

LETTERS TO THE EDITOR

Methylene blue staining in Barrett's esophagus

To the Editor:

We read with interest the article by Dave et al.¹ on the usefulness of methylene blue staining in Barrett's esophagus. This article has followed two well-conducted studies by Canto et al.² and Kiesslich et al.³ involving over 100 patients, on the value of methylene blue staining in Barrett's esophagus published within the last 12 months in this journal.

These two studies have shown encouraging results with high specificity and sensitivity for the detection of intestinal metaplasia, although they have differed in the dysplasia detection rate. It was unfortunate that Dave et al. enrolled only 9 patients and the study was terminated on safety grounds, which was not a problem with the above-mentioned studies. There are several limitations to the study, which the authors themselves have pointed out: limited patient number, nonrandomization, absence of a validated questionnaire to assess patient discomfort, and the use of midazolam, which may be associated with retrograde amnesia. More importantly, photographs of the staining pattern were not obtained. Interpretation of the staining pattern plays a major role in this kind of a study. This could vary with individual endoscopists. Canto et al.⁴ have described the staining pattern as diffuse and nondiffuse staining, depending on the percentage area stained. From our personal experience (data due to be published) we have also noted focal staining and heterogeneous staining patterns. Ideally biopsies should be targeted toward the stained and unstained mucosa for comparison, after spraying methylene blue. These results should be compared with random biopsies without using methylene blue staining. It is not surprising that Dave et al. could not reproduce the high specificity and sensitivity achieved by the other two groups of investigators with the above-mentioned limitations. The learning curve is also an important confounding factor in this study with a limited number of patients. Perhaps a more valid assessment could have been made if the patient number recruited were appropriately larger.

The aim of any identification procedure for Barrett's metaplasia is first to reduce the number of biopsy specimens taken and target them to suspicious areas, and second to help in the identification of groups at high risk for esophageal adenocarcinoma.

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Response:

We agree with Rangunath and Krasner that our study showed lower specificity and sensitivity for methylene blue staining in detecting intestinal metaplasia than the studies by Canto et al. and Kiesslich et al.¹⁻³ We clearly admit the limitations of our study in the article: a small number of patients, evaluation of patient discomfort in the absence of a validated patient questionnaire, and possible retrograde amnesia caused by midazolam use.¹

The key message of our study was that there is a potential risk of spraying a large volume of liquid in the esophagus. We agree that with increased experience in the staining technique, the sensitivity and specificity of staining in detection of intestinal metaplasia and the time for staining may possibly improve. We are concerned regarding the complete safety of spraying a large volume of liquid during a prolonged endoscopy with the patient under sedation or with the use of topical pharyngeal anesthesia induced by spraying local anesthetic.

Recently the value of surveillance in Barrett's esophagus is being questioned.⁴ We strongly feel that any surveillance procedure that is associated with a potentially serious adverse effect should be very carefully evaluated before it is adopted in clinical practice.

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The continuing search for a good working relationship between endoscopic and surgical teams in the treatment of cholecysto-choledocholithiasis

To the Editor:

There is still no consensus regarding the management of patients with choledocholithiasis who are to undergo laparoscopic cholecystectomy (LC) for cholelithiasis. This is a practical and common problem for clinicians. Therefore, articles such as that by Iodice et al.¹ that recently appeared in *Gastrointestinal Endoscopy* are of interest. These investigators reported a large series of patients who were managed by single-step endoscopic-laparoscopic treatment. This report is welcomed, but there are a few points that require further discussion.

As Iodice et al.¹ stated, there are a variety of therapeutic options available for patients with stones in the bile duct as well as the gallbladder. However, because LC has rapidly become the treatment of choice for cholelithiasis, there is an increasing focus on the treatment of associated choledocholithiasis by LC. But because of the great skill and experience required for the management of both problems by LC alone, there is also a growing interest in the concept of ERCP-LC as a single-stage treatment.²⁻⁶

Iodice et al.¹ performed LC in 812 patients over a 3.5-year period regardless of whether stones were unsuspected, suspected, or known. Intraoperative cholangiography was obtained in all patients at LC. If stones were demonstrated, ERCP was performed during the LC procedure. The mean time required for the combined procedure was nearly twice that of LC alone. A mean of 22 minutes was required for alerting the endoscopic team and for the installation of the ERCP equipment and team in the surgical theater. Although the time required is relatively short, the majority of hospitals are unlikely to be able to match this time.

When choledocholithiasis is unsuspected before LC, it is very difficult to quickly organize an unscheduled ERCP during LC. Moreover, it is extremely expensive if an ERCP team has to be on stand-by for every LC. The number of hospitals and surgeons performing LC will certainly increase in number in the future, more so than the number of skilled biliopancreatic endoscopists. There are many hospitals in which more than one surgeon and surgical team perform LC, whereas such hospitals have only a single, or perhaps no, expert biliopancreatic endoscopist. Furthermore, improvements in the pre-LC diagnosis of choledocholithiasis can be expected, mostly because of the diffusion of MRCP. This should reduce the number of cases in which LC is performed in patients with bile duct stones that were unrecognized before the procedure. In this era of managed care and high costs associated with the hospitalization of a patient, it is essential that patients with bile duct stones be managed by the most economical strategy.