

Clinical Note

Complication of gall stone lost during laparoscopic cholecystectomy.

The complications associated with laparoscopic cholecystectomy include perforation, bleeding and injury to common bile duct, and are the same as may occur with the open method, but their incidence varies. The incidence of perforation of the gall bladder during laparoscopic cholecystectomy was reported to be 10%-40%.¹ Prevention of complications are dependent on proper patient selection, meticulous technique and an accepting attitude toward conversion to open cholecystectomy. A 45-year-old female presented with a 5 day history of pain in the right iliac fossa. She had a past history of laparoscopic cholecystectomy 2.5 years earlier. On examination she was afebrile and mildly tender in the right iliac fossa. A plain abdominal x-ray showed no abnormalities, but ultrasonography showed a mass. A computerized tomography (CT) scan was then performed and revealed a 3 x 2 cm mass (Figure 1) to the lateral side of the ascending colon, radiologically suggestive of a colonic tumor. On reviewing her old notes it was stated in the operative notes that a 3 x 2 cm gallstone had been dropped from a perforated gall bladder during extraction from the abdominal wall, retrieval was unsuccessful. The patient was operated upon and the stone was removed through a small incision in the right iliac fossa. She recovered uneventfully and was discharged home 2 days after surgery.

Management. The effect of bile and stones on the peritoneal cavity may depend on the presence or absence of biliary infection at the time of perforation.¹ In a study on rats² it was suggested that the combination of bile and stones in the peritoneal

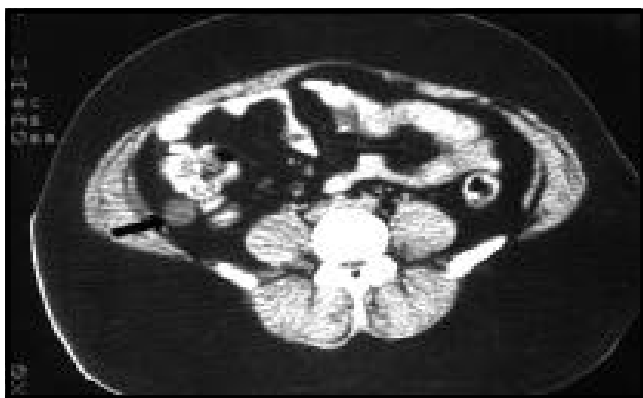


Figure 1 - A section of computed tomography showing a mass 2 x 3 cm suggestive of ascending colon tumor.

cavity may result in an increased risk of adhesion and delayed intra-abdominal abscesses and abdominal wall abscess.³ There are reports of migration of stones into the pleura, lung and penetration into the colon.^{3,4} The complications are related to the volume of bile and size of stone or stones.² Perforation of the gall bladder should be avoided by gentle traction during dissection and avoidance of direct diathermy to the wall of the gall bladder. Stretching or enlarging the fascial incision under vision should be the way of extracting the gall bladder from the peritoneal cavity if resistance is encountered. Extraction bags are now available and a damaged gall bladder can be placed into a bag and removed. Spilled stones can be removed by grasping forceps or by wide-bore suction, after floating the stones with saline.¹

On the basis of this case report, it is advisable to remove, as much as possible, stones and bile spilled into the peritoneal cavity. Proper documentation in the operative notes of residual stones is important to avoid incorrect diagnosis at a later date. However, most surgeons in the United Kingdom believe it is not necessary to retrieve all lost stones. In one audit,⁵ 82% of surgeon felt retrieval of lost stones was preferable but not necessary and 18% felt it was mandatory to remove all stones from the peritoneal cavity.

References

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