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Case Report

Post-laparoscopic cholecystectomy pancreatitis

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ABSTRACT

Laparoscopic cholecystectomy is one of the commonest operations performed on the biliary system. Acute pancreatitis following Lap-chole is quite uncommon. Whether pancreatitis is a complication or a sequalae to surgical treatment of gall stone disease continues to be a debatable issue. A 37-year-old lady underwent laparoscopic cholecystectomy for incidentally diagnosed gall stones. Early post-operative course was uneventful. The patient presented 3 weeks after surgery with severe excruciating abdominal pain and was diagnosed as acute pancreatitis by ultrasound evaluation. Liver function tests were altered with raised bilirubin, serum lipase and amylase. MRCP revealed a normal biliary tract. Pancreas showed changes of acute interstitial pancreatitis. Patient responded to conservative line of treatment. Acute pancreatitis could be a known complication following laparoscopic cholecystectomy. What causes pancreatitis continues to be a matter for debate. MRCP is the investigation of choice. Interventional endoscopy (ERCP) is indicated in cases of impacted gallstone in the CBD. While if the CBD is clear of stones, aggressive conservative management will suffice.

Keywords: Post laparoscopic, Cholecystectomy, Pancreatitis, Treatment

INTRODUCTION

Laparoscopic cholecystectomy is one of the commonest operations performed on the biliary tract. Multitude of complications may develop depending upon the difficulty of situation caused by inflammation and adhesions during the course of surgery. Majority of these are related to the biliary system. Acute pancreatitis following laparoscopic cholecystectomy is an extremely rare complication.[1] What causes acute pancreatitis in such a setting continues to be a debatable issue. A case of acute pancreatitis in a 37-year-old lady who had undergone laparoscopic cholecystectomy is presented to create awareness of this complication as well as to outline further surgical care in such cases.

CASE REPORT

A 37-year-old lady with established diagnosis of uncomplicated gall stones presented for evaluation. On general examination there was no icterus or pallor. Physical examination of the abdomen did not reveal any abnormality. LFT and CBC were within normal limits. USG of the abdomen revealed multiple gall stones. No evidence of gall bladder wall thickening or CBD dilatation or stones. Patient underwent Lap-chole. Intra-operatively, it was revealed to be a normal CBD with a patent cystic duct (Figure 1). Intraoperative and post-operative course was uneventful event. Patient presented 3 weeks after discharge with severe excruciating pain in the upper abdomen. On examination, the patient was Icteric, pulse was 110 beats/min and the blood pressure were 110/70 mmHg.

Per abdomen examination revealed rebound tenderness and guarding in the epigastrium, CBC showed a total count 11,790. Total bilirubin-4 mg/dl with a direct bilirubin of 2.8 mg/dl whereas SGPT and SGOT were normal. Serum lipase was 2387 IU/l and serum amylase was 5398 IU/l.

The serum alkaline phosphatase was 323 IU/l. Ultrasound of the abdomen revealed a swollen and bulky pancreas. There was no collection in the gall bladder fossa. CBD was mildly dilated. was done which revealed mildly dilated CBD with no evidence of stones in the CBD. There was distal tapering of the CBD. (Figure 2) Pancreas was edematous and bulky with peripancreatic inflammatory changes typical of acute interstitial pancreatitis. (Figure 3) Aggressive supportive care was administered which compromised of IV antibiotics, analgesics and IV fluids. Patient responded well to the treatment with fall in the serum lipase and amylase levels within 4 days of treatment and was discharged from the hospital.

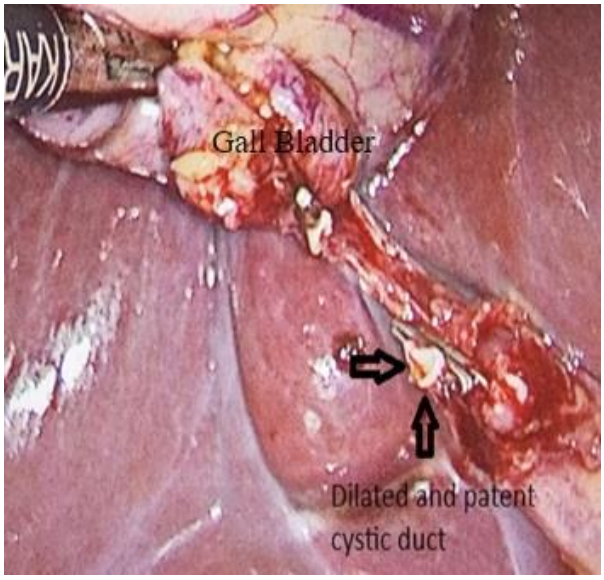

Figure 1: Intraoperative photo showing a dilated and patent cystic duct.

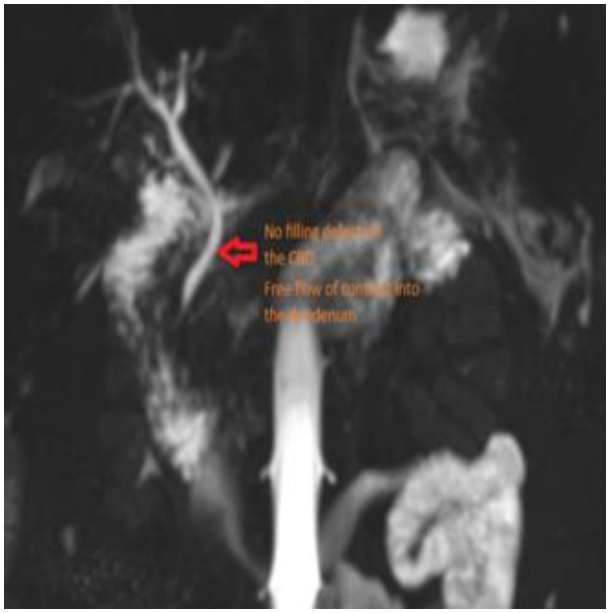

Figure 2: MRCP shows a CBD without any filling defects.

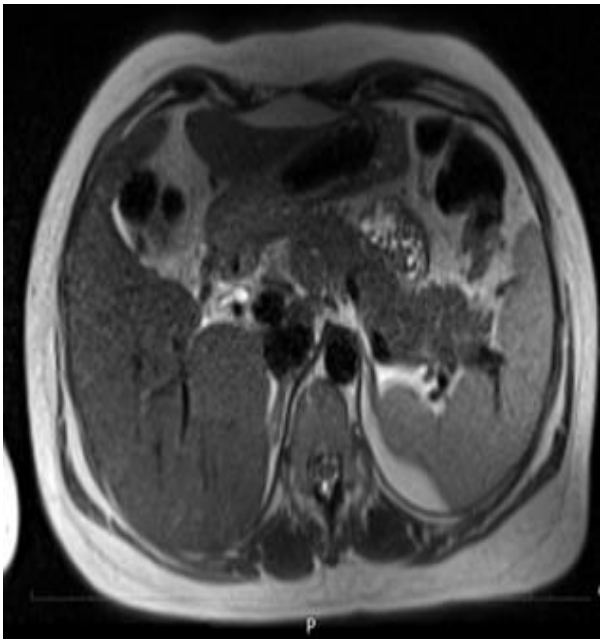

Figure 3: MRCP shows features of acute interstitial pancreatitis.

DISCUSSION

Acute pancreatitis following cholecystectomy is a rare condition. The etiology of this complication is debatable. Whether pre-existing CBD stones are initially missed and later after surgery may have passed down the CBD giving rise to gall stone pancreatitis is a possibilty.[2] However, in the case presented there was no evidence of gall stones in the CBD pre operatively. There is a high likelihood that during dissection of the Hartmann's pouch, few stones or a sludge ball might pass down the cystic duct into the common bile duct. This could cause transient obstruction of the common bile duct due to impaction at the ampulla of Vater. This could possibly precipitate an attack of acute gall stone pancreatitis.[3] It is Important to understand that a wide patent cystic duct as was seen in the case presented could have led to passage of stones or sludge during surgical dissection into the common bile duct leading to transient obstructive jaundice as well as precipitating attack of acute gall stone pancreatitis. Total bilirubin, serum lipase and serum amylase were raised on admission. However, after treatment these levels normalized. MRCP also did not reveal any stone or sludge in the distal CBD except for interstitial pancreatitis. Therefore, MRCP is the investigation of choice in such cases.[4] If the MRCP doesn't reveal any stone or sludge in the CBD then conservative treatment is advisable. However, if there is any stone impaction in the CBD then, there is a need of an interventional endoscopic procedure to relieve obstruction of the CBD caused by the stone.[4,5] Therefore, awareness of this possibility needs to be kept in mind while performing cholecystectomy. Therefore, post-operative pain and jaundice need not necessarily be a cause for panic in the mind of the attending surgeon.

CONCLUSION

Acute pancreatitis following laparoscopic cholecystectomy is a rare complication which needs to acknowledged. MRCP is the investigation of choice. Supportive conservative treatment is necessary for patients in whom the CBD is devoid of gallstones in the CBD on MRCP. If there is stone or sludge impaction in the CBD then ERCP is necessary.

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