

Associations of Metabolic Cardiovascular Risk Factors in Patients with Psoriasis and/or Psoriatic Arthritis

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Introduction

As it has been previously reported, Psoriasis (Ps) and Psoriatic Arthritis (PsA) are associated with Metabolic Syndrome. The variability of these associations between patients with Ps and PsA is not completely defined.

Aim

To investigate differences between patients with Ps and PsA, pertinent to the association with metabolic cardiovascular risk factors

Methods

540 patients ≥18 years (338 with PsA and 202 with Ps only) have been recruited for a 6 months period of time. The patients were selected randomly (the first 20 patients during their visit at primary care medical centers) by 30 physicians (rheumatologists and dermatologists) from Northern and Southern Greece.

Each patient has completed a Questionnaire designed to record the parameters under evaluation. Statistical tests have been performed between variables with the use of chi-square, Fisher's exact, Mann-Whitney tests with the logistic regression analysis.

Results

55.6% of the patients were females, 44.4% were males and the mean age of the patients was 51.6 (SD:14.1). The mean duration of the disease in patients with Ps only was 9.5 years (SD:9.5, median 6.3 [3-12]), while in those with PsA was 4.6 years (SD:5.8, median 2.5 [1-5]). (Figure 1) Most of the patients (97.5%) were of Greek nationality.

There was no statistically significant difference of the prevalence of Metabolic Syndrome between patients with Ps only (50.5%) and those with PsA (47.3%). Only 17.8% of the patients with Metabolic Syndrome were below the age of 45 years old ($p < 0.001$).

No statistically significant differences have been observed between patients with Ps only or with PsA in terms of comorbidities such as arterial hypertension, diabetes mellitus, obesity or dislipidemia. (Figure 2)

On the contrary, patients with PsA presented at a statistically higher percentage with hyperuricemia (45.9%) or a medical history of uric arthritis (14.2%), compared with patients with Ps only (12.2% and 3.8% respectively), ($p < 0.001$, $p = 0.003$). (Table 1)

A statistically significant difference has been observed in relation with smoking and alcohol consuming habits between the two groups: 62.6% of the patients with PsA and 45.5% of the patients with Ps only were smokers ($p < 0.001$), whereas 73% and 58.3% respectively were consuming alcohol on a daily basis ($p < 0.001$). A higher percentage (52.5%) of the patients with PsA have limited their daily activities as compared to those with Ps only (28.4%), ($p < 0.001$). Inflammatory indices such as ESR ($p < 0.001$) and CRP ($p = 0.002$) and glycosylated hemoglobin levels ($p < 0.001$) were reported at a statistically significant higher rate among patients with PsA.

Figure 1: Distribution of patients with respect to duration of disease

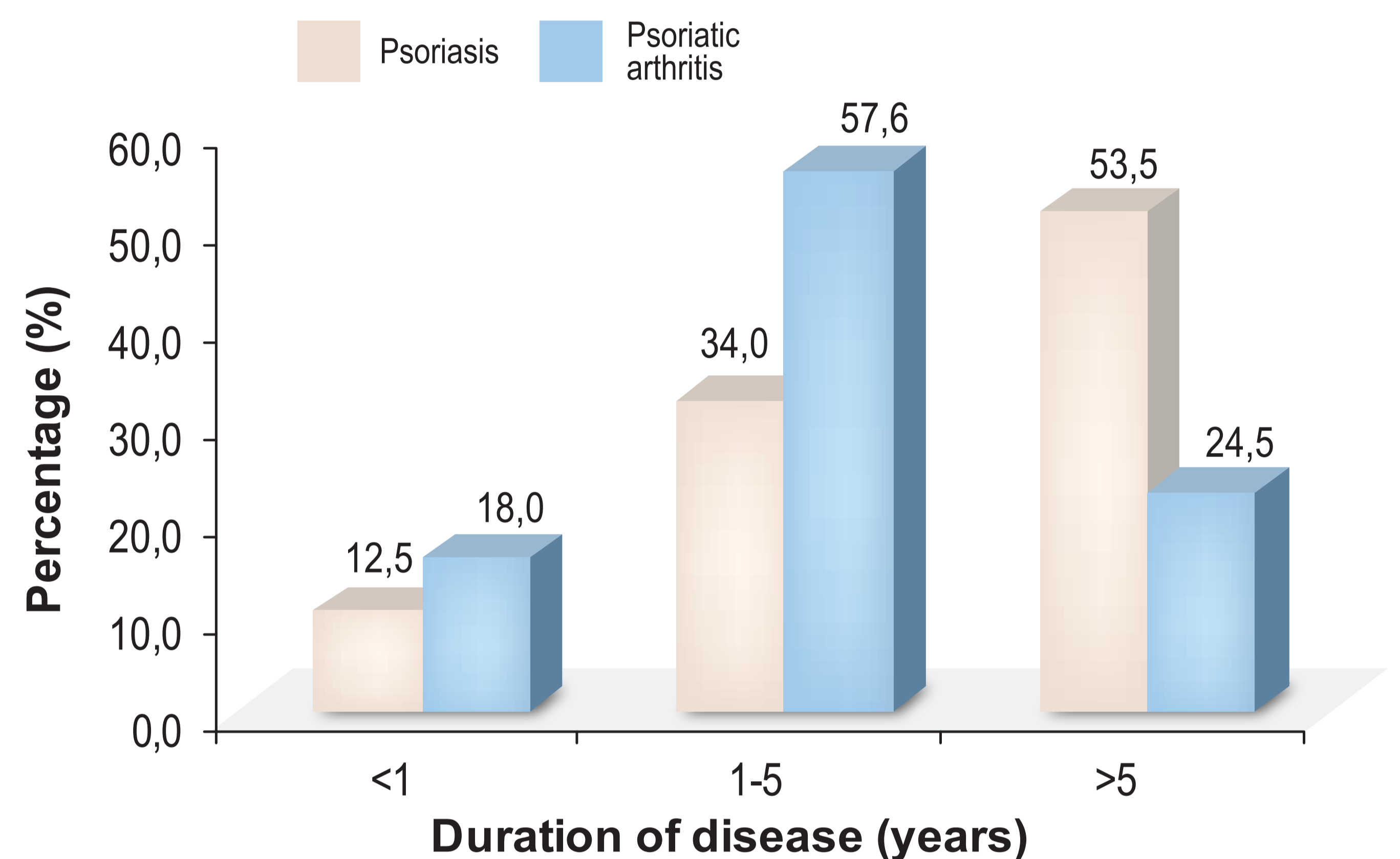


Figure 2: Prevalence of metabolic syndrome in patients with psoriasis and/or psoriatic arthritis

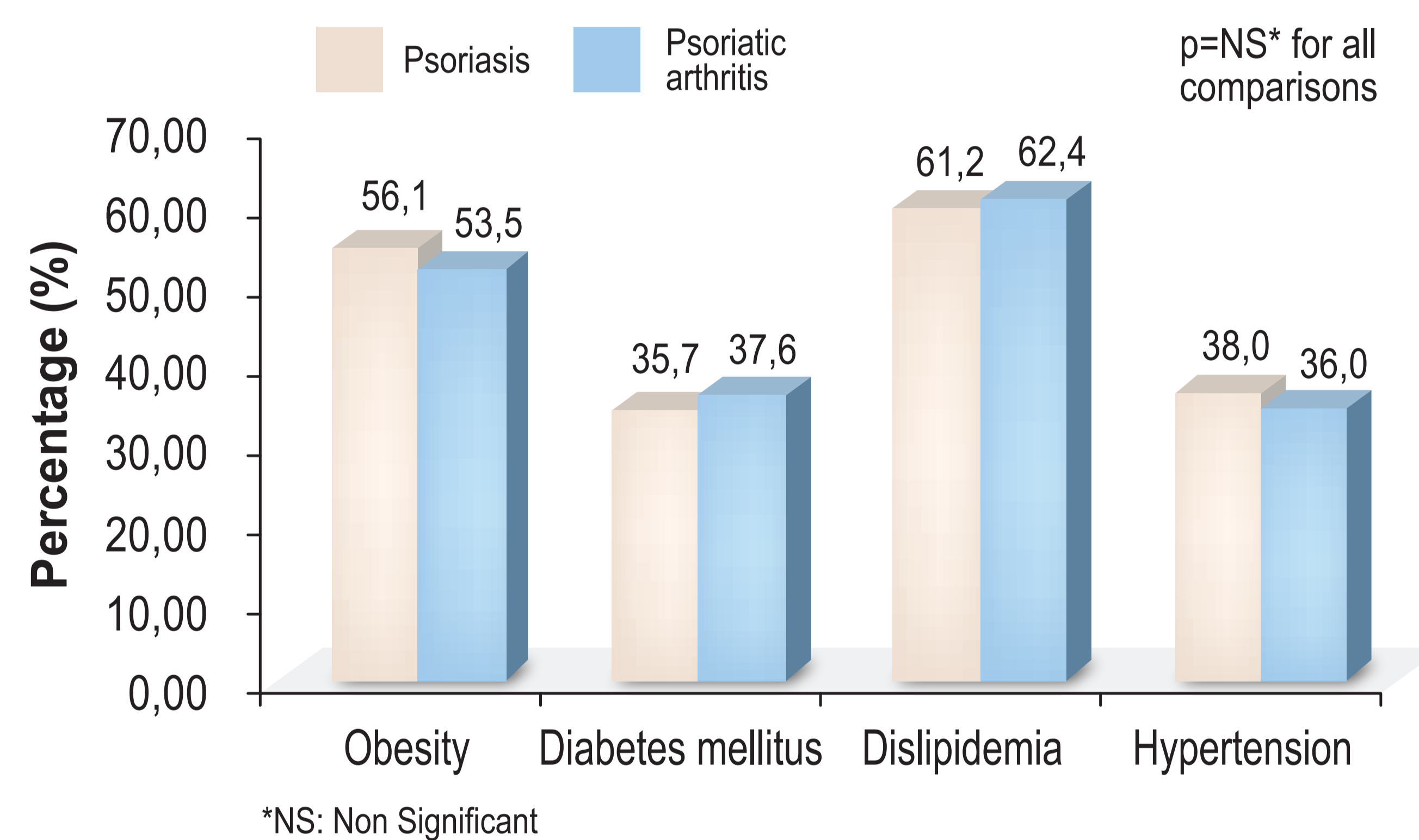


Table 1: Prevalence of comorbidities in patients with psoriasis and/or psoriatic arthritis

	Psoriasis		Psoriatic Arthritis		P
	N	%	N	%	
History of Metabolic Syndrome	101	50,5	159	47,3	0,476
Obesity	55	56,1	84	53,5	0,683
Diabetes mellitus	35	35,7	59	37,6	0,764
Dislipidemia	60	61,2	98	62,4	0,848
Hypertension	70	38	117	36	0,646
History of Uric Disease	21	11,2	77	23,5	0,001
Hyperuricemia	16	12,2	68	45,9	<0,001
Uric arthritis	5	3,8	21	14,2	0,003

Conclusions

The prevalence of metabolic syndrome was similar in patients with PsA and in those with Ps only. A higher incidence of hyperuricemia and/or uric arthritis was found in patients with PsA as compared with those with Ps only. No statistically significant differences with regard to the prevalence of cardiovascular risk factors such as hypertension, diabetes mellitus, obesity and dislipidemia, have been observed between patients with Ps and/or PsA.