ORIGINAL RESEARCH PAPER

Surgery

POST LAPAROSCOPIC CHOLECYSTECTOMY INTRAHEPATIC BILOMA - A CASE REPORT

KEY WORDS: *Cholelitiasis,* Laparoscopy, Biloma, Interventional radiology.

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ABSTRACT

A 58yrs old lady underwent laparoscopic cholecystectomy for *cholelithiasis.* The gall bladder was dissected out by duct first method and its anatomy was clearly delineated and moderate fibrous adhesion encountered in the Calot's triangle and liver bed. Post operatively, on the same day she complained of severe pain in the right lower chest and right shoulder and CT scan of the abdomen showed a large subcapsular collection in the right lobe of liver extending from the gall bladder fossa(Segment IV) upto Segment VI. It was evacuated percutaneously using a pig tail catheter under CT scan guidance and she recovered.

INTRODUCTION :

Since laparoscopic cholecystectomy is being routinely performed for gall bladder stones, inadvertent injury to the bile duct may go unnoticed or remain covert intraoperatively. Bile leak arising from either minor or major bile duct injuries can assume significance by influencing the postoperative morbidity as well as mortality of the patients. Although bile accumulates within the peritoneal cavity but on rare occasions it can develop in the subcapsular region of the liver close to the gall bladder fossa. Incidence of bile leak following laparoscopic cholecystectomy seems higher as being reported by several series in the range of 0.2% to 4%[1] compared to open cholecystectomy[7].

CASE REPORT :

A 58yrs old hypertensive lady presented with recurrent painless dyspepsia and diminished appetite for about 1 year. Clinically no abnormality was detected in her abdomen, however USG of the Abdomen showed a single calculus in the gall bladder. After necessary preoperative preparation, laparoscopic cholecystectomy was performed and her gall bladder was found to be normally distended and having a wide, short cystic duct along with moderate amount of fibrous adhesion in the Calot's area as well as in the gall bladder bed. Postoperatively, she experienced severe pain in her right shoulder and right lower chest which occurred about 6hrs after surgery and the abdominal drain was having minimal serous collection. Her pain subsided completely on the following day with regular dosage of analgesics and she tolerated oral feeding satisfactorily. Hence, no investigation was done to ascertain the cause and she was discharged on advice after drain removal. About 10 days later she came back to the hospital for having similar right shoulder pain along with minimal breathing difficulty, but it was not associated with fever or jaundice. A CT Scan of the abdomen was done which revealed the presence of a large subcapsular collection(20x4 cms) [Figure #1] in the right lobe of liver and extending to the gall fossa in segment IV. But no collection was seen in the peritoneal cavity. Immediately a pigtail catheter was inserted under CT scan guidance and about 1500 ml of bile from the area was evacuated and it gradually subsided in 2 days. CT Scan of the abdomen were repeated after 10 days [Figure #2] and 30 days later it did not show any remnant collection. The pig-tail drain was then removed after 12 days and the patient was later found to be symptom free and is maintaining a good health now.

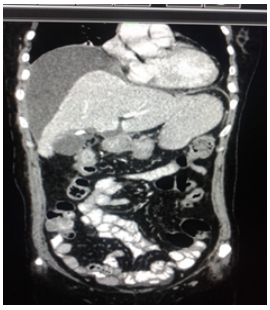
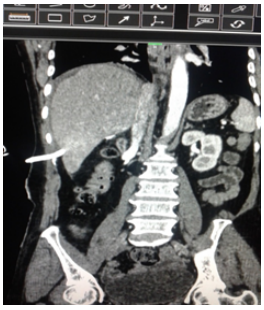


Fig #1



Fig#2

DISCUSSION :

Biloma is a localised collection of bile developing outside the biliary tract and Kuligowska et al opined that the term includes both intrahepatic as well as extrahepatic collection. Cystic duct stump leak comprises >50% of extrahepatic bilomas but the intrahepatic variety which may occur during ERCP due to breakdown of biliary ductules arising out of high intrabiliary pressure or disruption of similar ductules during gall bladder dissection in the liver bed[3,7] and in the case of our patient this might be the probable reason for developing such an enormous subcapsular biloma. Modern imaging techniques (MRI,CT & HIDA Scans)[6] and other invasive procedures such ERCP & PTC[5] can identify the lesions besides allowing minimal invasive treatment. Spontaneous sealing and cessation of bile drainage after percutaneous evacuation of biloma usually precludes the use of any kind of cholangiography and it can even fail to detect a minute leak. Of course larger leaks or those having persistent drainage despite percutaneous evacuation will require bile duct stenting[4,5] or occasionally nasobiliary drainage to alleviate the condition.

CONCLUSION :

It can now be inferred that biloma can occur unexpectedly during laparoscopic cholecystectomy, but it may remain hidden or undetected until symptoms develops postoperatively. Majority of such conditions can be successfully managed by drainage catheter placement under imaging guidance

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