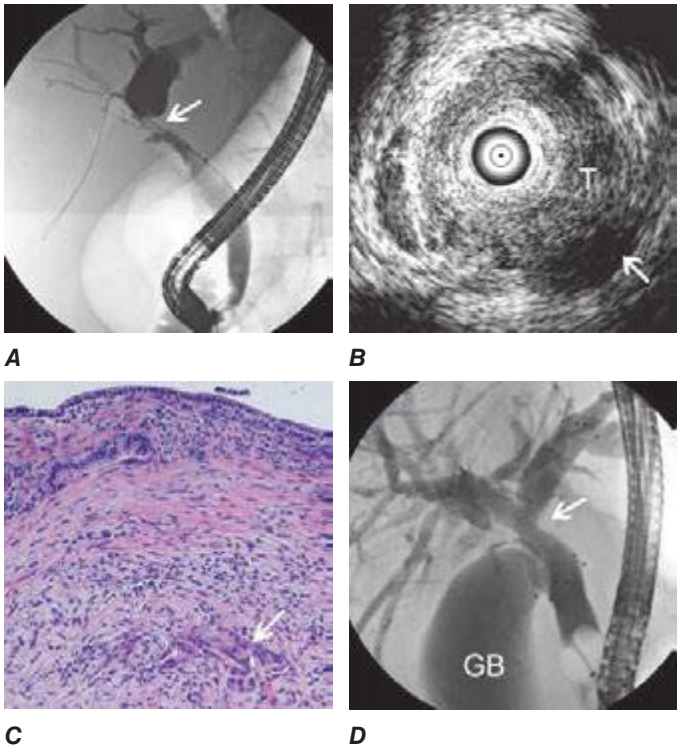


A B C D

FIGURE 345-13 Endoscopic diagnosis, staging, and palliation of hilar cholangiocarcinoma. ***A.*** Endoscopic retrograde cholangiopancreatography (ERCP) in a patient with obstructive jaundice demonstrates a malignant-appearing stricture of the biliary confluence extending into the left and right intrahepatic ducts. ***B.*** Intraductal ultrasound of the biliary stricture demonstrates marked bile duct wall thickening due to tumor (T) with partial encasement of the hepatic artery (*arrow*). ***C.*** Intraductal biopsy obtained during ERCP demonstrates malignant cells infiltrating the submucosa of the bile duct wall (*arrow*). ***D.*** Endoscopic placement of bilateral self-expanding metal stents (*arrow*) relieves the biliary obstruction. GB, gallbladder. *(Image* ***C*** *courtesy of Dr. Thomas Smyrk; with permission.)*

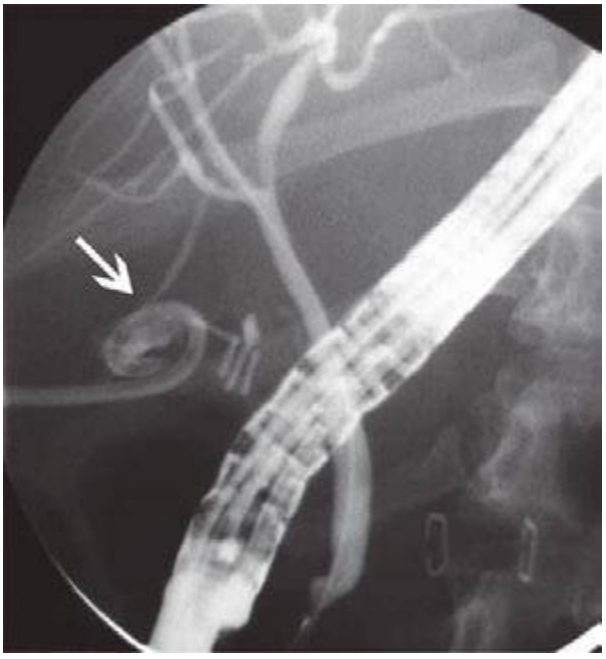


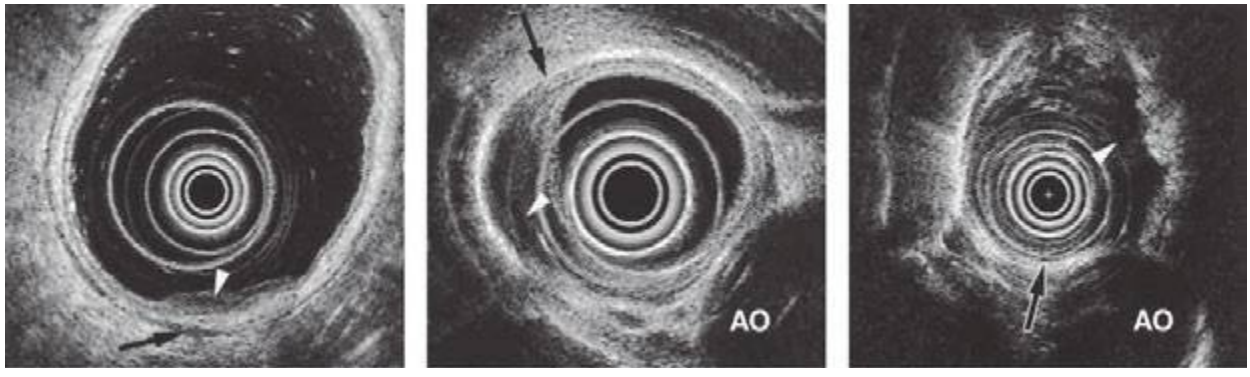
FIGURE 345-14 Bile leak (*arrow*) from a duct of Luschka after laparoscopic cholecystectomy. Contrast leaks from a small right intrahepatic duct into the gallbladder fossa and then flows into the pigtail of a percutaneous drainage catheter.

URGENT ENDOSCOPY

ACUTE GASTROINTESTINAL HEMORRHAGE

Endoscopy is an important diagnostic and therapeutic technique for patients with acute gastrointestinal hemorrhage. Although gastrointestinal bleeding stops spontaneously in most cases, some patients will have persistent or recurrent hemorrhage that may be life-threatening. Clinical predictors of rebleeding help identify patients most likely to benefit from urgent endoscopy and endoscopic, angiographic, or surgical hemostasis.

Initial Evaluation The initial evaluation of the bleeding patient focuses on the severity of hemorrhage as reflected by the postural vital signs, the frequency of hematemesis or melena, and (in some cases) findings on nasogastric lavage. Decreases in hematocrit and hemoglobin lag behind the clinical course and are not reliable gauges of the magnitude of acute bleeding. This initial evaluation, completed well before the bleeding source is confidently identified, guides immediate supportive care of the patient, triage to the ward or intensive care unit, and timing of endoscopy. The severity of the initial hemorrhage is the most important indication for urgent endoscopy, since a large initial bleed increases the likelihood of ongoing or recurrent bleeding. Patients with resting hypotension or orthostatic change in vital signs, repeated hematemesis, or bloody nasogastric aspirate that does not clear with large-volume lavage, or those requiring blood transfusions, should be considered for urgent endoscopy. In addition, patients with cirrhosis, coagulopathy, or respiratory or renal failure and those over 70 years of age are more likely to have significant rebleeding.



A B C

FIGURE 345-15 Local staging of gastrointestinal cancers with endoscopic ultrasound. In each example, the *white arrowhead* marks the primary tumor and the *black arrow* indicates the muscularis propria of the intestinal wall. ***A.*** T1 gastric cancer. The tumor does not invade the mp. ***B.*** T2 esophageal cancer. The tumor invades the muscularis propria. ***C.*** T3 esophageal cancer. The tumor extends through the muscularis propria into the surrounding tissue and focally abuts the aorta. AO, aorta.