Helicobacter pylori and IL-23R gene polymorphism role in degeneration of gastric mucosa

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Abstract:

Relationship between \textit{H. pylori} (Hp) colonizes and gastric inflammation is widely accepted. Polymorphisms in inflammation related genes such as cytokines and their receptors were thought to partly determine the outcome of Hp infection. Interleukin 23 receptor (IL23R) may relate to degeneration of gastric mucosa. We evaluate association of IL23R +2199 rs10889677 polymorphism and grade of Hp infection with degeneration of gastric mucosa and grade of Hp infection. Biopsies taken from the corpus patients were classified as Hp-infected and Hp-uninfected. The histological severity of Hp infection and degeneration of gastric mucosa were graded from normal to severe. Polymorphism in IL23R was evaluated by PCR-RFLP. AC genotype was related to mild degeneration in Hp-infected subjects \((P=0.017)\). Mild and moderate grades of Hp infection were found related to mild grade of gastric mucosal degeneration \((P=0.004\) for mild and \(P=0.037\) for moderate grade), sever grade was associated with non-degeneration \((P=0.010)\). We didn’t found any association between IL-23R +2199 polymorphism and grades of Hp infection \((P>0.05)\). We concluded that AC genotype of IL-23R polymorphism influences degeneration of gastric mucosa according to presence of Hp and grades of Hp infection.