

Iatrogenic Huge Colon Perforation during Colonoscopy

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Dear Editor:

Colonoscopy is accepted as the gold standard approach for the assessment of colorectal diseases. It has been associated with various complications, and perforation is the most common complication (1). Iatrogenic perforation rates during colonoscopy ranges between 0.005% and 0.63%, with a larger number of patients requiring laparotomy for repair. Causes of colonoscopic perforation include blunt trauma to the colonic wall, barotrauma from air insufflation, inadvertent endoscopic resection, or thermal damage (1). An et al. (2) reported that in the management of colonic perforation, perforation size >15 mm is a critical indicator for the conversion from non-surgical to surgical procedures. Therefore, professional skill and education level of the endoscopist come into prominence.

Here, we report the case of a 52-year-old woman who experienced sigmoid perforation during diagnostic colonoscopy. The diagnosis of perforation was made on the basis of clinical presentation, physical examination, and radiological evidence, such as detection of free air on direct radiography (Figure 1). The patient was taken up for abdominal exploration. There was no fecal matter in the peritoneal cavity. Local contamination was minimal. The perforation site was inspected, and a sigmoid colon perforation of 4-5 cm was recognized (Figure 2). Resection with primary anastomosis was performed. The postoperative course was uneventful and the patient was discharged on postoperative day 7. Verbal informed consent was obtained from patient who participated in this study.

To have standard performance, endoscopists must have performed at least 25-30 flexible sigmoidoscopies and 200 colonoscopies (3). Qualification benchmarks for gastroin-



FIGURE 1. The patient with massive abdominal distension.

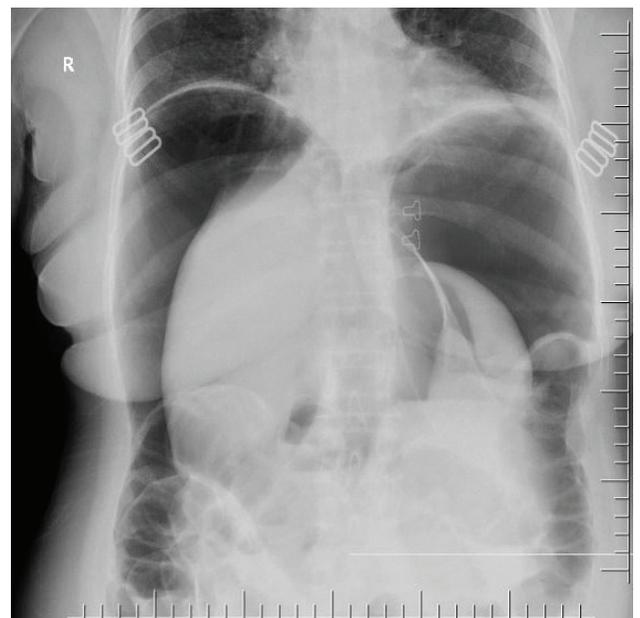


FIGURE 2. Abdominal radiograph demonstrating large-volume pneumoperitoneum.



FIGURE 3. Operative image showing the sigmoid colon perforation.

testinal endoscopic interventions are assessed on the premise of the number of procedures performed. Discussion is frequently about "Which specialist should do colonoscopy?" In our opinion, this is a meaningless question as long as good education is provided and quality standards are met. Colonoscopy performed by a gastroenterologist, internist, or surgeon reduces the risk of colorectal cancer death; moreover, the hazard for colon perforation is the least of all when it is performed by well-trained endoscopist. Cecal intubation rate of >90%, adequate bowel preparation, post polypectomy bleeding rate of <0.5%, and perforation rate of <0.1% are all quality indicators for colonoscopy. Polypectomy and adenoma detection rates are additional

essential quality indicators; however, there is no consensus on what the appropriate targets should be. There is insufficient evidence to suggest a minimum withdrawal time from the cecum (4, 5).

Informed Consent: Verbal informed consent was obtained from patient who participated in this study.

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