

## FREQUENCY OF CARDIOVASCULAR RISK FACTORS IN PATIENTS WITH PSORIATIC ARTHRITIS: A CROSS-SECTIONAL STUDY

### UČESTALOST KARDIOVASKULARNIH RIZIČNIH ČIMBENIKA U BOLESNIKA SA PSORIJATIČNIM ARTRITISOM: PRESJEČNO ISTRAŽIVANJE

Kristina Kovač Durmiš<sup>1,2</sup>, Iva Žagar<sup>1,2</sup>, Nadica Laktašić Žerjavić<sup>1,2</sup>, Sanda Špoljarić Carević<sup>3</sup>, Mislav Pap<sup>2</sup>, Nataša Kalebota<sup>2</sup>, Ivan Ljudevit Caktaš<sup>2</sup>, Nikolino Žura<sup>4</sup>, Porin Perić<sup>1,2</sup>

<sup>1</sup>*School of medicine, University of Zagreb, Croatia*

<sup>2</sup>*University Department for Rheumatic Diseases and Rehabilitation, University Hospital Centre Zagreb, Croatia*

<sup>3</sup>*Special Hospital for Medical Rehabilitation Naftalan, Ivanić-Grad, Croatia* <sup>4</sup>*University of Applied Health Sciences, Zagreb, Croatia*

**Introduction:** Inflammatory rheumatic diseases (IRD), including psoriatic arthritis (PsA), are associated with increased cardiovascular (CV) risk due to systemic inflammation, multiple comorbidities, and medications used. The aim of the study was to investigate the prevalence of traditional CV risk factors among patients with PsA in comparison to a control group.

**Participants and methods:** A total of 67 patients with PsA, and 69 control subjects without IRD or psoriasis (PsO), were consecutively enrolled in a cross-sectional study. The study was conducted in the Clinical Hospital Center Zagreb from 2021 to 2023. Data on tobacco use, body mass index (BMI), the diagnosis of hypertension, diabetes mellitus (DM), dyslipidemias, and hyperuricemia were obtained through medical history taking and clinical examination. Tobacco use was assessed by smoking status (never, former or current smoker), number of cigarettes smoked per day, and number of years smoked. A standard evaluation of PsA disease activity and functional status was performed. C-reactive protein was used to calculate disease activity scores. Basic sociodemographic parameters were recorded.

**Results:** Obesity and overweight were highly prevalent in both PsA (37.3 % and 76.1 %, respectively) and control group (33.3 % and 75.4 %, respectively), with no significant differences between the groups ( $\chi^2$ -test,  $p = 0.88$ ). A higher proportion of PsA patients had DM (7.4%) compared to the controls (0.7%) (Fisher exact test,  $p < 0.01$ ). As anticipated, hyperuricemia was significantly more frequent in the PsA group (14.7% vs. 3.7%, Fisher exact test,  $p < 0.01$ ). Group comparison showed no significant differences in hypertension and dyslipidemia prevalence. Additionally, no difference was noted regarding tobacco use, with the exception that patients with PsA had a shorter smoking history (median 11.5 vs. 20.0 years, Mann-Whitney U test,  $p = 0.01$ ). Median DAPSA was 16.7 (range: 0.1- 68.2), HAQ 0.875 (range: 0- 2.1), and PASI score 1.4 (range: 0- 15). Sociodemographic variables, including age and gender, were equally distributed between the groups.

**Conclusion:** Patients with PsA in this study are at higher CV risk and more likely to suffer from diabetes and hyperuricemia. Concerning obesity and overweight levels in PsA and control group necessitate comprehensive public health intervention combined with individualized bio-psycho-social disease management.

**Keywords:** psoriatic arthritis, cardiovascular diseases, risk factors, obesity, diabetes mellitus

**E-mail of the main author:** kristinakovacdurmis@gmail.com

**Conflict of interest statement:** The authors declare no conflict of interest.