Risk Factors of Chronic Atrophic Gastritis

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In this issue Siregar and coworkers report their study regarding Risk Factors of Chronic Atrophic Gastritis. Atrophic gastritis and gastric intestinal metaplasia (GIM) are well-known risk factors for the development of gastric cancer. Gastric cancer develops in the soil of extensive chronic atrophic gastritis and the entire mucosa is exposed to the same processes (ie, field carcinogenesis). Prior studies that carefully examined stomachs resected for gastric cancer have found that 4%–15% of resected stomachs contained foci of cancer. These findings are consistent with the high risk of metachronous cancer that occurs after simply removing a small area of mucosa. Furthermore, the gastric cancer risk can be assessed by the status of gastric atrophy. Not only endoscopic and histological examination but also the measurements of serum pepsinogen (PG) I and PG I/II levels can be available to examine the status of gastric mucosal atrophy. A meta-analysis showed that a PG I level ≤ 70 ng/mL and a PG I/II ratio ≤ 3 had a sensitivity of 57%, specificity of 80%, positive predictive value of 15%, and negative predictive value of 83% in screening for atrophic gastritis to detect gastric cancer. However, the proper cut-off value can be various according to the geographic difference.[1,2]

Combining the narrow-band imaging (NBI) system and magnifying endoscopy brings a simple and clear visualization of microsurface structures and microvascular patterns of the superficial mucosa, which may be useful for precise endoscopic diagnosis, being closer to the histopathological diagnosis. Some advanced endoscopic techniques have been used to diagnose atrophic gastritis. However, it is still difficult to diagnose atrophy with a high degree of accuracy. For patient with atrophic gastritis, if the patient was infected with *Helicobacter pylori*, then eradication therapy would be given; if the patient was not infected with Helicobacter pylori, then the management was similar with that of patient with non-atrophic gastritis. For patients with mild or moderate dysplasia, rigorous endoscopic surveillance program was offered, and if severe dysplasia was detected, endoscopic resection was provided. While for patients with severe dysplasia, endoscopic resection was the management of choice unless there was contra indication to endoscopic resection.[2,3,4,5]

This study showed 40% prevalence of chronic atrophic gastritis in which 40% of the specimens showed chronic inflammation of the gastric mucosa with gastric gland atrophy. Chronic atrophic gastritis is diagnosed if histopathology showing chronic inflammation of the gastric mucosa with a loss of gastric glands. Chronicatrophic gastritis commonly occurs and correlates as the malignancy risks increase. In summary, the findings of this present study indicate that Elderly status, low body mass index (BMI), and H. *pylori* infection are risk factors for the prevalence of chronic atrophic gastritis.[6]

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