

ASSESSMENT OF COGNITIVE FUNCTIONS IN PSORIATIC ARTHRITIS PATIENTS PROCJENA KOGNITIVNIH FUNKCIJA U BOLESNIKA SA PSORIJATIČNIM ARTRITISOM

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Introduction: Rheumatic diseases and psoriasis (PsO) are associated with an increased risk of cognitive dysfunction. However, data about cognitive status in psoriatic arthritis (PsA) is limited. The aim of the study was to assess cognitive functions in patients with PsA in comparison to a control group.

Participants and methods: Sixty-seven adult patients with PsA and 69 healthy controls, with minimum 8 years of formal education, were consecutively enrolled in a single-center cross-sectional study. Individuals with fibromyalgia, vitamin B12 and folic acid deficiency, serious neurological or psychiatric disorders, and chronic inflammatory disease other than PsA and PsO were not included. PsO patients were not included in the control group. Cognitive functions were assessed using the Montreal Cognitive Assessment (MoCA) and the Trail Making Test (TMT) A and B. Depression and anxiety symptoms were measured using Beck Depression Inventory-II (BDI-II) and State-Trait Anxiety Inventory (STAI). Visual Analog Scale pain and FACIT-Fatigue were recorded. Standard clinical assessments for PsA and PsO were conducted.

Results: Patients with PsA performed significantly worse on the TMT-A test compared to controls (median= 36.0 s [range: 15–182] vs 28.0 s [range: 13–89], $p=0.005$, Mann–Whitney U test). No significant differences between the groups in TMT-B, as well as in MoCA total and individual domain scores were observed. The proportion of individuals with mild cognitive impairment (MoCA<26) did not significantly differ between the PsA and the control group (37.3% vs 24.6%, $p=0.157$, χ^2 -test). MoCA and TMT showed no correlation with clinical parameters of PsA and PsO severity. PsA patients exhibited higher levels of depression (BDI-II median: 8.0 vs 6.0, $p=0.020$), trait anxiety (STAI-T median: 39.0 vs 35.0, $p=0.015$), and fatigue (FACIT-Fatigue median: 38.0 vs 42.0, $p=0.004$). No significant differences in sociodemographic parameters and pain intensity were noted.

Conclusion: PsA patients underperformed on the TMT-A test and might be at slightly increased risk of cognitive decline, but further research is needed to precisely estimate that risk.

Keywords: psoriatic arthritis, cognitive dysfunction, Montreal Cognitive Assessment (MoCA), Trail Making Test (TMT)

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