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Case Report

A Late Presentation Of Biloma

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ABSTRACT

Bile duct injury is a complication following open/laparoscopic cholecystectomy. Due to detergent and tissue destroying action of bile, a low grade inflammation and a thin capsulation sets in forming isolated collection called biloma. The median time of presentation of biloma is usually 1-2 weeks. In our case, we are reporting a late presentation of biloma which occurs after one year.

KEY WORDS : Bile duct injuries, Bile leak, Bilioma

Indtrocution

A biloma is a rare abnormal accumulation of intrahepatic or extrahepatic bile caused by traumatic or spontaneous rupture of the biliary tree.It is most commonly caused by surgery, percutaneous transhepatic cholangiography (PTC), percutaneous transhepatic biliary drainage (PTBD), and abdominal trauma. A spontaneous occurrence of a biloma is a very rare condition. The median time of presentation of bilioma is usually 1-2 weeks after surgery .In our case, we are reporting a late presentation of bilioma which occurs after one year.

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Case Report

A 60 yr old female presented with c/o swelling and pain in the right upper quadrant of abdomen for one month. H/o discharge from swelling, thick yellowish for 20 days. H/o fever, low grade, intermittent for 20 days. She also had generalized itching.

Patient was admitted at another hospital for the complaints of same swelling for which they aspirated fluid from the swelling followed by discharge from aspirated site.

Patient had past history of cholecystectomy with CBD exploration with T-tube drainage done 1 year 3 months back. T-tube was removed after 15 days.T-tube cholangiogram was normal.

Examination revealed that the patient was febrile and icteric. Vitals recorded, her pulse rate was to be 102/min and BP-110/70 mm of Hg. Per abdomen was soft and with no tenderness. Discharge seen from the middle of the right subcostal scar.

Blood investigations revealed normal blood sugar levels and renal parameters. Liver function tests were Total Bilirubin-1.16mg/dl (D-0.74, ID-0.58) ALP-169, OT-17, PT-13, Total Protein-5.4(A-3.1, $_{S}$G-2.3) ESR-93mm/hour.

CECT Abdomen revealed ill-defined collection (8*7.5*7.5 cms) in the pericholecystic plane extending through anterior abdominal wall into subcutaneous plane -? Infected bilioma from possible bile leak from cystic duct remnant.

ERCP revealed stone at the distal CBD and stump leakat cystic duct. Sphincterotomy with therapeutic stenting done. Stone could not be retrieved.

Patient was asymptomatic after 4 months follow up with normal LFT and ERCP.

Discussion

Bile leak is a complication of any cholecystectomy, its incidence following open cholecystectomy is 0.1-0.5% [1-2] and Laparoscopic cholecystectomy 0.5-3% [3-4]. Biloma is a well demarcated and encapsulated collection of bile outside the biliary system. It usually occurs in the sub hepatic space[5]. It can also occur intra hepatically or in the retroperitoneal space. The term biloma was first used by Gould and Patel in1979 [1] to describe loculated collection outside the biliary tree.

Kuligowska et al extended the term to include intra hepatic and extra hepatic collection of bile. Bilomasorginate from cystic duct in 50% of the cases[6]. Bilomas are due to inadequately secured cystic duct stump or leakage from accessory bile duct or duct of luschka in the GB fossa of the liver. Usually present with abdominal pain, fever, jaundice and anorexia.

Fig.No.1:Right subcostal scar with discharge.

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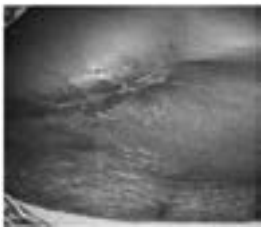


Fig.No. 2:CECT ABDOMEN- ill-defined collection(8*7.5*7.5 cms) in the pericholecystic plane extending through anterior abdominal wall into subcutaneous plane - ? infected bilioma from possible bile leak from cystic duct remnant.

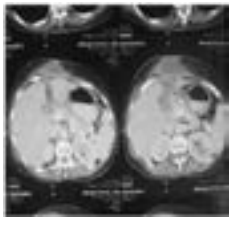
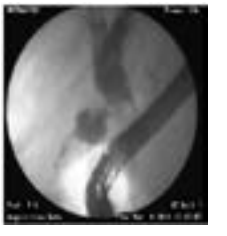


Fig.No.3: ERCP demonstrating the cystic duct stump leak



Diagnostic algorithm

Clinical history with ultrasound and CT confirms the presence of abdominal fluid collection but fails to differentiate between postoperative fluid collection, haematoma and bile leak.

Further confirmation is by HIDA scan demonstrating continuity of collection with the biliary ductal system. But it can't differentiate between obstructing calculi and bile duct injury.

ERCP and Trans Hepatic Cholangiography are most accurate for detecting the exact anatomy of biliary leak.

MRCP identifies the bile leak only in the presence of active leak.

Management involves percutaneous drainage when there is a large volume of infected fluid. Spontaneous reabsorption of bile collection more than 4cm is rare and unpredictable [7]. Endoscopy identifies the extent and level of injury. Relaparoscopy is indicated when there is a failed percutaneous and endoscopic management.

Literature reveals only few cases of delayed presentation of bilioma occurring after one year of which the most delayed were after 5 years[8] and 9 years[9] respectively.

Conclusion

Biloma should be considered in any case of intra abdominal cystic swelling following hepatobiliary and GB surgery.

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