A 45-YEAR-OLD WOMAN PRESENTED TO THE emergency department with nausea, vomiting, and abdominal pain. Her medical history was significant for mental retardation, morbid obesity, hypertension, chronic renal insufficiency requiring dialysis, insulin-dependent diabetes mellitus, congestive heart failure, and hydrocephalus controlled by a ventriculoperitoneal shunt. Liver function test results were normal. An uneventful open cholecystectomy was performed for porcelain gallbladder. On the 10th postoperative day, bilious drainage appeared in the incision. Liver function test results were normal except for a minimally elevated alkaline phosphatase level. Hepatobiliary iminodiacetic acid scan was performed (Figure 1), followed by an endoscopic retrograde cholangiopancreatogram (Figure 2).

What Is the Diagnosis?

A. Iatrogenic injury to the common bile duct
B. Cystic duct leak
C. Subvesical bile duct (Luschka) leak
D. Biliary shunt fistula

Image of the Month

Samuel E. Bledsoe, MD; Kimball I. Maull, MD

A 45-YEAR-OLD WOMAN PRESENTED TO THE emergency department with nausea, vomiting, and abdominal pain. Her medical history was significant for mental retardation, morbid obesity, hypertension, chronic renal insufficiency requiring dialysis, insulin-dependent diabetes mellitus, congestive heart failure, and hydrocephalus controlled by a ventriculoperitoneal shunt. Liver function test results were normal. An uneventful open cholecystectomy was performed for porcelain gallbladder. On the 10th postoperative day, bilious drainage appeared in the incision. Liver function test results were normal except for a minimally elevated alkaline phosphatase level. Hepatobiliary iminodiacetic acid scan was performed (Figure 1), followed by an endoscopic retrograde cholangiopancreatogram (Figure 2).

What Is the Diagnosis?

A. Iatrogenic injury to the common bile duct
B. Cystic duct leak
C. Subvesical bile duct (Luschka) leak
D. Biliary shunt fistula

Author Affiliations: Department of Surgical Education, Carraway Methodist Medical Center, Birmingham, Alabama.
Dr Maull is now with the Trauma Service, Hamad General Hospital, Doha, Qatar.

Figure 1. Image from hepatobiliary iminodiacetic acid scan at 30 minutes.

Figure 2. Endoscopic retrograde cholangiopancreatogram.