



# The History of Biliary Stone Disease

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## Abstract

While the recognition of gallstones as an abnormality within the human body dates back at least to the fifth century, the treatment of symptomatic gallstone disease remained primitive and ineffective until the eighteenth century. Thudichum proposed a two-stage elective cholecystostomy. Dr. John Stough Bobbs performed the first cholecystotomy. J. Marion Sims must

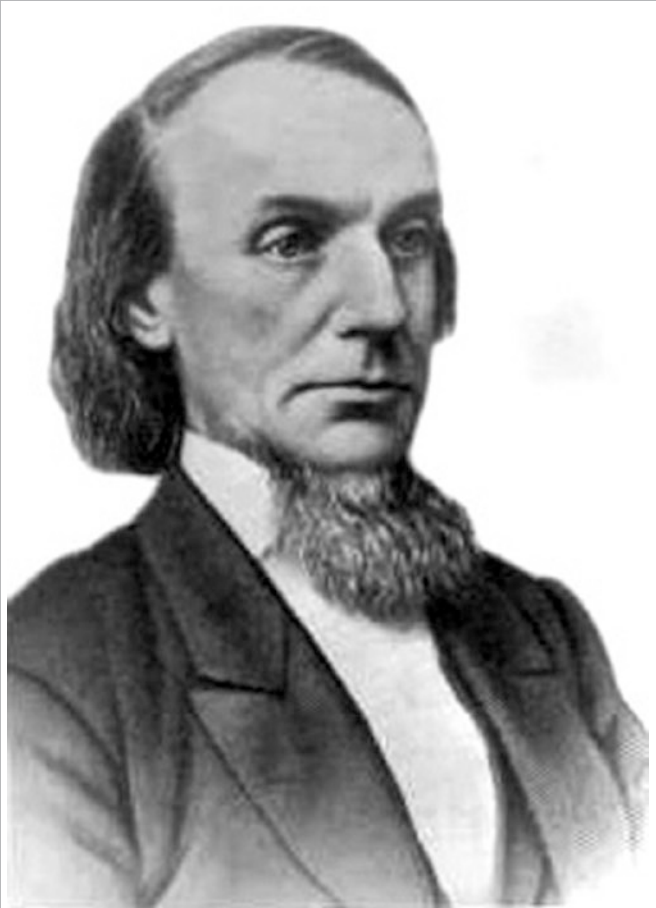
be credited with designing, perfecting, and performing the first cholecystostomy. Later in the nineteenth century Kehr and Langenbuch would usher in the era of open cholecystectomy.

## Keywords

Biliary history · Cholecystostomy  
Cholecystotomy · Surgical history



Petit (1674–1750)



Bobbs (1809–1870)

The first account of gallstones, given in 1420 by a Florentine pathologist, Antonio Benevieni [1] reported a woman who died with abdominal pain. Centuries followed with ever-increasing recognition of biliary colic. The description of these clinical scenarios flooded the medical literature with numerous physicians and surgeons, including Francis Glisson in 1658 [2], reporting similar cases of biliary colic [3].

The recognition of gallstones as an abnormality within the human body dates back at least to the fifth century. Andreas Vesalius (1514–1564) [4, 5] established that gallstones were associated with disease and could cause jaundice. Morgagni [6], late in the eighteenth century [5], established a correlation between the clinical course and the autopsy findings in a group of patients with obstructive jaundice.

In 1676, a physician by the name of Joenisius [6] removed gallstones from a spontaneous biliary fistula of the abdominal wall that formed after rupture of an abscess and, thereby, has been credited with the first successful cholecystolithotomy. During this time, two animal experiments by Zambecarri in 1630 [7] and Teckoff in 1667 [8] had shown that the gallbladder was not essential to life. Moreover, physicians were of the opinion that the gallbladder itself gave rise to stones. The first interaction of gallstones and surgery dates back to 1687 when Stal Pert Von der Wiel, while performing surgery on a patient with purulent peritonitis, accidentally found gallstones [9]. Nonetheless, the treatment of symptomatic gallstone disease remained primitive and ineffective until the eighteenth century.

Jean-Louis Petit (1674–1750), the founder of gallbladder surgery, suggested the removal of gall-

stones and drainage of the gallbladder, thus creating a fistula in patients with empyema, which he successfully performed in 1743 [10]. Petit's rigid criteria of surgical intervention were modified over the years. It included skin stimulants to provoke adhesion of the gallbladder to the abdominal wall and subsequent introduction of an indwelling trocar to remove stones and bile from the adhered gallbladder to minimize peritonitis. Thus, this procedure was the prevailing operative management until 1859, when J. L.W. Thudichum proposed a two-stage elective cholecystotomy [11]. In the first stage, the inflamed gallbladder was sewed to the anterior abdominal wall through a small incision, which served as a route for the removal of gallstones at a later date.

Several years later, on July 15, 1867, Dr John Stough Bobbs (1809–1870) from Indianapolis, Indiana, found an inflamed and adhered sac containing “several solid ordinary rifle bullet-like structures” while operating on a patient with a suspected ovarian cyst [12]. He opened the sac, which incidentally happened to be the gallbladder packed with multiple gallstones. He removed the gallstones and left the gallbladder in the abdomen after closing the defect in the gallbladder (cholecystotomy). The patient recovered and outlived Dr. Bobbs.

J. Marion Sims (1831–1883) [13] must be credited with designing, perfecting, and performing the first cholecystotomy on a 45-year-old woman with obstructive jaundice in 1878. Though the patient died on the eighth postoperative day due to massive internal hemorrhage, it paved the way for Theodor Kocher to perform the first successful cholecystotomy in June 1878 [14].

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