Diabetes being the second most common with 25.45% (n=28) patients followed by 19% (n=24) patients having anaemia. Hypothyroidism was present in 15.45% (n=17) of patients while CKD, COAD and Bronchial Asthma were present in 4.54% (n=5), 3.63% (n=4), 0.9% (n=1) of patients respectively.

Distribution of patients on the basis of Comorbidities (n=110)

(A) Comorbidities Present or Absent

Comorbidities	No. of Patients	Percentage
Yes	76	69.1
No	34	30.9

(B) No. of Comorbidities Present

No. of Comorbidities	No. of Patients	Percentage
0-1	63	57.26
2-3	46	41.81
4-5	1	0.9

(C) Most common comorbidities associated with RA.

Medical Conditions	No. of Patients	Percentage
Hypertension	36	32.72
Diabetes	28	25.45
Anaemia	21	19
Hypothyroidism	17	15.45
CKD	5	4.54
COAD	4	3.63
Bronical Asthma	1	0.9

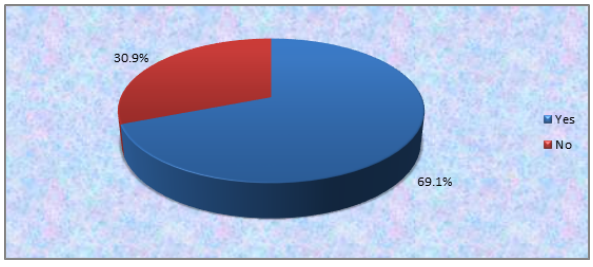

FIG. (A): Distribution of Patients on the Basis of Comorbidities

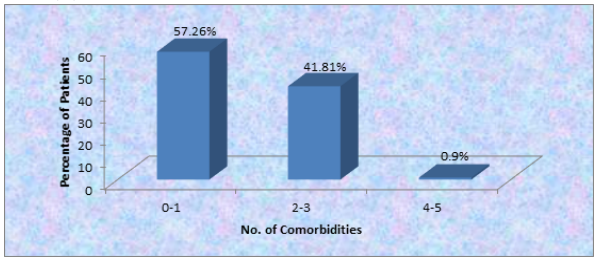

FIG. (B): Distribution of Patients on the Basis of No. of Comorbidities Present (n=110)

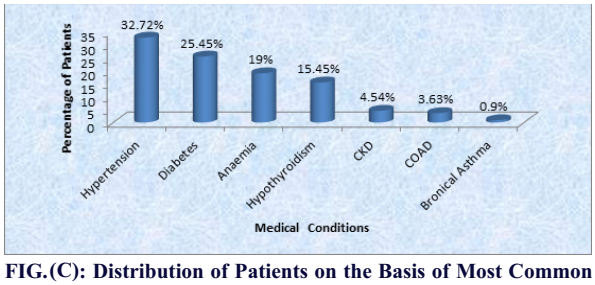

FIG.(C): Distribution of Patients on the Basis of Most Common Comorbidities Associated with RA (n=110)

DISCUSSION:

- 69.1% of patients had at least one comorbid condition
- Most of them had two comorbid conditions (36.36%).
- Hypertension was the most common comorbid condition present in 32.72% of the patients followed by diabetes (25.45%).

Rheumatoid Arthritis affects many aspects of individuals' lives and its impact extends beyond those areas traditionally considered to be within the domain of medical intervention. It is therefore complex to attempt to summarise in a succinct manner how RA affects individuals; its impact differs from case to case depending on a whole host of personal factors. The most common comorbid condition was hypertension followed by diabetes followed by anaemia and hypothyroidism in the study, which is in accordance with study done by Bishri et al, (6) which also shows hypertension followed by diabetes most common comorbid condition associated with Rheumatoid arthritis. Similar results were found by Wolfe F et al, (7) in their study in which there was high incidence of hypertension in patients of rheumatoid arthritis as compared to other comorbid illnesses.

Conclusions: The current study highlights Rheumatoid arthritis to be very common rheumatological problem presenting commonly in 5th to 6th decade of life with female predominance. It demonstrates that, at present, the management of comorbidities in patients with RA is far from optimal. As in this study, the systematic evaluation of RA patients for evidence of comorbidities may uncover previously undiagnosed conditions in some patients. The treating rheumatologist should consider the periodic assessment of comorbidities as one of the tasks involved in treating a patient with RA. This should be carried out in collaboration with primary care providers and other specialists who are involved in the care of these patients. However, the increasing complexity of managing treatment of RA with effective combinations of traditional and biological DMARDs in the setting of progressively decreasing amounts of time available for direct interaction with the patient makes this additional responsibility challenging.Thus results of the current study further impress upon comprehensive and aggressive management plan involving clinicians as well as persons from allied specialties for early diagnosis of Rheumatoid Arthritis as early as window period, so as to institute treatment and improve QOL of patients in all spheres.

Conflicts of interest : NONE

REFERENCES

1. Malaviya AN, Singh RR, Kapoor SK. Prevalence of rheumatic diseases in India: results of a population study. J Ind Rheumatism Assoc 1994; 2: 13-17
2. Chopra A, Pat HJ, Billempelly V. Prevalence of rheumatic disease in a rural population in western India: A WHO-ILAR COPCORD Study. J Assoc Physicians India 2001; 49: 240-46
3. Kudial S, Tandon VR, Mahajan A. Rheumatological disorder (RD) in Indian women above 40 years of age: A cross-sectional WHO-ILAR-COPCORD-based survey. Journal Mid-life Health 2015; 6(2): 76
4. Gabriel SE, Crowson CS, Kremers HM, Doran MF, Turesson C, O'Fallon WM et al. Survival in rheumatoid arthritis: a population-based analysis of trends over 40 years. Arthritis Rheum 2003; 48(1): 54-58
5. Matcham F, Scott IC, Rayner L, Hotopf M, Kingsley GH. The impact of rheumatoid arthritis on quality-of-life assessed using the SF-36: a systematic review and meta-analysis. Semin Arthritis Rheum 2014; 44(2): 123-30
6. Al-Bishri J, Attar SM, Bassuni N, Al-Nofaiey Y, Qutbuddeen H, Al-Harthi S, et al. Comorbidity profile among patients with rheumatoid arthritis and the impact on prescriptions trend. Clinical medicine insights. Arthritis Musculoskeletal Disorders 2013; 6:11
7. Wolfe F, Michaud K. Severe rheumatoid arthritis (RA), worse outcomes, comorbid illness, and sociodemographic disadvantage characterize RA patients with fibromyalgia. The Journal Rheumatology 2004; 31(4): 695-700
8. Scott DL, Smith C & Kingsley G. What are the consequences of early rheumatoid arthritis for the individual. Best Pract Res Clin Rheumatol 2005; 19(1): 117-36