Assessment of babA2 and hsp genotype frequency in Helicobacter pylori specimens isolated from digestive disorders patients

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Abstract

Background and Objective: Helicobacter pylori is the main gastric pathogen in human. BabA2 and Hsp genotypes are essential for enormous clinical outcomes in gastreodeoneal and dyspepsia. This study was done to determine the assessment of babA2 and hsp genotype frequency in Helicobacter pylori specimens isolated from digestive disorders patients.

Method: This descriptive-analytic study was carried out on 80 digestive disorders patients in 5th hospital, Gorgan, northern Iran. Stomach specimen biopsy was taken by a gastroenterologist. Urease test, histopathologic assessment and DNA extraction were performed. The frequency of babA2 and hsp genotypes was determined using polymerase chain reaction.

Results: In 80 affected patients with H.pylori, 36, 18 and 26 patients were found to suffer from gastritis, stomach cancer and stomach ulcer, respectively. 51 specimens (63%) were positive babA2 genotype. 49 specimens (61%) were positive hsp genotype. No significant relationship was found between babA2 and hsp genotypes with stomach diseases.

Conclusion: In spite of positive babA2 and hsp genotype in isolated Helicobacter pylori specimens from digestive disorders patients, this finding was not correlated with type of digestive disorders.

Keywords: Helicobacter pylori, babA2 gene, Hsp gene, Gastric disease

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