Cholecystoduodenal fistula with gastric outlet obstruction

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Case

A 68-year-old man with a history of a gallbladder stone for many years suffered acute right upper quadrant pain and was admitted to the emergency room. Computed tomography of the abdomen showed a very high-density shadow in the gallbladder (Fig. 1A). His symptoms were relieved after receiving antibiotics and spasmolytic treatment, but he refused to accept further cholecystectomy. Five months later, the patient presented with a 2-week history of postprandial nausea and vomiting. Physical examination found abdominal splashing sound. Computed tomography revealed a large dense shadow in the duodenum, while the gallbladder appeared atrophic with pneumatosis (Fig. 1B). What could the patient's diagnosis be?

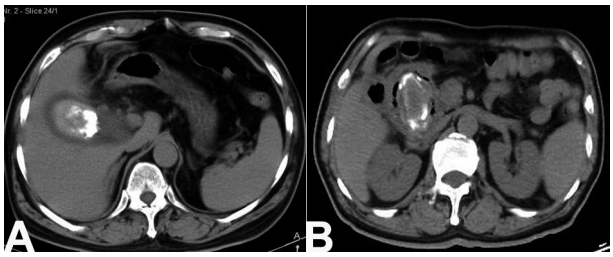

Fig. 1. — A : The CT scan displays a big gallstone in the gall bladder. B : The CT scan shows gas in the atrophic bladder and filling defect(gallstone) in the duodenum.

Answer

The findings seemed consistent with pyloric obstruction secondary to a gallstone. We tried endoscopic stone extraction. We revealed a big stone in the pyloric orifice (Fig. 2A) and found a fistula in the anterior wall of the duodenum (Fig. 2B), but we failed to remove the stone by endoscopy. Then, the cholecystectomy was performed and the cholecystoduodenal fistula was repaired successfully A large fistula was clearly visible in the duodenum during the operation (Fig. 2C). The stone was removed and shown below (Fig. 2D). The patient recovered well and was discharged soon after the procedure. We report clear radiographic and endoscopic evidence of a cholecystoduodenal fistula in addition to the pre-and post-operation history.

Bouveret's syndrome, first described in 1896 by Leon Bouveret (1), is a gastroduodenal obstruction following the passage of a gallstone from the gallbladder to the duodenum via a cholecystoduodenal or choledochoduodenal fistula. Endoscopy and computed tomography are the principle method for diagnosis, but other radiographic examination such as abdominal radiography and ultrasonography can also contribute to the diagnosis. Surgery is the most effective treatment and is required in over ninety percent of cases (2,3).

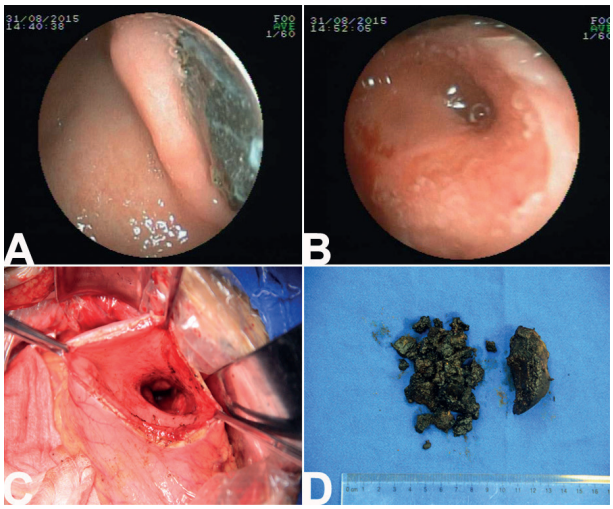

Fig. 2. — A : Gastroscopy displays a big gallstone obstructed in the pyloric orifice. B : Gastroscopy shows a fistula in the anterior wall of the duodenum.C : The view of choleduodenal fistula during operation. D : Gallstone after extraction.

Conflict of interest

The authors have no conflicts of interest to declare.

Key words : Gallbladder stone, choleduodenal fistula, pyloric obstruction.

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