The aim of the present study was to investigate the prevalence and severity of RLS in patients with psoriasis.

**Materials and Methods:** A total of 44 consecutive psoriatic patients (21 male and 23 female; aged, 46.43 ± 14.62 years) who visited Psoriasis Unit of Department of Dermatology and Venereology, Akdeniz University Hospital were involved in the study. The demographic and clinical data were recorded. A diagnosis of RLS was made according to the criteria of the International RLS Study Group (IRLSSG), and severity was assessed using the IRLSSG severity scale. We measured serum iron, ferritin and red cell count, haemoglobin, erythrocyte sedimentation rate (ESR), C-reactive protein (CRP), 25-hydroxyvitamin D3 (25-OH-D3), Vitamin B12 in patients with RLS.

**Results:** RLS was obtained in 7 (15.9%) patients. IRLSSG severity scale were moderate in 4 patients (57.1%) and severe in three patients (42.9%). 3 (42.9%) patients had iron deficiency anaemia, 5 (71.4%) patients had low 25-OH-D3 and 1 (14.2%) patient had low vitamin B12 levels among patients with RLS. Two of them had both iron deficiency anaemia and low 25-OH-D3.

**Conclusion:** RLS is common in patients with psoriasis. In our study group, RLS seems to be associated with iron deficiency anaemia, low 25-OH-D3 and B12 levels.

**Disclosure of Interest:** None declared.

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**IL-6 and TNF-alpha polymorphisms in portuguese psoriatic patients**

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**Introduction:** Cytokines regulate the growth, function and differentiation of cells and help to steer immune response and inflammation. In this study we focused our attention in two proinflammatory cytokines: IL-6 and TNF-α. It is known that their overexpression is responsible for initiation, maintenance and recurrence of skin lesions in psoriatic patients. Therefore, it is important to investigate genetic biomarkers with functional effects in the genes of those cytokines that could help to predict the severity of Psoriasis.

**Objectives:** To investigate the hypothesis that allelic variants in IL-6 and TNF-α genes are a risk factor for the developing of severe Psoriasis.

**Materials and Methods:** A cohort of 178 (74 females, 104 males) psoriatic patients with severe plaque type psoriasis (according to the Psoriasis Area and Severity Index (PASI)) and 206 healthy individuals were selected. Several polymorphisms in the IL-6 gene (rs1800795, rs1800796, rs2069827, rs2069840) and TNF-α (rs361525, rs1799964, rs1800629) promoter region were genotyped. SNP genotyping was performed using Mass Spectrometry (MassARRAY iPLEX-SEQUenom).

**Results:** We observed a lower frequency in the minor allele (C) of the TNF-α rs1799964 SNP in psoriatic patients, compared with controls (21.9% vs. 29.4%), p = 0.02, OR = 0.675 (0.49-0.94)]. The frequency of the CC genotype in patients was 3.93% while in the healthy control group it was 9.22% [(p = 0.04, OR = 0.403 (0.17-0.98)]. No statistical significant differences were found in the other polymorphisms.

**Conclusion:** Our data suggest that the rs1799964 C allele could be a protective factor for developing severe psoriasis. These results were similar to the findings of Gallo et al (2012) in a Spanish population. The mechanism to explain this association remains elusive, given the lack of evidence of a functional association.

**Disclosure of Interest:** None declared.