

Post ERCP Acute Acalculous Cholecystitis; Entity To Remember.

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Abstract

Introduction: Common complications associated with ERCP include—pancreatitis, bleeding, cholangitis, duodenal perforation.

Case Report: We report here a 16 year old boy, a very rare complication of ERCP- acute acalculous cholecystitis, in a patient of EHPVO with symptomatic portal biliopathy who was subjected to ERCP. Patient underwent emergency partial cholecystectomy. Patient had a stormy post-operative course but eventually recovered.

Conclusion: One needs to be aware of post ERCP acalculous cholecystitis, a life threatening complication for which endoscopic, percutaneous or surgical intervention should be done in a timely manner to avoid fatal outcomes

Keywords: Acute acalculous cholecystitis, ERCP complications.

Introduction

ERCP is a commonly performed diagnostic and therapeutic procedure for various hepato-pancreato biliary indications. Despite advances in technology, certain complications of ERCP are seen frequently, such as—pancreatitis [4-5%], bleeding [2-3%], cholangitis [1-2%], duodenal perforation [0.5-1%]. Post ERCP cholecystitis has been described in patients of choledocholithiasis in whom sphincterotomy with CBD clearance was done with gall bladder in situ. Acute acalculous cholecystitis as a complication post ERCP has been described only in four case reports in the past.

Case Report

A 16 year old patient presented with jaundice, low grade fever since 4 months and pruritus since 1 month. Clinical examination revealed mild icterus, grade 2 splenomegaly. Investigations showed Hb-14, WBC-3690, Platelet-1.16 lacs, Total bilirubin-3.90mg%, Direct bilirubin-2.70mg%, Alk.phos-407 I.U., AST-93, ALT-136, INR-1.1, Albumin-4.5, HIV/HBsAg/HCV-negative, serum ceruloplasmin-normal. USG—IHBRD, dilated CBD, no gallstones, splenomegaly. Upper GI endoscopy-2 small esophageal varices. CT confirmed EHPVO with portal biliopathy with non-shuntable vessels (fig. 1). Hence, decision taken for ERCP with CBD stenting.

ERCP with sphincterotomy with placement of 10FrX10cm CBD stent performed. Post-procedure patient had symptomatic relief with normalisation of bilirubin levels and patient was discharged. Patient was re-admitted 1 week later with pain in right hypochondrium, fever, vomiting. On clinical examination there was tenderness in right hypochondrium with tachycardia. Post ERCP pancreatitis was ruled out as serum amylase, lipase levels were normal. Hb-13.4 g%, WBC-14000, Platelet- 40000. LFT, RFT, INR were normal. USG showed severely distended GB, wall thickness-4.2mm, echogenic bile within, peri GB varices, no free fluid, no IHBR dilatation. CT scan showed similar findings. (fig. 3). Patient was started on intra-venous antibiotics, bowel rest. Patient did not improve with 48 hrs of conservative treatment and in view of increasing pain, tachycardia, right hypochondriac tenderness—decision taken for Percutaneous cholecystostomy. However in view of significant varices in GB fossa and peri GB region, this option was deemed very high risk by interventional radiologist. As patient was young, no co-morbidities, no organ dysfunction—decision taken to operate.

Intra-operatively GB was extremely distended, tense, thick-walled, with few necrotic patches with large peri GB varices and thick, dark green bile within (fig. 4), with thick sludge. There was significant inflammation in Calots triangle and hepatoduodenal ligament with large collaterals. In

Access this article online

Website:
www.surgicalcasesjournal.com

DOI:
10.13107/ijsc.2250-0685.

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International Journal of Surgical Cases | eISSN 2321-3817 | Available on www.surgicalcasesjournal.com/ |

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Figure 1.
CT scan shows IHBRD, pericholedochal and peri GB varices.



Figure 2.
ERCP revealed dilated proximal CBD with 3 cm stricture in distal CBD.

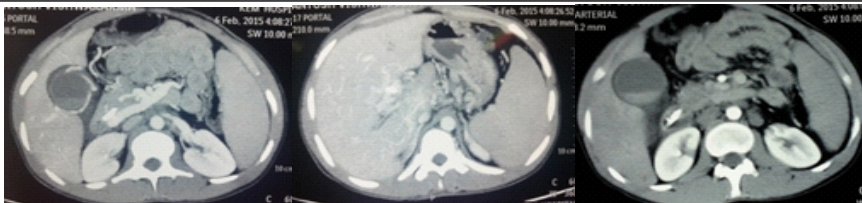


Figure 3.
CT shows CBD stent, peri-choledochal varices with enhancing bile in GB.



Figure 4. Intraoperative photograph showing necrotic patch on severely inflamed, distended and tense GB.

view of these findings partial cholecystectomy with ligation of cystic duct opening from within was performed.

Postoperatively patient was put on higher antibiotics. On postop day 6, there was severe wound infection which grew same organisms [E.coli ,Klebsiella] which were grown in GB bile. There was bilious discharge from wound on post-op day 8. Patient was subjected to repeat ERCP with CBD stent exchange .Subsequently bile discharge stopped by post-op day 12. Secondary suturing was done and patient discharged on post-op day 20. Subsequent follow-up for 4 months was uneventful. Patient has been advised life-long endoscopic surveillance.

Discussion

ERCP is a commonly performed procedure for various diagnostic and therapeutic indications in hepato-pancreato-biliary diseases. However it is associated with various life threatening complications such as – pancreatitis, bleeding, cholangitis, duodenal perforation. We have described here a case of acute acalculous cholecystitis following ERCP in a patient of EHPVO with symptomatic portal biliopathy. This patient had distal CBD stricture due to portal biliopathy with distended gall bladder. When patient was subjected to ERCP with

sphincterotomy and CBD stenting, possibly the contrast must have entered the already distended gall bladder and along with enteric organisms must have caused acute acalculous cholecystitis. Patient was successfully managed, though with a stormy post operative course. As per our literature search, there are 4 case reports of emphysematous cholecystitis post ERCP in previously normal gallbladder,,,. Hence one needs to be aware of this life threatening complication, for which endoscopic, percutaneous or surgical intervention should be done in a timely manner to avoid fatal outcomes.

Conclusion

One needs to be aware of post ERCP acalculous cholecystitis, a life threatening complication for which endoscopic, percutaneous or surgical intervention should be done in a timely manner to avoid fatal outcomes.

Clinical Message

Amongst various known and well described causes post ERCP acute abdomen, Acute acalculous cholecystitis caused by undrained contrast, retained in the gall bladder, should be kept in mind.

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Conflict of Interest: Nil
Source of Support: None

How to Cite this Article

Mirza B K, R Y Prabhu, Sagar R K, Sharvari G P, C V Kantharia. Post Ercp Acute Acalculous Cholecystitis; Entity To Remember. International Journal of Surgical Cases 2015 July-Sep;1(1): 22-23.