International Surgery Journal
Vagholkar K et al. Int Surg J. 2016 May;3(2):941-943
http://www.ijsurgery.com
pISSN 2349-3305 | eISSN 2349-2902

DOI: http://dx.doi.org/10.18203/2349-2902.isj20161171

Case Report

Post cholecystectomy pancreatitis: a misleading entity

Ketan Vagholkar*, Amish Pawanarkar, Suvarna Vagholkar, Shamshershah Pathan, Rohini Desai

Department of Surgery, D.Y. Patil University School of Medicine, India

Received: 13 April 2016
Accepted: 18 April 2016

***Correspondence:**
Dr. Ketan Vagholkar,
E-mail: kvagholkar@yahoo.com

ABSTRACT

Cholecystectomy is one of the commonest hepatobiliary procedures performed in general surgical practice. Both laparoscopic as well as open cholecystectomies have their place in modern-day surgical practice. Post cholecystectomy syndrome is a known entity affecting approximately 20% of patients who have undergone cholecystectomy. Post cholecystectomy pancreatitis is an uncommon and rare complication. A case of acute early post cholecystectomy pancreatitis is presented to create an awareness of this rare but misleading and morbid complication.

Keywords: Cholecystectomy, Pancreatitis

INTRODUCTION

Cholecystectomy is usually followed by an uneventful course. However, in a few patients early complications can develop. Most of these are usually attributed to bile duct injuries and bleeding from the adjacent vessels. Therefore, symptoms of pain or alteration in drain output always raise the suspicion of either a bile duct injury or a hemorrhagic complication.[1]

Pancreatitis developing during the early post-operative course is quite uncommon especially in patients who do not have any stones in the common bile duct (CBD) prior to undergoing cholecystectomy. Therefore awareness of such a complication developing is essential to avoid misdiagnosis and mistreatment.

A case of early acute early post cholecystectomy pancreatitis is presented along with a brief review of literature.

CASE REPORT

36 years old male patient with chronic calculus cholecystitis underwent open cholecystectomy. Open cholecystectomy was contemplated in view of the severity of the attack of acute cholecystitis which he had 6 weeks prior to surgical intervention. An MRCP done preoperatively did not show any stones in the CBD (Figure 1). At surgery the gall bladder was thickened and densely adherent to the inferior surface of liver. The Hartmann's pouch was expanded and adherent to the CBD. The CBD was undilated and normal on palpation. A combination of meticulous sharp and blunt dissection of the gall bladder by fundus first method was performed. The gall bladder was removed and specimen was opened and inspected. The gall bladder wall was thickened and contained thick bile, abundant sludge with presence of small soft gall stones (Figure 2). A tube drain was placed in the sub hepatic region. On post-operative day 3 the patient complained of sudden onset of severe excruciating pain originating in the epigastrium and radiating to left hypochondrium and the back. The attack of pain lasted for almost two and half hours. During this episode the pulse was 92 beats per min and the BP

120/70 mmHg. The patient was icteric. Per abdominal examination revealed mild fullness in the upper abdomen. There was tenderness in the epigastrium. However there was no rebound tenderness, guarding or rigidity.

Figure 1: Preoperative MRCP showing a clear common bile duct and pancreatic duct.

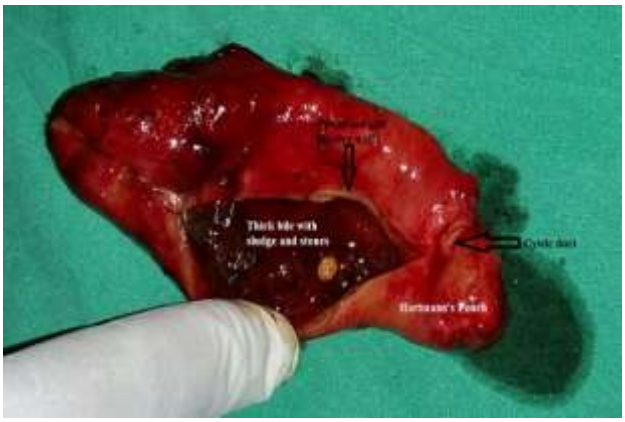

Figure 2: Specimen of the gall bladder which has been opened shows thick bile, sludge and soft stones.

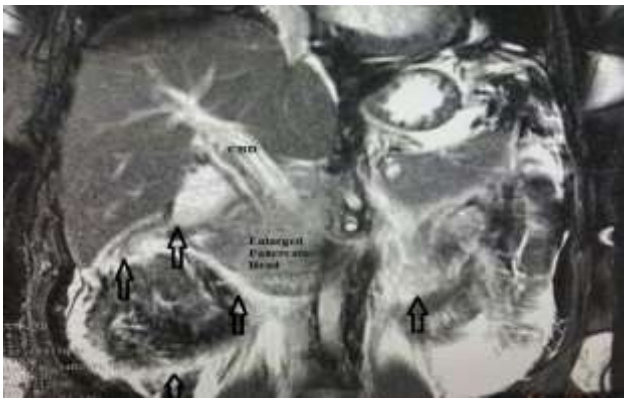

Figure 3: Post cholecystectomy MRCP showing normal CBD but plenty of fluid in the abdominal cavity marked by black arrows. The head of the pancreas is enlarged.

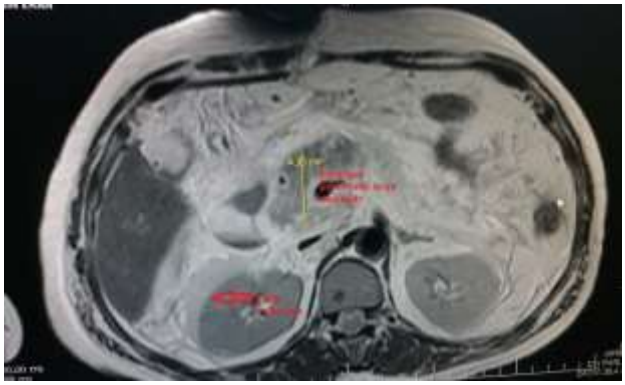

Figure 4: Post cholecystectomy MRCP showing an enlarged head of and body of the pancreas with fat stranding.

Hematological investigations were carried out. CBC was normal. However liver function tests were grossly deranged. Total bilirubin was 7.5% mg, Direct bilirubin: 5.5% mg, SGOT: 75 IU, SGPT: 80 IU, Alkaline phosphatase: 430 IU, Serum Amylase: 500 IU, Serum lipase: 1190 IU. An MRCP was done immediately which revealed a normal CBD, common hepatic duct and intrahepatic biliary radicals. There was no evidence of any filling defect nor was there dilatation of any portion (Figure 3). Head and body of pancreas were bulky with presence of fat stranding (Figure 4). There were extensive fluid collection in peri pancreatic area and sub hepatic region (Figure 3). A diagnosis of acute pancreatitis was therefore made and aggressive conservative treatment commenced. Patient responded to this treatment within 2 days. By fifth post-operative day, the total bilirubin was 2.5% mgm, alkaline phosphatase was 180 IU. The drain output however increased and drained approximately 750cc of blood stained fluid which later cleared and stopped draining within 2 days. Patient passed flatus and stools by the seventh post-operative day. Oral feeds were commenced a day after. Liver function tests were performed on seventh post-operative day and were within the normal range. Drain was removed on seventh post-operative day. Complete suture removal was done on tenth post-operative day. Patient has been following up for the last 1 month with no symptoms.

DISCUSSION

Early post cholecystectomy pain can be attributed to a wide variety of causes.[1] A missed stone or a sludge ball in the CBD could possibly pass across the ampulla of Vater giving rise to temporary obstruction with accompanying pain. This can also cause transient jaundice which will resolve after passage of stone or sludge ball into the duodenum. It can also cause back pressure changes in the CBD leading to blow out of the cystic duct stump with leakage of bile. The leaking bile may give rise to clinical features of peritonitis. However, this process may take some time approximately 2-3 days to evolve fully with typical clinical features. In the case presented the gall bladder was severely thickened and

fibrotic. Pre-operative MRCP was normal with no evidence of any CBD calculi or sludge. Microliths can also cause or precipitate severe pancreatitis.[2] Microliths cannot be picked up by routine MRCP or CT scanning. It is therefore possible that microliths in the CBD bile may have passed and crossed the sphincter of Oddi causing temporary obstruction with precipitation of an attack of acute pancreatitis.[3] This was evidenced by enlargement of pancreatic head and body as seen on the post-operative MRCP. Typical fluid collections in peri pancreatic area with fat stranding are diagnostic of pancreatitis. Prompt and aggressive supportive care can lead to early resolution of pancreatic inflammation. Post cholecystectomy acute pancreatitis therefore can be a misleading complication after cholecystectomy.[4] Any post-operative sequel after cholecystectomy therefore warrants an urgent MRCP. MRCP provides an excellent road map to plan the course of further treatment. In the case presented, as the diagnosis of acute pancreatitis was confirmed and the CBD was normal, conservative treatment was the mainstay of management. However if there happens to be a stone or sludge ball impacted in the lower end of the CBD then ERCP with sphincterotomy and stenting is essential.

CONCLUSION

Early acute post cholecystectomy pancreatitis is a rare entity. Immediately MRCP accompanied with altered enzymes (lipase and amylase) and liver function tests is diagnostic. Aggressive supportive care is the mainstay of treatment in cases where there is no obstruction in the CBD. However if there is an impacted stone or sludge ball seen on MRCP then endoscopic intervention is mandatory.

ACKNOWLEDGEMENTS

We would like to thank the Dean of D.Y. Patil University School of Medicine, Navi Mumbai, India for allowing us to publish this case report.

We would also like to thank Parth Vagholkar for his help in type setting the manuscript.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

REFERENCES

1. Shaffer E. Acalculous biliary pain; new concepts for an old entity. Dig Liver Dis. 2003;35(3):20-5.
2. Ros E, Navarro S, Bru C, Garcia Puges A, Valderrama R. Occult microlithiasis in idiopathic acute pancreatitis; prevention of relapses by cholecystectomy or ursodeoxycholic acid therapy. Gastroenterology. 1991;10(6):1701-9.
3. Abeysriya V, Deen KI, Navarathne NM. Biliary microlithiasis, sludge, crystals, microcrystallization, and usefulness of assessment of nucleation time. Hepatobiliary Pancreat Dis Int. 2010;9(3):248-53.
4. Quallich LG, Stern MA, Rich M, Chey WD, Barnett JL, Elta GH. Bile duct crystals do not contribute to sphincter of Oddi Dysfunction. Gastrointest Endosc. 2002;55(2):163-6.

Cite this article as: Vagholkar K, Pawanarkar A, Vagholkar S, Pathan S, Desai R. Post cholecystectomy pancreatitis: a misleading entity. Int Surg J 2016;3:941-3.