Abstract

Rheumatoid arthritis (RA) presents a significant healthcare challenge, requiring effective treatment to manage symptoms and enhance patient outcomes. Recent advancements have broadened the therapeutic landscape with biologic and targeted synthetic disease-modifying antirheumatic drugs, enabling more personalized treatment approaches. Understanding the comparative efficacy and safety of these medications is essential for tailoring treatment to individual patient needs, considering factors like disease severity and treatment goals.

This thesis aims to address the knowledge gap regarding the effects and safety of Infliximab, Rituximab, and Baricitinib in RA patients, providing insights for clinicians and researchers.

A retrospective study was conducted at Benghazi Medical Center, including 80 RA patients treated with these drugs from 2018 to 2023. Data collected encompassed patient demographics, education level, residence, illness duration, medication details, side effects, efficacy, comorbidities, and laboratory results. Ethical approval was obtained, and patients meeting specific criteria were included.

Results showed a predominance of females, with the 40-60 age group being the most represented. Significant differences were noted in education, residence, and anthropometric measurements. Illness duration varied, with Infliximab and Baricitinib patients typically diagnosed between 6 to 10 years, while Rituximab patients were distributed across 1-5 years and 6-10 years. Most patients reported no side effects, with Infliximab having the highest percentage of side effects. Rituximab showed higher efficacy compared to the other drugs, with significant reductions in ESR and CRP observed post-treatment. All groups demonstrated a significant reduction in DAS after treatment, with Infliximab and Rituximab showing a statistically significant decrease in tender and swollen joints compared to Baricitinib.

In conclusion, this study highlights the efficacy and safety of Infliximab, Rituximab, and Baricitinib in managing RA, supporting the need for individualized treatment strategies to enhance patient care and outcomes.

Keywords: Disease Activity Score, Efficacy, Safety, Inflammatory Markers.