# SPONTANEOUS CHOLECYSTOCUTANEOUS FISTULA : A RARE PRESENTATION IN MODERN ERA

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## Abstract:

**Introduction**: Spontaneous cholecystocutaneous fistula (SCF) is a rare complication of chronic neglected calculus cholecystitis and may occasionally be due to gallbladder carcinoma and acalculous cholecystitis. We present a case of spontaneous cholecystocutaneous fistula secondary to acalculous cholecystitis was successfully treated with excision, cholecystectomy in G.R.M.C J. A. Hospital Gwalior on November 2016

**Case Outline:** A 28yrs old male presented in OPD with discharging sinus over right hypochondrium since 8 months following incision and drainage of abscess over right hypochondrium.

**Discussion:** This condition is rarely seen nowadays due to the greater availability of antibiotic therapy and advanced biliary surgery. Cholecystectomy is the preferred treatment, although in a few patients, the fistula may close spontaneously

**Keyword**: Fistula, cholecystocutaneous, spontaneous

## **Surgery**

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#### Introduction

Biliary fistulae is usually divided into internal and external biliary fistulae. External biliary fistulae can be further subdivided based on etiology into spontaneous, therapeutic, traumatic, and iatrogenic fistulae. Spontaneous external cholecystocutaneous fistula is a very rare surgical complication of neglected gallstone disease.

Thilesus first described spontaneous cholecystocutaneous fistula in 1670 A.D.<sup>2</sup> Before 1900 A.D, Courvoisier in 1890, Naunyn in 1896 and Bonnet in 1897 published large series of spontaneous cholecystocutaneous fistula in quick succession. Courvoisier reported 169 cases of spontaneous cholecystocutaneous fistula among 499 cases of gallbladder perforation.<sup>3</sup> Naunyn published about 184 cases and Bonnet 122 cases of spontaneous

cholecystocutaneous fistula.1

Spontaneous cholecystocutaneous fistula (SCF) is a rare complication of chronic neglected calculus cholecystitis may occasionally be due to gallbladder carcinoma and acalculous cholecystitis.1 Since the advent of cholecystectomy for the treatment of gallstone disease, the incidence of spontaneous cholecystocutaneous fistula has reduced dramatically; from 1890-1949, only 37 cases were found in the published literature. Over the past fifty years fewer than twenty cases of spontaneous cholecystocutaneous fistulas have been described in the medical literature. The declining incidence is attributed to prompt diagnosis, availability of antibiotics, and early surgical treatment for calculus cholecystitis and empyema. We present a case of spontaneous cholecystocutaneous fistula secondary to acalculous cholecystitis was successfully treated with excision,

cholecystectomy in G.R.M.C J. A. Hospital Gwalior on November 2016.

#### **Case History**

A 28yrs old male presented in OPD with discharging sinus over right hypochondrium since 8 months following incision and drainage of abscess over right hypochondrium. Patient has no co morbid condition On examination there as fistulous opening with scar mark of I&D. CT scan abdomen revealed: A fistulous tract communicating skin with fundus of gall bladder suggestive of billiary cutaneous fistula. Fistulogram was suggestive of fistulous tract communicating with gall bladder. Patient was planned for surgery and fistulectomy with cholecystectomy was done. Gall bladder did not contain any stone histopathology of gall bladder was s/o chronic inflammation.



Figure 1: pre-operative picture showing fistula opening



Figure 2: intra operative picture showing fistulous tract communicating to fundus of gall bladder



Figure 3: fistulogram showing cholecystocutaneous fistula

#### **Discussion**

Spontaneous biliary fistula can be either internal or external. Internal fistula are very much commoner, 75% of them connecting to the duodenum and 15% to the colon. The remaining 10% of internal fistulas connect with the stomach or jejunum, or have multiple communications such as cholecystoduodenocolic fistula. <sup>2,3</sup>

Spontaneous external biliary fistulas are rare. They are usually due to complication of gallstone disease, but can occur secondary to biliary injury during a surgical procedure, carcinoma gallbladder, cholangiocarcinoma and other traumatic causes. 16.7 The external opening of a cholecysto-cutaneous fistula is generally in the right hypochondrium. However, other sites can be involved such as the left hypochondrium (45%), the umbilicus (27%), the right lumbar region, the right iliac fossa and the gluteal region. 4.5

A spontaneous fistula such as this one could be an end result of perforation of the gallbladder secondary to acute or chronic cholecystitis or carcinoma of gallbladder. Perforation of the gallbladder occurring in absence of gallstones is very rare. In our case presented here, the likely pathological process was recurrent gallbladder inflammation (but cause of inflammation is unknown), causing adherence to the abdominal wall with eventual fistulation, but what is surprising in this case is the lack of severe symptoms experienced by the patient prior to abscess formation. Our patient didn't had any symptoms of cholecystitis or cancer gallbladder as she was apparently alright until the appearance of painful swelling in right upper abdomen.

Thus although rare possibility of cholecystocutaneous fistula should be consider in any cases with discharging sinus over abdomen or chest wall in gall bladder region.

#### **Conclusions**

Spontaneous cholecystocutaneous fistula is a rare entity in present time where prompt diagnosis and treatment of gallstone disease is very advanced.

Discharging sinus over right hypochodrium with history of abscess over right hypochondrium possibility of cholecystocutaneos fistula should be kept in mind though very rare but known complication of chronic gall bladder pathology.

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