Introduction: In the hepatitis C infection, (HCV) the persistence viral and the response to antiviral therapy have been associated with the production or no of the cytokines. The therapy, based on the use of interferon-alpha (IFN-alpha) in combination with ribavirin, results in limited success, especially in patients infected with the most prevalent genotype type 1.Cytokines genes are polymorphic at specific sites, and some these mutations have been associated with either higher or lower production of the specific cytokines. Objective:In this study we evaluated the frequency allelic and genotipic of the -251A/T common polymorphism of the IL-8 gene in patients infected with chronic HCV after therapy with Peg-Interferon and ribavirin. Methods: Genomic DNA from 128 patients was isolated from buffy-coat cells using QIAamp DNA blood. An allele-specific oligonucleotide polymerase chain reaction (ASO-PCR) was used to detect polymorphisms at position -251 of IL8 gene and internal control, the human β-globin gene, were included in the ASO-PCR. Results: The frequencies of different dimorphic polymorphisms based on single nucleotide substitution were as follows: responders AT 37(15,5%), AA 24(55,6%), TT 8(28,9%), and no responders AT 26(12,1%), AA 21(51,4%), TT 13(36,4%) the difference was not significant among groups Conclusions: There was no significant difference in the frequencies of genotypes associated with the IL-8 -251 polymorphism between responders and no responders the therapy with Peg-Interferon and ribavirin in patients infected HCV.