CORRESPONDENCE

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Comment on "Positive fecal immunochemical test results are associated with non-colorectal cancer mortality"

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Division of Gastroenterology, Department of Internal Medicine, Inje University Haeundae Paik Hospital, College of Medicine, Inje University, 875 Haeun-daero, Haeundae-gu, Busan 48108, Korea Tel: +82-51-797-0220 Fax: +82-51-797-0220 E-mail: ready200@paik.ac.kr https://orcid.org/0000-0003-4274-8204 The paper by Jung et al. [1], titled "Positive fecal immunochemical test results are associated with non-colorectal cancer mortality," reported on the association between colorectal cancer (CRC)/non-CRC mortality and fecal immunochemical test (FIT), which is used for CRC screening in a large number of patients. Various biomarkers are used for the diagnosis and prognosis prediction of CRC [2]. Among them, guaiac fecal occult blood test (gFOBT) and FIT are used as screening tools in many countries. The gFOBT is useful as a non-invasive screening test; however, it cannot differentiate between human and non-human heme and does not provide information on the location of bleeding [2]. FIT detects human globin through a human hemoglobin-specific immunoassay and has higher sensitivity and specificity than FOBT [2]; however, it has a limitation that a positive test result does not eliminate the need for diagnostic colonoscopy to evaluate colorectal lesions.

Several studies have reported a relationship between FOBT results and mortality [3,4]. Libby et al. [3] reported that a positive gFOBT result is associated with a higher risk of CRC and non-CRC mortality. With respect to the high correlation of a positive FOBT with not only CRC mortality but also non-CRC mortality, factors including the use of aspirin or anticoagulants in the elderly with circulatory diseases, as well as systemic inflammation have been discussed [1,3,5]. However, the effectiveness of FIT as a screening tool for CRC also needs to be considered. Although FIT may raise awareness about non-CRC mortality, FIT alone is insufficient for CRC screening, and appropriate correlation with colonoscopy is required.

Colonoscopy is gaining popularity as a population-based CRC screening tool because it allows the evaluation of the entire intestine at once, can remove precancerous or early CRC lesions, and has a longer examination interval than other CRC screening tests [6,7]. However, information on the appropriate timing and linkage to colonoscopy after a positive FOBT remains insufficient.

In several Western countries such as Austria, Germany, and Poland, colonoscopy is a population-based screening practice for CRC [8,9]. In the United Kingdom, the long-term effect of a single flexible sigmoidoscopy screening was reported in a study with a follow-up period of 17 years [10]. Approximately 30% of patients in the control and sigmoidoscopy groups underwent gFOBT at least once, and patients in the intervention group tested positive at least once. However, the effect of flexible sigmoidoscopy on the incidence and mortality of CRC was not significantly different between patients with

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and without gFOBT screening [10]. In addition, screening for non-CRC conditions based on a positive FIT may lead to unnecessary tests.

In Korea, as the health awareness of the population increases, the number of colonoscopy procedures performed during regular medical evaluations is increasing. Therefore, it may be helpful to focus on the appropriate timing and effectiveness of FIT and colonoscopy in CRC screening rather than on its role in predicting non-CRC mortality. A largescale study on the relevance of colonoscopy and FIT in the screening and mortality prediction of CRC seems necessary.

Conflict of interest

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

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