IOSR Journal of Engineering (IOSRJEN) **www.iosrjen.org**
ISSN (e): 2250-3021, ISSN (p): 2278-8719
Vol. 09, Issue 4 (April. 2019), ||S (I) || PP 70-75

Bowel Obstruction and Cholecysto-Enteric Fistula, Due To a Large Gallstone: A Case Report.

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Abstract: The Cholecystoenteric fistula is a rare complication of gallstone diseases and mostly diagnosed during laparoscopic cholecystectomy or open procedure surgery This conditions can also be treated by laparoscopic method,here we have been treated by laparoscopic cholecystectomy of Cholecysto-enteric Fistula,the Stone that passes into the small intestine due to Cholecysto-enteric Fistula present themselves with recurrent ileus attacks and the clinical picture becomes apparent in case of complete obstruction. Very large stones, the successfully of laparoscopic repair for the subset the patient. illustrate the growing successfully of the laparoscopic approach to this condition, including a decreasing rate of conversion to open surgery over the last 5 years.

Keywords: fistula Cholecysto-enteric laparoscopy.

Date of Submission: 26-03-2019 Date of acceptance: 09-04-2019

I. INTRODUCTION

The cholecysto-enteric fistula is an unusual rare complication associated with chole- lithiasis affecting both the biliary and the gastrointestinal tracts. They also occur secondary to abdominal trauma, Crohn's disease, peptic ulcer disease, and malig- nancies of the biliary tract, bowel, and head of pancreas(1).

The estimated incidence of biliary fistula is reported to be 0.1% to 0.5% in autopsy series and 1.2% to 5.0% in a large series of cholecystectomies (2). Of these, 75% are cholecysto-duodenal, and only 10–20% are cholecysto-colonic fistulae. Cholecysto-duodenal fistulas are the most common, followed by cholecysto-colonic and cholecysto-gastric fistulas in descending order (3).

It has been suggested that the laparoscopic approach is contraindicated in the presence of a cholecysto-enteric fistula(4).With increasing expertise and accumulating experience of surgeons, some patients with bilio-enteric fistulae have been reported to have undergone laparoscopic cholecystectomy in the past few years(5-8).

In other researchers have found the incidence of the cholecystenteric fistula to be 2%.2 Frequently, cholecystenteric fistulas are asymptomatic and do not reliably appear on radiographs and thus are not found until laparoscopy.Previously, such a lesion represented a contraindication to laparoscopic cholecystectomy here we report one case the success of laparoscopic management for the subset of patients, illustrates the growing successfully of the Laparoscopic Approach to this condition, including a decreasing rate of conversion to open surgery over the last 5 years.

II. CASE REPORT PRESENTATION

A 40-year-old man presented to the emergency department complaining of right upper abdominal pain for 10 days, with no obvious cause of the emergence of right upper abdominal pain and distension, no obvious change of position improved, no fever chills, nausea, and discomfort, there was no bowermovement or stool. . Vital signs were within normal limits. and CT scan shows Figure B:2, A hint of gallbladder duodenal fistula, gallbladder pneumatosis, cholecystitis, right middle intestine oval laminated gallstone size was 4cm with proximal segment obstruction, distal intestinal obstruction catheter located in the near side.

Small calcification in the wall of the aorta. we give anti-inflammatory and other symptomatic relief treatment no significant improvement.

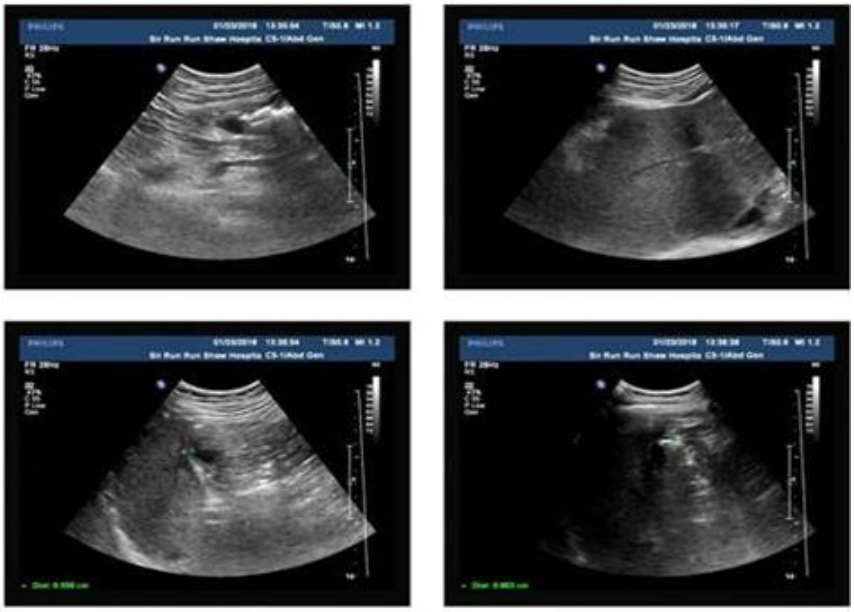
check on the abdominal CT scan showed as acute intestinal obstruction, cholecystitis, duodenal leakage ", we give anti-inflammatory and other symptomatic relief treatment no significant improvement. The patient for further diagnosis and treatment, an emergency department, to check on the abdomen and pelvis.

We Improve, gallbladder duodenal fistula, prompt gallbladder pneumatosis, cholecystitis, right middle intestine oval laminated gallstone size was 4cm with proximal segment obstruction, distal intestinal obstruction catheter located in the near side."
There was no special discomfort and no treatment. Since the disease, the spirit,no obvious weight loss.

Laboratory and special examinations
Liver, gallbladder, pancreas, spleen ultrasound.
Clinical diagnosis
Intestinal obstruction examination items:

Liver, gallbladder, pancreas, spleen ultrasound examination: emergency, the size of the liver is normal, the capsule is smooth, the echo of the liver is enhanced, the vascular network is clear, no obvious occupying is found, and there is no obvious expansion of the intrahepatic bile ducts. The size and shape of normal gallbladder wall thickening, rough, about 0.56cm thick, cavity bile perforated poor, with acoustic shadow visible hyper echo multiple, larger size of about 0.86cm. There was no obvious widening of the inner diameter of the upper segment of the common bile duct, which showed no obvious abnormality in the segment of the segment. The shape of the spleen is normal and the echo in the spleen is even and fine. There was no obvious abnormal appearance of pancreas, uniform internal echo, no obvious expansion of the main the pancreas, duct and no significant lesion.

Figure (1) Ultrasound



Clinical diagnosis: intestinal obstruction examination
The size and shape of normal gallbladder wall thickening, rough, about 0.56cm thick, cavity bile perforated poor, with acoustic shadow visible hyper echo multiple, larger size of about 0.86cm. There was no obvious widening of the inner diameter of the upper segment of the common bile duct.
Ultrasound diagnosis: 1. Fatty liver 2. Rough and thick gallbladder wall, multiple gallbladder stones, cholecystitis.

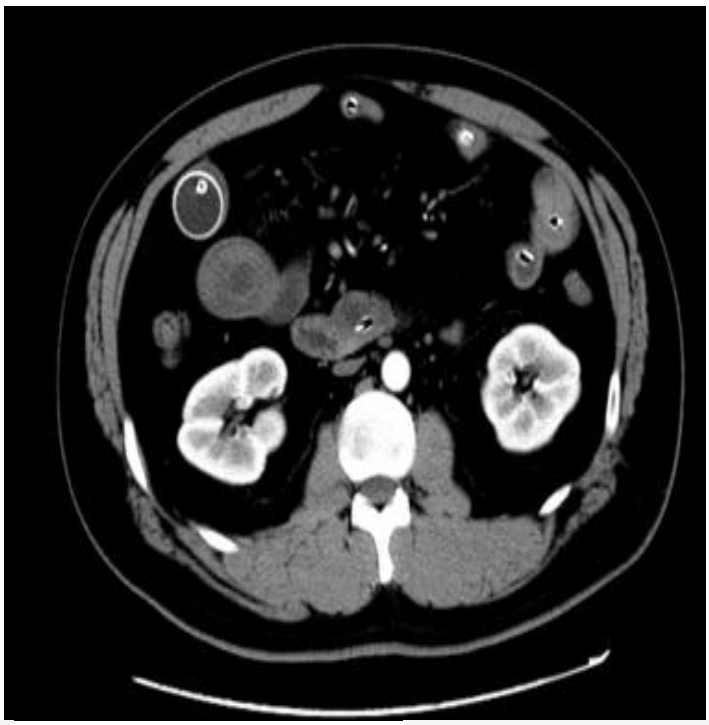


Figure: 2 below is the Computed abdominal tomography: A hint of gallbladder duodenal fistula, gallbladder pneumatosis, cholecystitis, right middle intestine oval laminated gallstone size was 4cm with proximal segment obstruction, distal intestinal obstruction catheter located in the near side.

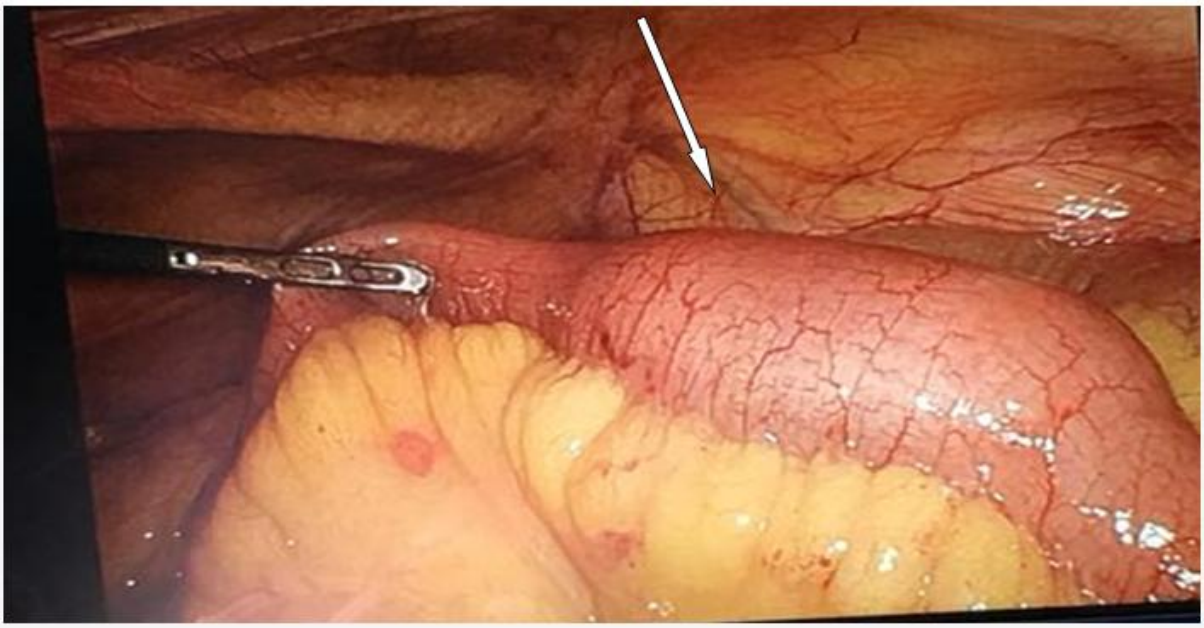
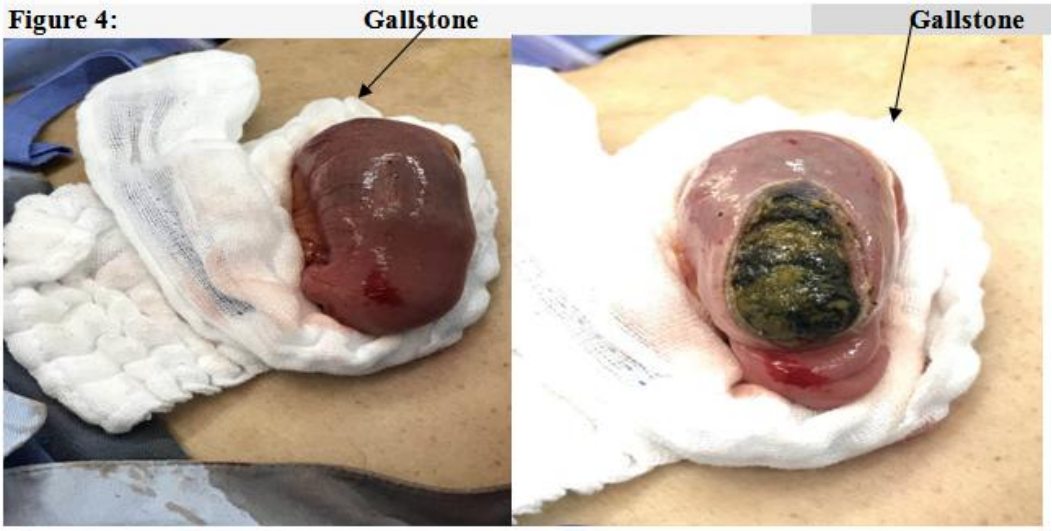


Figure : 3

Examination maging(white arrow) the stone long diameter of about 4cm with the proximal segment obstruction, distal intestinal obstruction catheter located in the near side. Duodenum and small ascending colon diverticulum.



During exploration, (A) trace of the stone in the intestinal loops and (B) the resected intestinal segment and the stone the patient was found to have the duodenal obstruction.
In operation.

The cause of obstruction was found to be large stones in the ascending colon diverticulum. Small calcification in the wall right middle intestine oval laminated gallstone size was 4cm with proximal segment obstruction, distal intestinal obstruction catheter located in the near side.

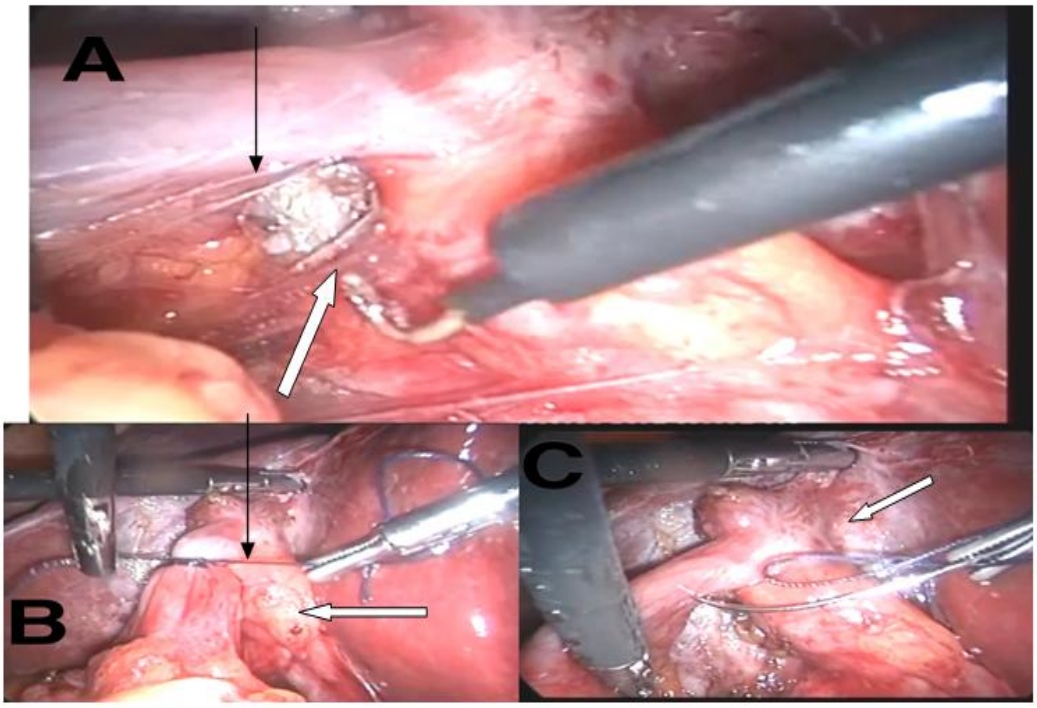
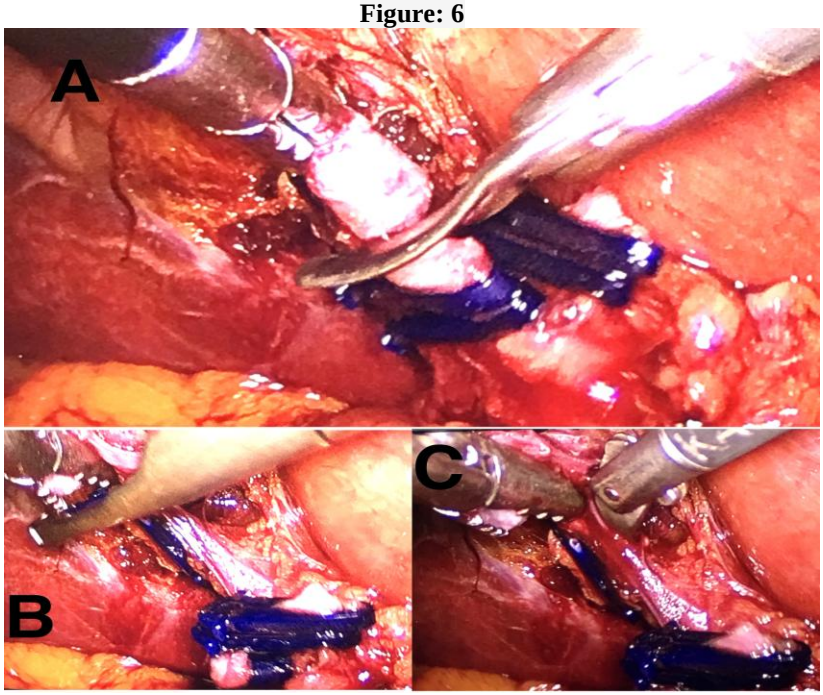


Figure 5:

Procedures showing management of cholecystoenteric fistula. **A:** (**white arrow**) Direct the adhesion;
B: (white arrow) ligation of cholecystocolic fistula.
C: **(white arrow**) showing the gallbladder duodenal fistula.suture ligation of fistula.

Figure: 6



Procedures showing management of cholecystectomy **A:** the cystic duct is divided a; **B:** cystic artery is freed and is clipped; **C:** the gallbladder is freed from the hepatoduodenal ligament after the cystic duct and the cystic artery (CA)were divided.

III. DISCUSSION

The cholecysto-enteric is an unusual rare complication associated with chole- lithiasis affecting both the biliary and the gastro-intestinal tracts. They also occur secondary to abdominal trauma, Crohn's disease, peptic ulcer disease, and malig- nancies of the biliary tract, bowel, and head of pancreas (1).

The putative mechanism involves impaction of a gallstone and its subsequent erosion through the gallbladder and duodenal wall. The most common communication is between the gallbladder and the duodenum, although cholecystocolonic and cholecystogastric fistulae have been reported(5).

While gallstones are the most common cause of spontaneous bilioenteric fistula, peptic ulcers and malignancies can also lead to similar fistulization(6).

The presence of such fistulae can be associated with gallstone ileus, Bouveret syndrome, Mirizzi syndrome, and intraoperative adverse events(7, 8).

There are isolated case reports of presentation with upper GI bleeding, often from a marginal ulcer located at the site of the fistula(9, 10).

To those of chronic cholecystitis. As a result, most cases are identified intra-operatively during laparoscopic cholecystectomy or open procedure. Although the preoperative diagnosis of this condition is uncommon, many cases have been reported(11-13). Diagnosis can be made by barium enema, endoscopic retrograde cholangiography (ERCP), computed tomography scan, and ultrasound & magnetic resonance (MR) cholangiography. A very high index of suspicion needs to be diagnosed preoperatively but mostly it is diagnosed intra-operatively during laparoscopic cholecystectomy. It would have been better if we could have done early preoperative detection so that it could reduce morbidity and mortality.

The time of laparoscopic cholecystectomy. The reported incidence of internal biliary fistulas is 2% of total biliary diseases(10).The most common type of cholecystoenteric fistulae is cholecysto-duodenal fistulae (70–75%), followed by cholecysto-colic fistulae (10–20%),least common cholecysto-gastric fistulae (5%). During the previous five-year period, the author encountered four cholecysto-enteric fistulae. Of them, one is cholecysto-gastric fistula and the other is cholecystoduodenal fistulae. Two of them were treated by the laparoscopic procedure. Some authors have reported laparoscopic repair of cholecysto-duodenal, cholecysto-colic, and cholecysto-gastric fistulae earlier(8-13) But in most of the patients, an endoscopic transecting stapler was used, which involved increased cost. The authors used #1-0 vicryl to ligate the fistulae tract and plastic vascular clip to make the closer of the tract more secure. This procedure allows us to cut down operating time and cost without compromising safety. Although it is an indication to convert to open surgery, with growing experience, improved expertise and instrumentation have made laparoscopic repair of Cholecysto-enteric fistula a reality. Conversion of laparotomy should be made if difficulties arise at any stage during operation.The aim of

this article is to highlight the rare findings of Cholecysto-enteric fistula during laparoscopic cholecystectomy and its laparoscopic management.

IV. CONCLUSION

The signs of mechanical intestinal obstruction together with jaundice, subfebrile body temperature, and tenderness in the right upper quadrant detected on physical examination of patients with ileus picture may strongly suggest CEF-related GSI Correct preoperative diagnosis of Cholecystoenteric fistula demands high index of suspicion and determines the success of laparoscopic management for the subset of patients. illustrate the growing successfully of the laparoscopic approach to this condition, including a decreasing rate of conversion to open surgery over the last 5 years.

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IOSR Journal of Engineering (IOSRJEN) is UGC approved Journal with Sl. No. 3240, Journal no. 48995.

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