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Clinical Significance of Risk Factors for Asymptomatic Peptic Ulcer Disease

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See "Risk Factors for the Presence of Symptoms in Peptic Ulcer Disease" by Sang Pyo Lee, In-Kyung Sung, Jeong Hwan Kim, et al., on page 578-584.

Peptic ulcer disease (PUD) is classified as: (1) *Helicobacter pylori*-associated PUD, (2) nonsteroidal anti-inflammatory drug (NSAID) or aspirin-associated PUD, and (3) idiopathic PUD.[1] The prevalence of PUD is 0.2%–0.5% in Western countries and 2%–3% in Korea.[2] The relatively high prevalence of PUD in Korea is due to a high prevalence rate of *H. pylori* infection and an increased incidence of asymptomatic PUD resulting from an increase in screening endoscopy.[3,4] The incidence of *H. pylori*-associated PUD has gradually decreased due to improvements in sanitation and socioeconomic conditions, as well as *H. pylori* eradication treatment.[5,6] Despite this, the incidence of PUD is increasing in the elderly population, mainly due to increasing use of NSAIDs or aspirin.[7] In addition, gastric mucosal defense mechanism in the elderly might be damaged and vulnerable to injury caused by NSAIDs or aspirin use, resulting in increased mortality due to complications of PUD.[8,9] Therefore, a strategy to reduce complications of PUD is very important.

PUD presents with various symptoms, such as epigastric pain, dyspepsia, nausea, or anorexia. In some PUD patients, however, serious complications such as bleeding or perforation may be the first sign of a problem without any other warning symptoms, and these occur in about 25% of PUD patients.[1]

Various PUD symptoms prompt patients to seek care, increasing the likelihood of diagnosis. Nonetheless, some patients with PUD are asymptomatic until a life-threatening complication such as bleeding or perforation develops. Therefore, identification of risk factors in asymptomatic cases of PUD could help reduce the incidence of mortality arising from unanticipated complications. Several studies have demonstrated that the risk of asymptomatic PUD is significantly associated with old age, current smoking, obesity, and habitual tea drinking.[10,11] The use of NSAIDs has also been considered a significant risk factor for asymptomatic PUD, although this remains controversial. Several studies have demonstrated that the use of NSAIDs is a potential risk factor for asymptomatic PUD, based upon the assumption that NSAIDs might mask visceral pain.[12,13] In contrast, other studies have reported that use of NSAIDs is associated with symptomatic PUD.[11,14] Therefore, while use of NSAIDs is a distinct risk factor for both symptomatic and asymptomatic PUD, it remains unclear whether NSAID use is associated with asymptomatic PUD.

In this issue of *Clinical Endoscopy*, Lee et al. investigated risk factors for the development of symptomatic PUD.[15] They reported that old age, current smoking, and *H. pylori* infection were independent risk factors for both symptomatic and asymptomatic PUD. However, use of NSAIDs was

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the only risk factor that was statistically significantly associated with symptomatic PUD. Therefore, they concluded that NSAID-associated PUD may lead to symptoms more often than *H. pylori*-associated PUD. On the other hand, with the focus on asymptomatic PUD, this study revealed that old age, male sex, current smoking, *H. pylori* infection, and absence of atrophic gastritis were independent risk factors for asymptomatic PUD. In these high-risk patients, serious complications such as bleeding or perforation can manifest as the initial symptoms without any warning symptoms. Therefore, physicians need to consider regular esophagogastroduodenoscopy or *H. pylori* eradication therapy in these high-risk patients. A further large cohort study is needed to clarify the risk factors for asymptomatic PUD.

Conflicts of Interest

The authors have no financial conflicts of interest.

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