Case Report

Post-cholecystectomy syndrome (PCS)

Abu Ahmed Ashraf Ali[1], Mahamud Riyad[2], Sadia Armin Khan[3]

Abstract

Post-cholecystectomy syndrome (PCS) is a common manifestation in patients with cholecystectomy. Patient may present with upper abdominal pain, vomiting, gastrointestinal disorders, jaundice, and dyspepsia. Choledocholithiasis, biliary dyskinesia, and dilation of cystic duct remnants are common causes of these symptoms. The symptoms can recur after a symptom-free period following cholecystectomy or they can persist after surgery. Ultrasonography & computed tomography (CT) are the two most common investigations along with magnetic resonance imaging scan have a high sensitivity in detecting the causes of PCS. We report a case of a 17-year-old girl who came to the General Surgery Department with recurrent episodes of abdominal pain following cholecystectomy. The MRCP showed a dilated cystic structure arising from common bile duct resembling a gall bladder whereas X-ray abdomen confirmed presence of clip of previous laparoscopic cholecystectomy.

Keywords : Biliary dyskinesia, choledocholithiasis, cystic duct remnant, post-cholecystectomy syndrome.

Introduction

Cholecystectomy is the most common method of choice for treating symptomatic gall stones. It can either be performed laparoscopically or by open cholecystectomy though laparoscopic cholecystectomy is the gold standard. Continuation of symptoms that patient experienced before cholecystectomy, or new symptoms like epigastric pain, vomiting, dyspepsia mimicking cholecystitis after cholecystectomy is called Post Cholecystectomy Syndrome (PCS).

About 10 to 15% of the patients with cholecystectomy experience PCS. The main symptoms of PCS include upper abdominal pain and dyspepsia. Ninety percent of the time, the etiology of PCS is identifiable, whereas recognized common causes are long cystic duct, choledocholithiasis, stone at cystic duct remnants & biliary dyskinesia.

1. Principal and Head, Department of surgery, Ad-din Women's Medical College, Dhaka.
2. Associate Professor, Department of surgery, Ad-din Women's Medical College, Dhaka.
3. Assisstant Professor, Department of surgery, Ad-din Women's Medical College, Dhaka.

Correspondence :
Dr. Mahamud Riyad
Associate Prof. Dept. of Surgery, AWMC.
E-mail : foysol_doctor@yahoo.com

Case Report

17 years old girl presented to general surgery out-patient department with recurrent right upper abdominal pain for five years, which was colicky in nature, was radiating to back and right shoulder, associated with vomiting and was aggravating after fatty food. Patient was admitted several times at different hospitals in last five years with the same complaints. Few occasions she was diagnosed as acute pancreatitis and treated conservatively. She was not anorexic. Her bowel and bladder habit was normal. She didn't loss weight in this time interval. She was neither diabetic, nor asthmatic and didn't suffer from jaundice. Patient had laparoscopic cholecystectomy 7 years back at her age of ten for cholelithiasis.

On examination, she was healthy with average body build. She was neither anemic, nor icteric. Dehydration, edema & clubbing were absent. Her pulse was 80 bpm, BP 110/80 mm of Hg. Examination of abdomen showed healed scars of previous laparoscopic cholecystectomy. Right upper abdomen was slightly tender on deep palpation but Murphy's sign was negative.

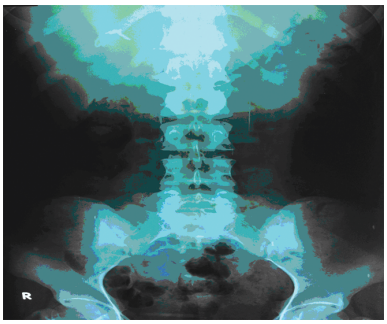
All laboratory results were within normal limits :

CBC - TC 7000, Neutrophil 56%, Hb 15gm/dl;

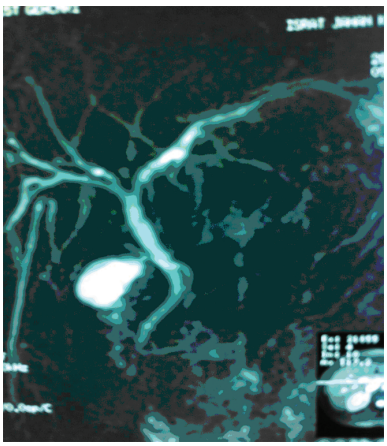
LFT - S. bilirubin 8gm/dl, SGPT 35 IU/L, Alkaline phosphatase 135 IU/L; Serum amylase 40 U/L; Serum lipase 68 U/L.

On imaging-

USG couldn't identify any pathology but reported as absent gall bladder.



X-ray abdomen showed three clips of previous laparoscopic surgery.



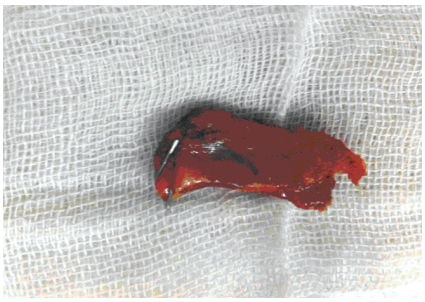
MRCP revealed a gall bladder like structure which was connected to common bile duct with a narrow duct.

Patient underwent laparotomy & findings were-

1) Adhesions around gall bladder fossa

2) Long cystic duct with dilation of terminal part, two clip attached on it.

Cystic duct was tied and the remnant excised as conventional open cholecystectomy. Post-operative recovery was smooth and uneventful in last 6 months of follow-up.



Discussion

Laparoscopic cholecystectomy is an established operation for symptomatic gall stone disease. However about 5% of patients may experience episodes of upper abdominal pain similar to those that they had prior to cholecystectomy.[1] These symptoms may be due to biliary stricture, retained / recurrent biliary calculi, stenosis or dyskinesia of sphincter of Oddi, cystic neuroma, remnant gall bladder / cystic duct stump calculi etc. and are together grouped as post cholecystectomy syndrome.

Long cystic duct remnant defined as residual duct greater than 1 cm in length, may cause post-cholecystectomy syndrome.[2] MRCP emerges as the optimal method for evaluating the biliary tree in these cases.[2,3] It has now been suggested that it is safe and feasible to remove the gall bladder or gall bladder remnants in such patients laparoscopically.[4,5]

Conclusion

Proper dissection and identification of gallbladder - cystic duct junction is paramount for complete removal of the GB and to prevent recurrent symptoms. If USG failed to diagnose the condition, MRCP is the best options available. Patients with recurrent symptoms and proven stones should be re-operated and laparoscopic surgery is no more a contra-indication for these revision surgeries.

References

1. Rozsos I, Magyarodi Z, Orban P. Cystic Duct Syndrome and minimally invasive surgery. OrvHetil. 1997; 138:2397–401.

1. Shaw C, O'Hanlon DM, Fenlon HM, McEntee GP. Cystic duct remnant and the post-cholecystectomy syndrome. Hepatogasroenterology. 2004; 51:36–8.

2. Rogy MA, Fugger R, Herbst F, Schulz F. Reoperation after cholecystectomy: The role of the cystic duct stump. HPB Surg. 1991;4:129–34

3. Chowbey PK, Bandyopadhyay SK, Sharma A, Khullar R, Soni V, Baijal M. Laparoscopic re-intervention for residual gallstone disease. Surg Laparosc Endosc Percutan Tech. 2003; 13:31–5.

4. Clemente G, Giuliante F, Cadedu F, Nuzzo G. Laparoscopic removal of Gall Bladder remnant and long cystic Stump. Endoscopy. 2001; 33:814–5.