PART ONE

APPROACHES TO COMMON GASTROINTESTINAL PROBLEMS

A

COMPONENTS

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APPROACH TO THE PATIENT WITH GROSS GASTROINTESTINAL BLEEDING

HELEN E. RAYBOULD ■ STEPHEN J. PANOL

CLINICAL BACKGROUND

Gastrointestinal (GI) bleeding is a common clinical problem that requires more than 300,000 hospitalizations annually in the United States. Most bleeding episodes resolve spontaneously; however, patients with severe and persistent bleeding have high mortality rates. Evaluation of a patient with bleeding begins with assessment of the urgency of the situation. Resuscitation with intravenous fluids and blood products is the first consideration. Once the patient's condition is stable, a brief history and physical examination will help determine the location of the bleeding. For probable or known upper GI bleeding, a nasogastric tube is placed to help determine the location of bleeding and to monitor the rapidity of the bleeding. The following algorithm is a general guideline for evaluation of non-variceal upper GI bleeding. There is an important exception to this algorithm, endoscopy may be used urgently in all patients with upper GI bleeding irregardless if their bleeding has stopped spontaneously, allowing triage of patients to outpatient, inpatient, or intensive care. This practice has been shown to be safe and lead to significant cost saving since patients without risk factors such as coagulopathy, serious concomitant diseases, or bleeding stigmata do not require hospitalization.

Ulcerative Colitis

Patients with liver disease or other causes of portal hypertension have a potential variceal source of hemorrhage. Urgent diagnostic endoscopy is indicated to confirm the bleeding source, because between one third and one half of these patients have bleeding from nonvariceal sites, and future management is different for bleeding varices. The following algorithm is for the evaluation and management of variceal hemorrhage. When the location of bleeding is suspected to be the lower GI tract, a nasogastric (NG) tube and even upper endoscopy may still be needed to rule out an upper GI source of hemorrhage. It is important to remember that as many as 10% of patients with hematochezia have an upper GI source and that results of nasogastric aspiration can be falsely negative when bleeding is duodenal and there is no duodenogastric reflux or when the bleeding has ceased. The following algorithm is for evaluation of lower GI bleeding.

EXTRAINTESTINAL MANIFESTATIONS

Unfortunately, some patients have both upper and lower GI bleeding sites that defy diagnosis despite the numerous diagnostic modalities available. They need repeated studies if bleeding recurs or becomes a management problem. Endoscopic view of the antrum of a patient with watermelon stomach. Vascular ectasias are present on top of rugal folds giving the characteristic ``striped'' appearance to the mucosa. This patient presented with chronic gastrointestinal blood loss that necessitated transfusions. Antral view of the same patient 2 weeks after the second YAG laser treatment of the vascular lesions. There was no further endoscopic evidence of the vascular lesions. A linear ulcer caused by the laser treatment is present. The patient needed no further transfusions in 10 months of follow-up care.

RADIOLOGY

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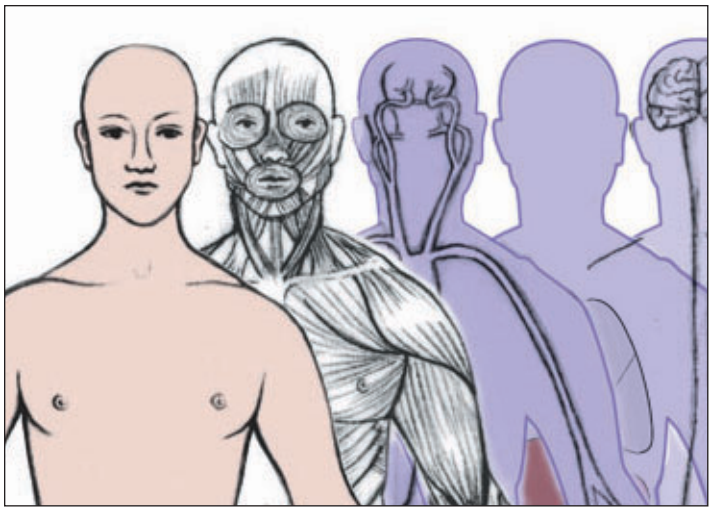

Figure 1-1. Endoscopic view of the antrum of a patient with watermelon stomach. Vascular ectasias are present on top of rugal folds giving the characteristic "striped" appearance to the mucosa. This patient presented with chronic gastrointestinal blood loss that necessitated transfusions. **B.** Antral view of the same patient 2 weeks after the second YAG laser treatment of the vascular lesions. There was no further endoscopic evidence of the vascular lesions. A linear ulcer caused by the laser treatment is present. The patient needed no further transfusions in 10 months of follow-up care.

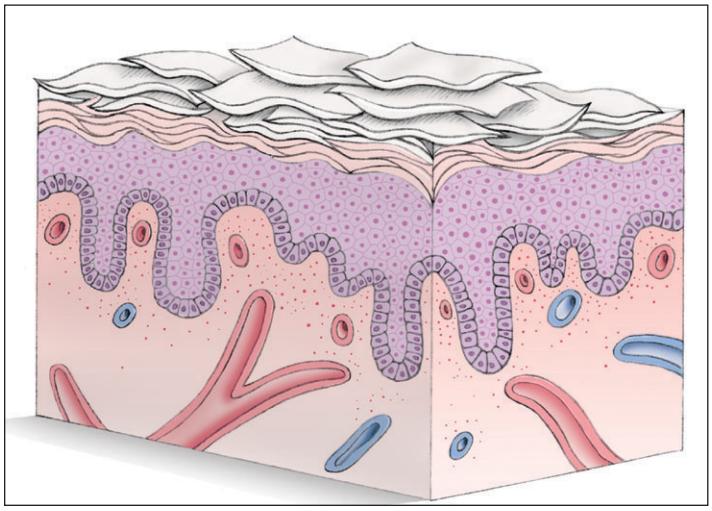

Figure 1-2. Endoscopic view of moderate-sized esophageal varices with multiple red marks.

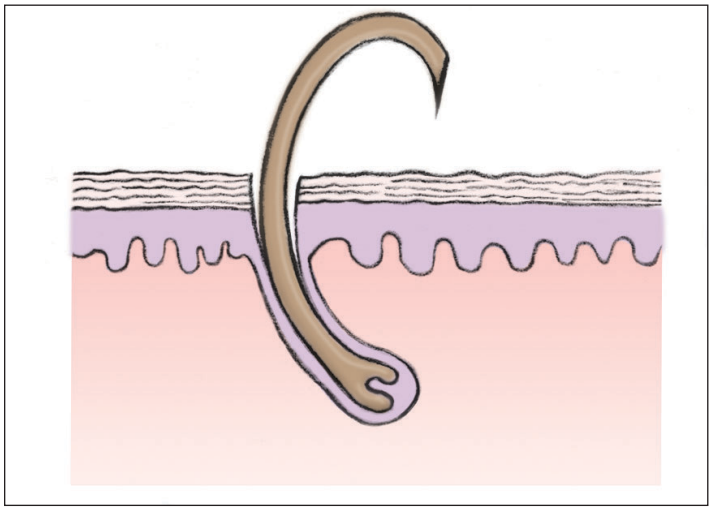

Figure 1-3. Retroflexed view of a cluster of gastric varices on the lesser curvature.

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TABLE 4-1
Causes of ascites in a series of 901 samples

Cause	Number	Percentage of total
Chronic parenchymal liver disease (cirrhosis and alcoholic hepatitis)	758	84.1
Mixed (portal hypertension plus another cause, such as cirrhosis and peritoneal carcinomatosis)	42	4.7
Heart failure	24	2.7
Malignant tumor without another cause	23	2.6
Tuberculosis without another cause	6	0.7
Fulminant hepatic failure	6	0.7
Pancreatic disease	4	0.4
Nephrogenous disorder (dialysis ascities)	2	0.2
Miscellaneeous factor[a]	36	3.9

[a]Includes biliary ascites and chylous ascites due to lymphatic tears, lymphoma, and cirrhosis.
From Runyon BA, Montano AA, Akriviadis AE, Antillon MR, Irving MA, McHutchison JG. The serum-ascites albumin gradient is superior to the exudate-transudate concept in the differential diagnosis of ascites. Ann Intern Med 1992; 117:215–220, with permission.

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