Factors increasing the risk of atrophic gastritis and intestinal metaplasia

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Atrophic gastritis and intestinal metaplasia are two important precursory lesions in the process of intestinal type gastric cancer. However, the precise mechanism of the progression of these two lesions is still unclear, a few studies have investigated the risk of host gene polymorphism on the atrophic gastritis and intestinal metaplasia, but all of them are limited by their one-time point screen.

A research article to be published on April 14, 2010 in the World Journal of Gastroenterology addresses this question. The research team led by Professor Ji-You Li from Beijing cancer hospital & institute, Peking University used PCR based DHPLC technique and 56 month follow-up data, to study the association between IL-8, MIF gene polymorphisms and progression of atrophic gastritis and intestinal metaplasia in a high risk population of gastric cancer. The article further investigate the relationship of *Helicobacter pylori* infection and gene polymorphism on the progression of atrophic gastritis and intestinal metaplasia.

The result shown that IL-8-251 AA genotype or IL-8-251 AA genotype together with IL-8-251 TA genotype significantly increased the risk of severe atrophic gastritis and intestinal metaplasia; MIF-173 CC genotype or MIF-173 CC genotype together with MIF-173 GC genotype also increased the risk of severe atrophic gastritis and intestinal metaplasia significantly. Interestingly, the risk of severe atrophic gastritis and intestinal metaplasia become more evident when *Helicobacter pylori* infection has been considered.

Due to the high prevalence of *H. pylori* infection, antibiotic resistance, and some potential drawbacks associated with *H. pylori* eradication therapy (eg. reflux esophagitis), this study may provide a reasonable basis for therapeutic decisions (eg. *Helicobacter pylori* eradication) at an early stage of precursory lesions of gastric cancer.

More information: Li ZW, Wu Y, Sun Y, Liu LY, Tian MM, Feng GS, You WC, Li JY. Inflammatory cytokine gene polymorphisms increase the risk of atrophic gastritis and intestinal metaplasia. World J Gastroenterol 2010; 16(14): 1788-1794, www.wjgnet.com/1007-9327/full/v16/i14/1788.htm

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