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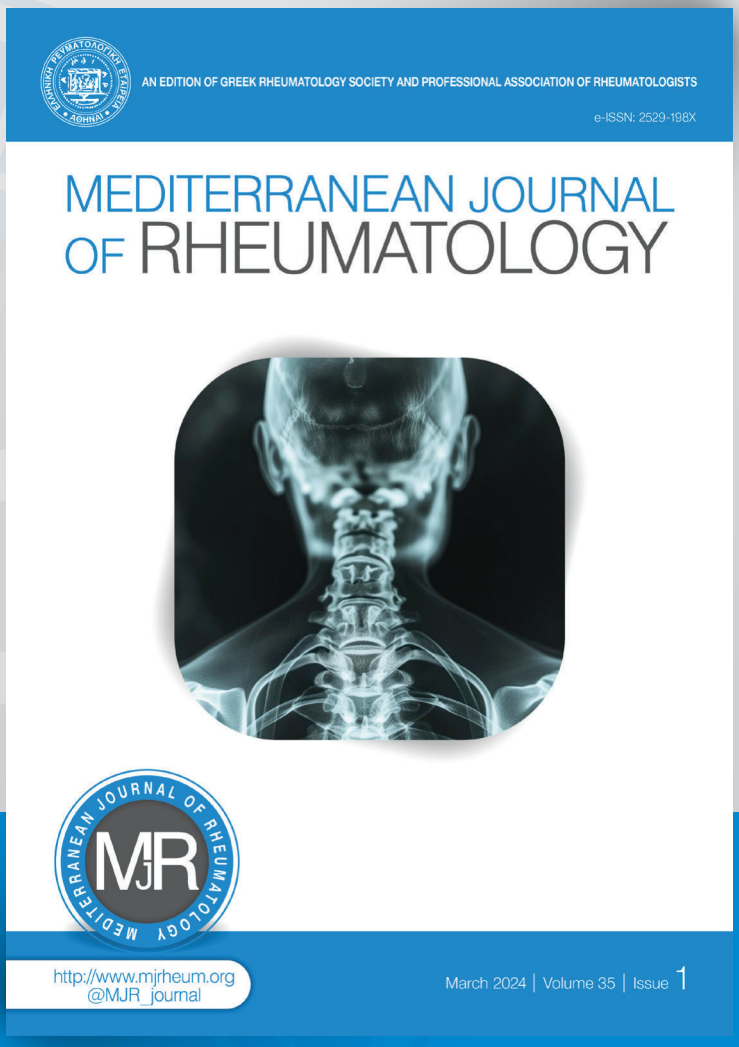
Mediterr J Rheumatol 2024;35(2):234-40



E-ISSN: 2529-198X

MEDITERRANEAN JOURNAL OF RHEUMATOLOGY | 35 2 2024

ORIGINAL PAPER

Factors Influencing Liver Abnormalities in Psoriatic Arthritis Patients: A Comprehensive Study

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ABSTRACT

Objective: The aim of this study was to establish the incidence of liver abnormalities in psoriatic arthritis patients and identify the factors that contributed to this condition. **Methods:** This is a longitudinal cohort study. Psoriatic arthritis (PsA) patients with liver enzymes abnormalities were identified. Our control group consisted of PsA patient from the same cohort who had no history of liver abnormalities. Factors associated with liver abnormalities were identified using univariate and multivariate analysis. **Results.** A total of 247 of PsA patients were included and out of those, 99 developed liver enzymes abnormalities. The mean age of the patients was 56 years old (±13.5) with 56.1% female and 39.4% Indian descendants. The univariate logistic regression demonstrated that disease duration of PsA (OR=1.06, 95% CI=1.01 - 1.10, p=0.012), diabetes mellitus (OR=2.16, 95% CI=1.26 - 3.70, 0.005) and non-alcoholic fatty liver disease (NAFLD) (OR=3.90, 95% CI = 1.44 - 10.53, p=0.007) were associated with abnormal liver function in PsA patients. No association was found with both conventional synthetic disease-modifying antirheumatic drugs or biologics. **Conclusion:** Liver enzymes abnormalities in PsA patients were linked to disease duration, diabetes mellitus and NAFLD. For these high-risk populations, vigilant monitoring of liver function tests is vital for early detection and intervention.

Mediterr J Rheumatol 2024;35(2):234-40

https://doi.org/10.31138/mjr.050723.fla

Article Submitted: 05 Jul 2023; Revised Form: 31 Jul 2023; Article Accepted: 11 Aug 2023; Available Online: 27 Aug 2023

Keywords: disease duration, diabetes mellitus, liver enzymes abnormalities, non-alcoholic fatty liver disease, psoriatic arthritis

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INTRODUCTION

Psoriatic arthritis (PsA) is a type of arthritis associated with psoriasis that affects both spinal and peripheral joints, as well as entheses and dactylitis. Recent research has found a connection between psoriasis and various comorbidities, including metabolic syndrome and cardiovascular disease.[1] Studies have shown that non-alcoholic fatty liver disease (NAFLD) is the most prevalent liver abnormality in individuals with psoriatic disease with both obesity and metabolic syndrome as risk factors.[2,3] NAFLD ranges from simple steatosis to steatohepatitis, cirrhosis, and hepatocellular carcinoma, in the absence of excessive alcohol intake.[4]