Mucosal Dissection and Massive Hematemesis Following Gastroduodenal Endoscopy and Biopsy

A 65-year-old man, presenting with ulcer dyspepsia that had continued for 20 years and gastric outlet obstruction that had continued for two months, underwent endoscopy, which revealed edematous gastric mucosa and a deformed and narrowed pyloroduodenum. An antral biopsy was taken. During withdrawal of the endoscope, a bleb and mild ooze was seen at the biopsy site. Subsequently, the patient developed massive hematemesis. At laparotomy, ecchymotic patches were seen on the serosal surface of the body and fundus of stomach. A near-total gastrectomy and a Roux-en-Y gastrojejunostomy had to be performed. The resected specimen revealed a raw area 7 cm in diameter, involving both walls of the stomach along the greater curvature. The mucosa of the body and fundus was edematous, friable, and had completely dissected off from other layers of the wall, resulting in a large bleeding surface (Figure 1). The histology of the resected specimen was unremarkable.

What had presumably happened in this case was that air dissection of the submucosal plane had occurred at the mucosal biopsy site. Overdistension of the partially obstructed stomach, and tissue edema, further facilitated mucosal dissection and bleeding from the denuded area. Following diagnostic endoscopy, bleeding may arise from the biopsy site or Mallory-Weiss tear (1), and this may rarely be followed by intramural or subserosal hematoma (2,3). Inconsequential submucosal air dissection of the stomach has been reported earlier (4). However, submucosal air dissection presenting with massive bleeding, necessitating near-total resection of the stomach, is distinctly rare.

V. Singh, M. Ibrarullah, S. P. Kaushik Department of Surgical Gastroenterology, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, India

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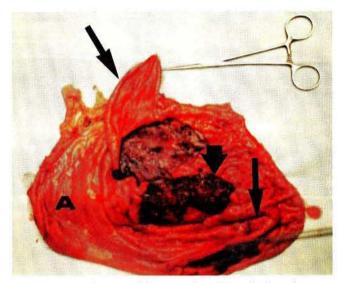


Figure 1: Mucosal aspect of the resected specimen, showing a large raw area, an adherent clot (arrowhead), dissected mucosa (tip of the hemostat and arrows), and normal antral mucosa (A).

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Corresponding Author S. P. Kaushik, M.D. Department of Surgical Gastroenterology Sanjay Gandhi Postgraduate Institute of Medical Sciences Lucknow 226014

Fax No: 522 259973