Duodenal Endoclip Migration after Laparoscopic Cholecystectomy: Report of a Case

Many kinds of complications following laparoscopic cholecystectomy have been reported, but so far as we are aware, migration of an Endoclip into the first portion of the duodenum has not previously been described. We report here a case of Endoclip migration, and suggest ways of avoiding and treating this potential complication.

A 60-year-old woman suffering from acute cholecystitis underwent emergency laparoscopic cholecystectomy. Due to severe adhesion, the operation, carried out by an experienced surgeon, took 3.3 hours. Unfortunately, bile leakage was noted on the first postoperative day. Endoscopic retrograde cholangiography on the third postoperative day revealed a duodenal ulcer containing a wire-like object located in the first portion of duodenum, which had not been present during the preoperative panendoscopic examination. The patient was discharged on the thirteenth postoperative day under conservative treatment. Two months later, the patient experienced an attack of upper abdominal pain without fever or jaundice.

Panendoscopy revealed a large peptic ulcer in the first portion of the duodenum, with an Endoclip protruding from the center of the ulcer (Figure 1). Retrieval of the Endoclip using a biopsy forceps failed. Oral antacids were prescribed, and the pain subsided two weeks later. Panendoscopy six months after the initial operation revealed a healed peptic ulcer with mild duodenitis. The Endoclip had dislodged spontaneously.

Migration of Endoclips into the common bile duct has been reported after laparoscopic cholecystectomy, causing obstructive jaundice (1,2). The present case illustrates a consequence of Endoclip migration not previously described. Judging by the location of the migrating Endoclip and the panendoscopic findings, the Endoclip most likely migrated directly through an injury in the first portion of the duodenal wall caused during dissection, resulting in ulceration of the duodenum. Although removal of Endoclips has been suggested when they migrate into the common bile duct (2), close observation was needed in the present case, and the Endoclip dislodged spontaneously without any sequelae six months later.

The use of a delicate technique to avoid injuring the duodenum, proper placement of Endoclips, and retrieval of incorrectly placed Endoclips should prevent duodenal migration. In cases of duodenal ulceration following laparoscopic cholecystectomy, panendoscopy is an effective diagnostic tool. The Endoclip may dislodge spontaneously from the duodenum, and treatment should therefore be simply close observation for further complications such as

Figure 1: Endoscopic appearance of the duodenal ulcer with an Endoclip protruding from its center.

bleeding, perforation, or intractable pain, in which case surgical intervention is necessary.

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References

1. Sato T, Denno R, Yuyama Y, Matsuura T, Kanisawa Y, Hirata K. Unusual complications caused by Endoclip migration following a laparoscopic cholecystectomy: report of a case. *Jpn J Surg* 1994; 24: 360-2.
2. Raoul JL, Bretagne JF, Siproudhis L, Heresbach D, Campion JP, Gosselin M. Cystic duct clip migration into the common bile duct: a complication of laparoscopic cholecystectomy treated by endoscopic biliary sphincterotomy. *Gastrointest Endosc* 1992; 38: 608-11.

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