Polymorphisms in the interleukin-6 receptor gene (Asp358Ala) and body mass index in chilean Women with type 1 diabetes

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Introduction. Interleukin-6 receptor (IL6R) has been linked with type 2 diabetes and obesity. The presence of the Asp allele in Asp358Ala of IL6R has been linked with insulin resistance and weight gain. Aim. The aim of this study is to evaluate the frequency and the association of the Asp358Ala in the IL6R gene in Chilean women with type 1 diabetes (T1D) and its relationship with body mass index (BMI).

Patients and Methods. One hundred and forty-five patients with T1D (N 145) and healthy control women (N 103) were recruited. The polymorphisms were studied with polymerase chain reaction and restriction fragment length polymorphisms. The effect of the polymorphisms on BMI and age of diagnosis was evaluated.

Results. A higher frequency of the Asp allele was observed in patients with T1D compared with controls (0.483 vs. 0.364; p < 0.01). The Asp358Asp genotype was more prevalent in the T1D group compared with controls (0.152 vs. 0.097; p < 0.01). T1D patients younger than 19 years had a p