**GENE POLYMORPHISMS IL-1 RN Y IL-1B-511 IN VENEZUELAN WITH CHRONIC CHAGASIC CARDIOMYOPATHY**

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Chagas disease is caused by *T. cruzi* and represents the principal cause of infectious myocarditis in Latin America, a localized inflammatory progressive process that affects 30% of those infected. The chronic chagasic cardiomyopathy (CChC) presents low parasite and elevated mononuclear infiltrate, accompanied by miocardic fiber destruction and fibrosis. Plus macrophages, monocytes y linfocite T, in addition to cytokines like TNF alfa, IL 1, IL 6, y INF gamma; amost others, form a net that offers an immune response; factors such as environment, T. cruzi, susceptibility and resistance of the host intervene with the interesting fact that only 30% of the infected develop CChC.

Objective: Determinate the frequency of genetic polymorphism in the genes of cytokines IL-1RN VNTR2 and IL1B -511 in Venezuelan patients with CChC compared to those asymptomatic.

Methodology: With a previous informed consent, genomic DNA was obtained through Wizard Genomic DNA Purification Kit of the peripheral blood samples of 58 patients, who where seropositive for anti-*T. cruzi* IgG; 29 of which were asymptomatic and 29 CChC patients from Portuguesa state. The detection of the polymorphism was done by PCR (VNTR) and PCR-RFLP, using restriction enzymes AvaI.

Results: Both of them ILB-511 and IL1-RN2 showed differences between CChC and asymptomatic there is a significant predominance of the frequency of the allele 1 polymorphism in the CChC patients studied compared to the asymptomatic. Conclusion: The distribution of the alleles 1 of the polymorphism ILB-511 and IL 1RN-VNTR2 seems to be a factor of susceptibility for the development of CChC in Venezuelan patients.