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Obscure gastrointestinal bleeding: Capsule endoscopy versus computerized tomography

To the Editor,

There are some important points to be remarked and underlined regarding the article that was published in the latest issue of Turkish Journal of Gastroenterology comparing capsule endoscopy (CE) with computed tomography (CT) in patients with obscure gastrointestinal bleeding (1).

As we know, approximately 5% of patients with gastrointestinal bleeding have obscure etiology that is defined as ongoing or recurred bleeding after previous endoscopic procedures that could not yield the cause (2). However, this rate has not been re-evaluated after the implementation of capsule endoscopy into routine practice.

In the study of the Turkish Journal of Gastroenterology mentioned above, the number of cases seems too small to arrive at the mentioned conclusions, and it is said that 90% of these cases have obscure overt bleeding. In common practice, we usually perform capsule endoscopy for occult obscure bleeding much more frequently than for overt obscure bleeding. That is why I think that this ratio of 90% is a little higher than usual in terms of the indications of capsule endoscopy. I think this group may not be appropriate to compare both methods. Two groups, defined as "CE first" and "CT first," seem similar in the baseline findings. According to the results of the study, CE, as a single diagnostic modality, is more effective than CT in both groups, whereas in overall evaluation, the CT and CE combination has emerged to be more effective than the single modality. This study does not state which modality should be used first. The study also does not say anything about which modality should be preferred in certain situations, like overt obscure bleeding, occult obscure bleeding, and suspected tumor, etc. Ultimately, both modalities of CE and CT are presented to be complementary, rather than alternative or superior to each other.

As a result, what we know so far was not changed very much by this study. What we know is that in patients without an obvious source of bleeding on routine endoscopy, capsule endoscopy is the next step of the diagnosis. Only the rate of blood loss and the presence of comorbidities will be able to change the next diagnostic modality we choose. We also know that in obscure gastrointestinal bleeding, capsule endoscopy followed by enteroscopy is a more effective approach than either CT before enteroscopy or starting with enteroscopy immediately (3).

Conflict of Interest: No conflict of interest was declared by the authors.

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Author's Reply

To the Editor,

First of all, we would like to express our appreciation for your attention, as well as your comments regarding the study we published in the June 2014 issue of the Turk-

ish Journal of Gastroenterology (1). In the study, we investigated whether there were clinical differences related to the order in which capsule endoscopy (CE) and computed tomography (CT) or CT enterography (CTE) were performed. The purpose of our study was also to evaluate patient-related clinical factors that require CT as the first-line study in OGIB, in terms of reducing the cost considering National health insurance of Korea. We did not find any significant difference regarding the test order and clinical factors that can identify the presence of a small bowel mass clinically prior to CT.

As pointed out by Danalıoğlu A. (2), we are aware of few limitations of our study. First, a small number of patients had been included, which was not enough to draw definite conclusion. In addition, overt obscure gastrointestinal bleeding (OGIB) occupies higher proportion of the subjects than the other studies. According to the purpose of our study, only patients who underwent both CE and CT (or CTE) were included. Because the two tests would not be performed routinely in the same patient, the number of subjects was relatively small. As mentioned by Danalıoğlu A. (2), approximately 90% of OGIB cases presenting overt bleeding, a relatively high percentage compared to data on other countries (3-5). However, according to an unpublished study using the Capsule Endoscopy Nationwide Database Registry in Korea, 76% of OGIB as the indication of CE showed overt bleeding. This result is associated with the issue of medical cost in Korea. Despite CE being regarded as an effective initial diagnostic method for patients with OGIB (6,7), physicians are reluctant to perform CE because the cost of CT is lower than 5 times than CE. According to published Korean CE guidelines (6), CTE performed as complimentary to CE and it could be helpful in determining the cause of disease in patients with OGIB. Our study did not include patients who had lesions discovered by CT, such as vascular or tumorous lesions with active bleeding, and who received direct angiographic embolization or surgery. Therefore, the clinical impact of CT as a first-line study could not be estimated precisely in our study. The differences in medical circumstances and physician preferences between Korea and other countries might be one of most important factors determining the use of CE or CT as the first-line diagnostic method in OGIB. However, because national health insurance will shortly cover CE in Korea, further prospective, large multicenter studies are needed to identify the factors affecting CE indications, and to select the first modality of diagnosis in OGIB.

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