Case Report

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 choledocho-lithiasis 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-3.90 mg%, Direct bilirubin-2.70 mg%, Alk.phos-407 IU, 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.

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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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