Intra-abdominal organ strangulation during intraoperative endoscopic retrograde cholangio-pancreatography with rendezvous cannulation: case report

Intraoperative rendezvous endoscopic retrograde cholangiopancreatography (ERCP) is one of the single-stage options available for managing common bile duct stones during laparoscopic cholecystectomy [1]. The rendezvous procedure allows immediate biliary cannulation and reduces the risk of post-ERCP pancreatitis [1,2]. We report a case of omentum and stomach strangulation caused by the trans-cystic guidewire during a routine rendezvous ERCP, an unusual complication.

A 41-year-old woman was admitted to the emergency department with a 3-month history of recurrent episodes of upper right abdominal pain. Examination with abdominal ultrasound demonstrated cholelithiasis. Because of the patient's intense abdominal pain, laparoscopic cholecystectomy was performed acutely. During perioperative cholangiography, stones were detected in the common bile duct, and it was decided to perform ERCP directly after the cholecystectomy.

At the beginning of the ERCP procedure, the guidewire was easily identified emerging from the papilla of Vater. During attempts to withdraw the guidewire, a high degree of resistance was encountered. Perioperative X-ray imaging revealed a twisted guidewire in the abdomen (> Fig. 1). Laparoscopy was performed immediately and showed the guidewire twisted around a structure that seemed to be part of the intestine, dark in color and with uncertain viability. Conversion of the procedure to laparotomy revealed strangulation of the omentum and anterior wall of the gastric antrum, with uncertain viability. The guidewire was cut into pieces and removed with the assistance of orthopedic scissors. The omentum and gastric antrum were fully recovered 20 minutes later (Fig. 2), and the abdomen was closed routinely. The patient was able to mobilize the same day and the day after was discharged from the hospital in good clinical condition.

The possibility of the strangulation of intraabdominal organs should be kept in mind when resistance that is hard to explain is encountered during extraction of a guidewire. Laparotomy remains the safest way to determine both viability of the abdominal organs and extraction of the guidewire [3–5].

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Fig. 1 Perioperative X-ray image shows a twisted guidewire in the abdomen of a patient undergoing endoscopic retrograde cholangio-pancreatography during surgery.

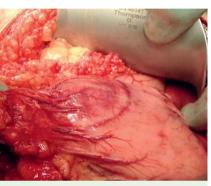


Fig. 2 Fully recovered gastric antrum and the sign of strangulation by the guidewire.

Bibliography

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