

ABSTRACT

Background: Psoriasis is a chronic inflammatory skin disease, the prevalence of which is around 2% to 5%. According to recent findings, psoriasis is associated with multiple other diseases called co-morbidities, which aggravate the quality of life of psoriatic patients, and affect their morbidity and mortality. Many studies have already demonstrated that the prevalence of metabolic syndrome and atherosclerosis is significantly higher in psoriatic patients than in the common population. The results of individual studies are highly variable and the conclusions are ambiguous. We therefore initiated a project aimed at identifying the presence of cardiovascular risk factors and subsequently creating regular screening program to provide the secondary prevention.

Aims: The objective of this study is to analyse the prevalence of cardiovascular risk factors (waist circumference, blood pressure, dyslipidaemia, prediabetes) in cases and controls and the potential association between subclinical atherosclerosis and psoriasis by ultrasound measuring the intima-media wallthickness of the common carotid artery in patients with psoriasis and controls. The major priority of the study is to use obtained data in secondary prevention screening program in psoriatic patients.

Methods: The study was designed as a case-control study. In each study subject we determine the following: blood pressure, glycemia, blood lipids, CRP, waist circumference, age, sex, weight, height, presence of smoking. In psoriatic patients we evaluated BSA (body surface area) and PASI (psoriatic severity index). Furthermore, in the subset of 117 cases and controls (matched 1:2) we evaluated the intima-media wallthickness of the common carotid artery.

Results: The comparison of cases and controls revealed statistically significant differences in terms of several observed parameters: waist circumference and BMI, level of triacylglycerol, HDL cholesterol, LDL cholesterol, total cholesterol, blood pressure (systolic and diastolic) and CRP. Differences between glucose level and intima-media thickness of the right and left common carotid artery in cases and controls did not reach the level of statistical significance.

Conclusions: The results of a study suggest that detection of elevated or pathological values in several investigated parameters reached levels of statistical significance therefore, a regular screening of patients with chronic stationary form of psoriasis should become a standard for dermatologists in cooperation with general practitioners. Early diagnostics of cardiovascular comorbidities and risk factors benefit psoriasis patients' health and quality of life, but it will also optimize available resources.