Gastric drainage of postoperative biloma

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Bile leak is a rare complication of cholecystectomy, although it has become more common with the introduction of laparoscopic cholecystectomy. It is reported in from 0.5% to 2% of patients who undergo this operation. Although endoscopic management of bile leak is an established form of treatment, the patient reported here presented late with a complication that required a different approach.

CASE REPORT

A 46-year-old woman presented with abdominal pain that had started during the day after laparoscopic cholecystectomy, 70 days before admission. The pain was periumbilical in location, intense, and continuous. She had undergone cholecystectomy at another hospital, and information regarding the operation was not available. There was no other significant history. Examination showed normal results except for tenderness in the upper abdomen. Liver function and other laboratory tests were normal. CT disclosed an encapsulated collection in left sub-diaphragmatic area and in the infrahepatic and perisplenic regions (Fig. 1). ERCP had normal results and did not demonstrate a biliary leak (Fig. 2). At endoscopy, extrinsic compression of the gastric wall was readily evident.

A decision was made to perform transgastric drainage based on prior experience with endoscopic drainage of pancreatic pseudocysts. After cystgastrostomy, a 9F, 3 cm plastic stent was placed transgastrically into the fluid collection (Fig. 3). Within a few days of the procedure the patient was asymptomatic. CT obtained 1 month later demonstrated a decrease in size of the fluid collection. At 2 months after the procedure, CT disclosed no fluid collection or evidence of the stent. The patient was followed for 9 months during which time she remained asymptomatic.

DISCUSSION

A biloma is an encapsulated collection of bile outside the biliary tree. The most common cause is biliary leak, which may be traumatic or iatrogenic in origin. The diagnosis of biloma is not difficult in its early stages; a fluid collection discovered after biliary surgery is either blood or bile. But when the diagnosis is delayed it may be necessary to differentiate biloma from other intra-abdominal fluid collections such as pancreatic pseudocyst and pancreatic cystic neoplasm. In our patient, the onset of the pain in relation to the surgery suggested the diagnosis.

The accepted approach to treatment of biliary leaks is either endoscopic or surgical. Endoscopic management involves sphincterotomy, insertion of a biliary stent or nasobiliary drain, or some combination of these. All these maneuvers are generally effec-
The aim of endoscopic treatment is to decrease biliary pressure, and in virtually all cases the insertion of a stent will serve to avoid further surgery. Bilomas should be drained because they easily become infected. Drainage can be accomplished by means of a US-guided percutaneous approach or surgery. Although endoscopic pancreatic pseudocyst drainage was reported in 1975, it is only in recent years that the number of such reports has increased. Endoscopic drainage can be accomplished via the pancreatic duct in the case of communicating pseudocysts (transpapillary drainage) or by a transmural approach through the stomach (cystgastrostomy) or duodenum (cystduodenostomy). Based on this technique, transgastric drainage of the biloma was performed, thereby avoiding further surgery or use of a percutaneous procedure. The outcome was good and the patient became asymptomatic in a few days.

The biloma in this case was peculiar in that a bile leak was not demonstrated. This is probably because of the delay in diagnosis. It would appear that when the pressure inside the biloma became high enough, the fistula closed spontaneously.

To our knowledge, this is the first description of endoscopic transgastric drainage of a biloma. It would appear that this approach can be used when the position of the biloma is such that an endoscopic cystgastrostomy can be performed. The need to combine this with ERCP-based treatment (stent or sphincterotomy) depends on whether a biliary fistula is also present.

REFERENCES