Tofacitinib in Patients with Rheumatoid Arthritis: Real World Data

Zainab Kallow[1], Michael Mourad[2], Farida Al Balushi[1] Issa Al Salmi[3],Maha Ali[4] , Talal Al Lawati[5] , Prabha Liyanage[1]

[1]Rheumatology Unit, Royal Hospital, Muscat, Oman
[2] Rheumatology Wessex deanery, NHS health educations , United kingdom.
[3]Nephrology department, Royal Hospital, Muscat, Oman
[4]Department of Medicine, Al Nahdha Hospital, Muscat, Oman
[5]Adult rheumatology unit ,Sultan Qaboos university hospital , Muscat, Oman

Correspondence to : Dr.Farida Al Balushi MD, FRCP ,Consultant rheumatologist , Rheumatology Unit,Royal Hospital, PO Box 1331, Postal code 111, Muscat, Oman.
Email: dr.farida.balushi@gmail.com

Abstract:

Introduction: Rheumatoid arthritis (RA) is an inflammatory disease that causes progressive joint destruction. There are different therapeutic options used in management of RA. Tofacitinib is a Janus kinase (JAK) inhibitor which is a relatively new treatment option approved for rheumatoid arthritis categorized under targeted synthetic disease-modifying antirheumatic drugs (ts DMARDs). Tofacitinib can be used as a monotherapy or in combination with methotrexate. This observational study aims to investigate the safety and efficacy of tofacitinib in RA patients.

Method: This is an observational study of RA Patients, who were prescribed Tofacitinib from January 2017 to Sep 2020. The study was conducted at the Royal hospital, Muscat. Patient's data were collected using the hospital electronic medical records.

Results: Total of 79 patients were included in the study. Data analysis showed females predominance of 92.4 % with median age of 53 years. The mean disease duration at time of Tofacitinib initiation was 86 months The baseline mean (SD) of swollen joints and Tender joints before initiation of tofacitinib was 3.18(3.8) and 8.5 (7.8), respectively. The baseline (SD) of ESR and C-Reactive protein (mg/dl) before initiation of tofacitinib was 56.3 (35) and 19.95

(31.25), respectively. The mean (SD) of DAS 28 at presentation was (4.9) 1.249. 83% of patients received combination therapy with methotrexate rather than monotherapy. The overall retention rate for tofacitinib at twelve months was 41 patients out of 79 (52%). There was significant reduction in total tender joints and total swollen joints over 3,6 months durations compared to baseline (p-value of 0.004, 0.0003 respectively). Majority of patients were on concomitant methotrexate. Five patients (12.5%) experienced significant adverse events requiring withdrawal of treatment.

Conclusion:

Tofacitinib was an effective and safe treatment option for rheumatoid arthritis in Omani population. There were no significant recorded complications related to tofacitinib use.