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Letter to the Editor

Effective utilization of non-invasive enteroscopy

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Dear Editor,

It is interesting to read the article entitled "Laparotomy and intraoperative enteroscopy (IOE) for obscure gastrointestinal bleeding before and after the era of video capsule endoscopy (VCE) and deep enteroscopy (DE): A tertiary center experience" by Manatsathit W and colleagues.[1] In this retrospective analysis of 52 patients who had laparotomy/IOE, 36.4% had preoperative presumptive diagnoses in the pre VCE/DE era while presumptive diagnoses were made in 48.8% in the post VCE/DE era ($p = 0.18$). Preoperative evaluation led to correct diagnoses in 18.2% in the pre and 51.2% in the post VCE/DE era ($p = 0.09$).

We found it surprising that the rate of preoperative diagnosis of the cause of OGIB has not changed significantly in the post VCE/DE era as compared with that in the pre VCE/DE era, and that the patients in the post VCE/DE era received significantly more RBC transfusions in this paper from a single center. Endoscopy is the most effective tool in the diagnosis and management of vascular lesions which are the major cause of OGIB.[2] In the pre VCE/DE era, a complete evaluation of small bowel was very difficult. Thanks to the development of VCE/DE and advances in small bowl imaging, the term obscure gastrointestinal bleeding (OGIB) has been largely replaced by small bowel bleeding.[3] Despite the fact that the diagnosis and management of patients with OGIB may be challenging processes, over the last 15 years the introduction in clinical practice of new diagnostic tools and therapeutic procedures, including VCE, DE, CT enterography, MR enterography, CT/MR angiography has revolutionized the diagnostic and therapeutic work-up of patients with OGIB.[4,5] Their diagnosis and treatment has become mainly endoscopic, radiologic, medical, and much less and less surgical. In addition, VCE has been shown to be equivalent to IOE in identifying the source of bleeding.[6] These advances have vastly reduced the indications for invasive IOE, which is known to be associated with high morbidity and mortality and low diagnostic yield.[7] Thus, IOE has been reserved for rare cases when preoperative noninvasive small bowel techniques are not available or a resection is required. Introduction of VCE/DE has been consistently shown to significantly reduce the number of investigations performed on a per-patient basis, an increase in the rate of diagnosis, and a decrease of the amount of blood transfusion among patients with OGIB.[8]

We do have few queries.

1. Before laparotomy/IOE in these patients, how many had complete VCE and antegrade and/or retrograde enteroscopy, and how many had therapeutic enteroscopy or angiographic intervention?
2. In clinical practice, rebleeding of vascular lesions in the small bowel is common. As the authors indicated that rebleeding was not uncommon in this retrospective analysis, how many patients in the pre VCE/DE era were also seen in the post VCE/DE era? If so, would a paired statistical test for the analysis be more appropriate?
3. The morbidity, including the amount of blood transfusion, and mortality of the patients with OGIB may be partly related to the underlying comorbid conditions such as congestive heart failure, presence of ventricular-assist devices, coagulopathy, sepsis, COPD. In the comparison between the two groups in the statistical analysis, comorbid conditions, such as use of Charlson comorbidity index, should be taken into consideration.

Evidences show that effective utilization of small bowel endoscopy and small bowel imaging in OGIB has significantly reduced the need of laparotomy/IOE.

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