ASS 2022 – OP 07

Prevalence of metabolic syndrome among Patients with Rheumatoid Arthritis attending to Rheumatology Clinic at National Hospital, Kandy, Sri Lanka

Farah MMF[1], Vasanthathilaka VWJ[2]

1. Acting Consultant in Rheumatology and Rehabilitation Medicine - BH Mahiyanganaya
2. Consultant in Rheumatology and Rehabilitation Medicine - NH Kandy

Background/Purpose

It is vital to screen, diagnose, monitor, and treat the components of metabolic syndrome (MetS) among rheumatoid arthritis (RA) patients to reduce morbidity and mortality due to MetS. Hence, the main aim of this study is to assess the prevalence and associated risk factors for MetS among RA patients.

Methodology

This is a descriptive cross-sectional study conducted among 72 patients diagnosed with RA at Rheumatology clinic, National Hospital Kandy. An interviewer administered data collection form was used to collect the data from the patients. The South Asian modified NCEP criteria was used to diagnose the MetS. Ethical clearance was obtained from ethical review committee at National Hospital Kandy. Data analysis was done by SPSS version 20.

Results

Majority of the patients were female (n=63; 87.9%). Disease and the treatment duration of the RA among study participants were 10.0 ± 8.2 and 9.8 ± 8.2 years, respectively. Highest number of the patients were in 41-50 years age group. Rheumatoid factor was positive among 75% (n=54) of study population. Presence of bone erosions was statistically significant (p value - 0.049). Majority (n=39, 54.2%) had a well-controlled disease with a DAS Score of ≤ 3.2. MetS was prevalent among 45.8% (n=33) of the patients. Majority (n=47,65.2%) of patients had a BMI of $\geq$ 23kg/m^2. Most prevalent component was high waist circumference followed by hypertension and high fasting blood sugar was the least prevalent component. A substantial proportion of participants did not engage in any physical activity/exercise (n=66, 91.7%). Majority of participants did not smoke (n=69, 95.8%) or take alcohol (n=66, 91.7%).

Patients with MetS had high mean value of AST (89.50 vs 27.34 U/I), ALT (31.62 vs 26.17 U/I)). However, mean of Hb is lower among patients with MetS than non-MetS patients (11.57

vs 12.07 g/dL). There were no statistically significant associations found between demographic factors, risk factors, disease activity, biochemical investigations & the presence of MetS. Statistically significant association (p=0.002) found between use of hypoglycaemic agents and presence of MetS.

Conclusion

A considerable proportion of participants of this study were diagnosed with MetS. Although, there were no statistically significant association found between risk factors and MetS, certain risk factors are common among the study population which could increase the cardiovascular disease risk and MetS. Therefore, early identification is essential to reduce the morbidity and mortality related to MetS. We recommend further studies to identify the risk factors for MetS among RA patients.