

Spontaneous Cholecystocutaneous Fistula

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Citation

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Abstract

Spontaneous cholecystocutaneous fistula is rarely observed today because of the early diagnosis possible by ultrasonography and effective management by broad spectrum antibiotics and early surgical intervention. We report a case of spontaneous cholecystocutaneous fistula due to cholecystitis with cholelithiasis successfully treated with excision of fistulous tract and cholecystectomy.

INTRODUCTION

Spontaneous external biliary fistula was common in the past but rarely encounter now because of early diagnosis and management of biliary tract diseases (^{1,2}). We report a case of spontaneous cholecystocutaneous fistula due to cholecystitis.

CASE REPORT

A 45 year female presented with a persisting discharge from right hypochondrium for 1 year. It was managed as a case of parietal wall abscess and as the sinus was not healing she was referred to our hospital. On examination patient was afebrile, pulse was 80 per minute, BP136/70 mmHg. Abdominal examination revealed discharging sinus with retracted skin and scar mark of prior minor operative intervention in right hypochondrium. The area was nontender and no lump was palpable. On investigation Hb was 10gm%, TLC 8,900/mm³ polymorphs 84%. Liver function test revealed total bilirubin of 3.8mg% and alkaline phosphatase of 686 IU/L. SGOT and SGPT was 50IU/L and 63IU/L respectively. Sinogram showed cholecystocutaneous fistula with multiple stones in the gallbladder and common bile duct. Ultrasound confirmed the same finding. Final diagnosis of cholecystocutaneous fistula was made. On exploration under general anaesthesia, fistulous tract was excised by giving transverse elliptical incision over the right hypochondrium. Cholecystectomy with choledocholithotomy and choledochoduodenostomy was done due to multiple stone in the distal part of CBD. Postoperative recovery was uneventful. Histopathological examination revealed chronic cholecystitis with nonspecific inflammation of fistulous tract.

DISCUSSION

A spontaneous external biliary fistula was a common complication of biliary tract disease in the past. The first description is attributed to Thilesus in 1670 (³) while Courvoisier in 1890 (³) described further 169 cases. However less than 20 cases of spontaneous cholecystocutaneous fistula have been reported in last 50 years. Spontaneous biliary fistulae are usually a complication of acute suppurative cholecystitis associated with cholelithiasis, and are uncommon in biliary disease without gallstones.

Spontaneous cholecystocutaneous fistula is always formed in the neglected case. Associated neuropathy is reported in some patients (⁴). It is more common in females as higher incidence of cholecystitis is reported in women than men. The pathophysiology of this condition involves obstruction of the cystic duct due to calculi and rarely due to gallbladder carcinoma. Obstruction of the cystic duct causes increased pressure in the gallbladder leading to impaired blood supply to the gallbladder which leads to mural necrosis and perforation. Perforation can occur as (i) acute free perforation causing peritonitis (ii) subacute perforation resulting in an abscess around the gallbladder or (iii) chronic perforation with the formation of an internal or external biliary fistula (⁵). These fistulae usually arise from the fundus of the gallbladder (¹). Chronic inflammation of the gallbladder can cause the gallbladder fundus to adhere the abdominal parietes triggering the formation of fistulous tract.

Diagnosis can be easily made by imaging. Before fistula formation, the abscess can be diagnosed by ultrasonography, which suggests sonolucent mass with echogenic material

adjacent to the anterior abdominal wall. The diagnosis of a cutaneous fistula is confirmed with fistulogram, which visualizes the tract and the gallbladder with the radiolucet area inside. CT scan can also help in making the diagnosis.

This condition is rarely seen nowadays due to early diagnosis of cholelithiasis by ultrasonography, greater availability of broad spectrum antibiotics therapy and early surgery. Cholecystectomy is the preferred treatment although in few cases fistula may close spontaneously after cholecystostomy and stone removal (1).

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