LUSCHKA DUCT TYPE 2 POST LAPAROSCOPIC CHOLECYSTECTOMY TREATMENT WITHOUT BILE DUCT STENT

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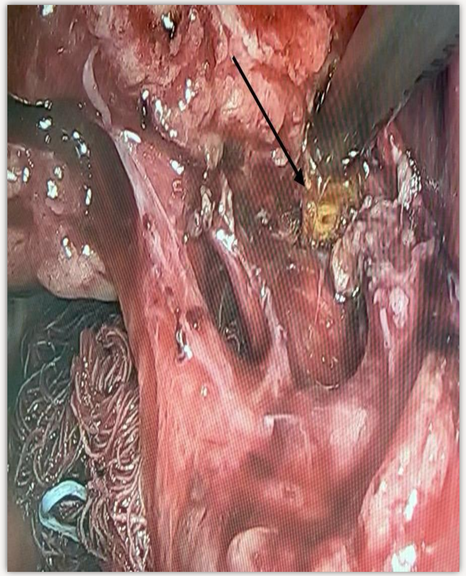
- **Introduction: A Luschka duct type 2 leak is a rare complication post laparoscopic cholecystectomy. Standard treatment is still stenting the bile system, but sometimes conservative treatment without stenting can be successful.**
- **Case presentation: A 42-year-old male presented with biliary pain for more than 4 days without features of acute cholecystitis or obstructive jaundice. Abdominal ultrasound showed multiple large gallbladder stones without features of pericholecystic edema. Patient denied any previous recurrent attacks. During laparoscopic cholecystectomy, extensive adhesions were found in the infundibulum and cystic duct to the common hepatic duct. After successful separation of adhesions, Luschka type 2 was discovered, which drained the liver bed to the common hepatic duct and tried to be clipped but failed. Abdominal drain kept under the liver surface after completion of cholecystectomy without conversion to open. The bile leak happened on the first day of post-surgery, but the patient was not complaining of abdominal pain and there were no signs of biliary peritonitis. The patient kept on conservative treatment and coverage of antibiotics and he was discharged to be followed in the outpatient clinic. MRCP done after 19 days post-operation showed no bile leak and normal biliary ducts. Liver function tests were normalized. Follow-up patient after one month from surgery, he had not complained of any abdominal pain or jaundice.**

Discussion

Luschka duct (LD) type 2 is a duct running along the gallbladder bed and draining to the hepatic duct. Leaks from this aberrant duct can cause significant clinical presentation variables, from no symptoms up to biliary peritonitis. It can be solitary or multiple ductules in diameter arranged between 1-2 mm. Bile leak incidence from these ducts is around 2%. Adhesions and inflammation in Calot's triangle or dissection deep into the liver bed can injure this duct. Intraoperative findings of these subvesicle ducts should be closed by endo clips or suture. ERCP, sphincterotomy and bile duct stenting are still the treatments of choice for Luschka duct injuries. Successful treatment of asymptomatic bile leaks from Luschka type 2 duct injury with coverage of antibiotics and bile drainage by abdominal drain if trial of closure failed intraoperatively. Bile leakage does not consistently happen on the first day of post-operation but can happen within days after surgery . Observation management includes clinical symptoms, tolerating low-fatty food and daily amounts of bile in the drain. Abdominal drain draining more than 500 cc bile/day in asymptomatic patients is a strong indication to hold the conservative treatment. MRCP still has a standard investigation to be done in these situations to confirm whether the Luschka duct is closed or not and, after that, to safely remove the abdominal drains.

Summary

Luschka type 2 is a rare cause of bile leaks, and still the standard treatment is stenting the bile ducts, but conservative treatments with abdominal drains and close follow-up can be successful.



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