

VacA and *cagA* genotypes of *H. pylori* and *IFN-γ* expression in chronic gastritis and gastric cancer patients

Martínez-Carrillo Dinorah Nashely¹, Atrisco-Morales Josefina¹, Reyes-Navarrete Salomón², Betancourt-Linares Reyes³, Hernández-Pando Rogelio⁴, Illades-Aguir Berenice¹, Román-Román Adolfo¹ and Fernández-Tilapa Gloria¹

¹Universidad Autónoma de Guerrero, México

²Instituto Estatal de Cancerología, México

³Unidad Especializada en Gastroenterología Endoscopia, México

⁴Instituto Nacional de Ciencias Médicas y Nutrición, México

Helicobacter pylori represents the major cause of chronic gastritis, duodenal and gastric ulcer and gastric cancer. Clinical outcome of *H. pylori* infection is determined by the virulence factors of bacteria, environment and immune response of the host. A differential expression of cytokines between *H. pylori* positive and *H. pylori* negative patients or between gastritis and gastric cancer patients was reported. The aim of present study was to compare the *IFN-γ* expression between *vacA* and *cagA* genotypes of *H. pylori* in chronic gastritis and gastric cancer patients. Ninety-six patients with chronic gastritis and twenty with gastric cancer were recruited. *H. pylori* infection, *vacA* and *cagA* genotyping were accomplished via PCR from total DNA of gastric biopsies, the *IFN-γ* expression was determined by immunohistochemistry. Of the patients overall, 66 (56.9%) were infected with *H. pylori*, among patients with chronic gastritis 54 (56.3%) and 12 (60%) in gastric cancer were *H. pylori* positive. The predominant *vacA* and *cagA* genotypes of *H. pylori* were *vacAs1m1* (87%) and *cagA* positive (77.8%) in chronic gastritis and 83.3% and 58.3% in gastric cancer. We observed a variation of expression of *IFN-γ* in patients with chronic gastric infected with *H. pylori vacAs1m2* (83%) compared with *vacAs1m1* (82%) and *s2m2* (72%) genotypes and in patients infects with *H. pylori cagA* positive (82%) respect to *H. pylori cagA* negative (78.2%), similar dates were found in gastric cancer groups. The *IFN-γ* expression and *vacA* and *cagA* genotypes of *H. pylori* could be important factors that increase the damage in gastric mucosa.

Biography

Martínez-Carrillo Dinorah Nashely has completed her master's degree at the age of 29 years from Universidad Autónoma de Guerrero. She has published 4 papers in reputed journals. She is currently pursuing her Ph.D.

chirris774@hotmail.com