

### **Clip Migration Within the Common Duct After Laparoscopic Cholecystectomy: A Case of Transient Acute Pancreatitis in the Absence of Associated Stones**

The late fate of metal clips used during laparoscopic cholecystectomy (LC) is not known, though the possibility that they can act as nuclei for recurrent common duct gallstones (GS) is well documented (1–4). We report here the case of a 63-year-old woman who had acute pancreatitis 15 days after LC. The patient belonged to a consecutive series of subjects who entered a prospective study on the short- and long-term side effects of metal clips placed during LC (2). The study design included a plain X-ray examination of the abdomen before discharge from the hospital and the repetition of X-ray films at scheduled

intervals. In this patient, the first control the day after LC demonstrated a “normal” position of the four residual metal clips in the right upper quadrant. At subsequent X-ray controls, performed after readmission for “acute abdomen”, one of the two 12 mm-large clips (placed on the cystic duct) was missing (Figure 1). Pancreatitis was confirmed by laboratory (amylasemia 4.350 Somogy Units/liter), ultrasound examination and CT scan. Symptoms disappeared three days after readmission. The patient had no recurrent symptoms and no further clip migration at the one, two and three year controls. She had endoscopic



**Figure 1:** The missing of one metallic clip at the X-ray control at day 18 after LC. Only three clips are detectable in the right upper quadrant. The missing clip was not detectable in any of the most dependent places of the abdominal cavity.

sphincterotomy prior to LC for removal of two common duct GS. It is presumed that the “missing” clip eventually passed through the papilla of Vater, maybe facilitated by the previous sphincterotomy, and was eliminated with stools.

Spontaneous passage of a metal clip from the common bile duct, where it had provoked mild jaundice, into the bowel, and the final collection of the clip with stools has been reported (5). We have recently collected a personal series of 64 GS containing suture material or phytobezoars (3,4) and also including GS around metal clips after LC (2). Our extensive analysis suggests that the exact percentage of patients susceptible to having foreign-body-related GS is unpredictable, though it is not negligible (2–4). However, this evidence, as well as bile duct obstruction, is not a side effect limited to the use of non-absorbable suture material or metal clips (1), but can occur with all types of intrabiliary foreign bodies (6,7), including absorbable sutures and clips, since all of them alter the “normal” equilibrium and the free flow of the bile (2). However, the present paper reports the probably “exceptional” evidence that a 12-mm-large metal foreign body not only did not lead to the formation of common duct GS, but also passed spontaneously through the sphincter of Oddi, with only transient symptoms.

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