



Helicobacter pylori eradication in the treatment of gastric hyperplastic polyps: beyond National Health Insurance

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Gastric hyperplastic polyps (HPPs) are among the most common types of polyps in the stomach, and are usually asymptomatic and incidentally found during screening esophagogastroduodenoscopy. However, if polyp size is significantly larger, focal adenocarcinoma may arise from surface of polyp in an average of 2.1% (range, 0% to 8%) [1-3]. In general, if the size of the gastric HPP is greater than 1.0 cm, endoscopic resection is recommended due to the possibility of bleeding and malignant potential of the polyp. Regular endoscopic follow-up may be considered in cases of smaller HPPs [4]. However, several case-control studies and a randomized controlled trial showed that eradication of *Helicobacter pylori* not only significantly reduced the size of the gastric HPP, but also improved the degree of histopathologic inflammation [5-7]. Furthermore, atrophic gastritis, which is a major risk factor for gastric adenocarcinoma and is mainly caused by chronic *H. pylori* infection, is commonly seen in patients with gastric HPPs [8]. Thus, the presence of gastric HPPs may be a potential marker for increased risk of precancerous atrophic gastritis and gastric adenocarcinoma.

Therefore, eradication of *H. pylori* infection in patients with *H. pylori*-positive gastric HPP is considered an optimal treatment strategy for gastric HPPs.

Based on clinical data on gastric HPPs, the Japanese guideline for the management of *H. pylori* infection (revised 2009 edition) recommends eradication of *H. pylori* in patients with multiple gastric HPPs (evidence level II) [9]. Consistent with this, the British Society of Gastroenterology recommends *H. pylori* testing and treatment for the management of gastric HPP (high evidence, definite recommendation) [10]. However, the Korean National Health Insurance System did not approved the eradication of *H. pylori* infection for management of gastric HPPs until recently, and Korean gastroenterologists needed to present domestic data to persuade national insurance authorities. In a retrospective study, we previously reported that regression of gastric HPPs was significantly higher in the *H. pylori* eradication group than in the non-eradication group (42.5% vs. 22.2%, $p < 0.05$), and *H. pylori* eradication was the only significant predictor of regression of gastric HPPs [11]. Another Korean retrospective study enrolled a large number of healthy subjects from a Private Health

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Screening Cohort at the National Cancer Center, and also showed that successful eradication of *H. pylori* was significantly associated with the disappearance of gastric HPPs compared with persistent *H. pylori* infection (85.0% vs. 29.0%, $p = 0.001$) [12]. However, the studies were based on outpatient data from a tertiary referral hospital or on data from private screening patients, which may have a selection bias due to patients' motivation for health care or medical cost.

In the current issue, Nam et al. [13] enrolled more than 10,000 participants from a National Cancer Screening Cohort, and 183 subjects with *H. pylori*-positive gastric HPPs were followed-up regularly. The authors showed that eradication of *H. pylori* infection dramatically induced the disappearance of gastric HPPs compared with non-eradication (83.7% vs. 34.1%, $p = 0.001$) [13]. Furthermore, successful eradication was a useful predictor for the disappearance of gastric HPPs (adjusted odds ratio, 5.56; 95% confidence interval, 2.63 to 11.11) [13]; and this was consistent with the results of their previous retrospective study, which was based on a private screening cohort [12]. We would like to acknowledge the authors' efforts to establish *H. pylori* eradication as an effective treatment for gastric HPPs, and for providing strong justification for expanding the coverage of *H. pylori* eradication by the Korean National Health Insurance System. Some authors may believe that the data from this study should only be only considered as "low level evidence" due to the inherent limitations of studies involving retrospective review of medical records. However, it is not easy to perform a prospective randomized controlled trial for evaluating the effect of *H. pylori* eradication, because patients usually refuse non-eradication and the "wait and see" strategy. At present, the "test and treat" strategy for *H. pylori* appears to be a reasonable option for the management of multiple small gastric HPPs.

In terms of insurance issues, the Korean Ministry of Health and Welfare recently approved the non-reimbursed eradication of *H. pylori* in patients with gastric HPPs. In contrast, the National Health Insurance Authority approved the eradication of *H. pylori* without coverage in cases where the patient has endoscopic resection of gastric adenoma, a family history of gastric cancer (among first degree relatives) or atrophic gastritis, or if the physician explains the necessity for *H.*

pylori eradication and the patient agrees [14]. However, more solid evidence based on domestic data (i.e., multicenter, prospective trial) would be necessary for expansion of National Health Insurance coverage of *H. pylori* eradication including patients with gastric HPPs, and outcomes from these studies may be a cornerstone for achieving this goal.

Conflict of interest

No potential conflict of interest relevant to this article was reported.

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