

Successful closure of a cholecystocolonic fistula due to cholecystitis using a clipping system

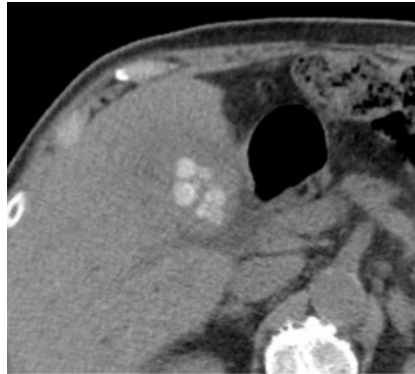
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▶ **Video 1** Successful closure of a cholecystocolonic fistula due to cholecystitis using an over-the-scope clip system. Source for over-the-scope clip system: Ovesco Endoscopy AG.

Idiopathic biliary fistula is an abnormal connection that spontaneously occurs between the biliary system and surrounding organs [1]. The standard treatment is surgery, including cholecystectomy and fistula closure [2]. However, with aging of the population, some patients are unfit for surgery. Recent reports have described the efficacy of the over-the-scope (OTS) clip system (OTSC; Ovesco Endoscopy AG, Tübingen, Germany) [3–5]. We report a case in which the OTS clip system was successfully used to close a cholecystocolonic fistula.

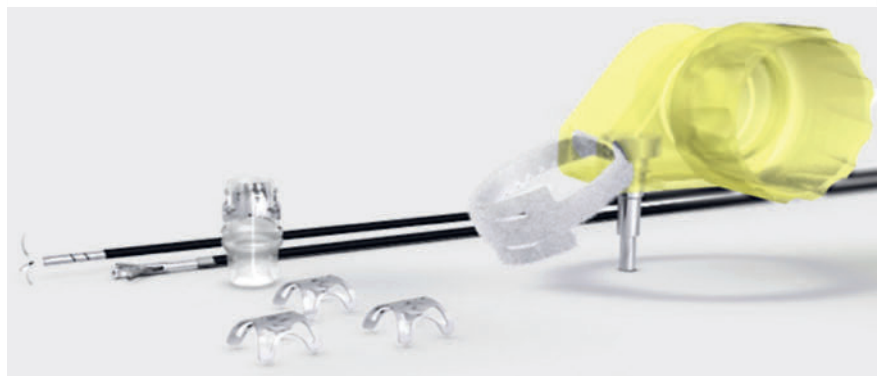
The patient was a 92-year-old man who presented with abdominal pain. Computed tomography revealed diffuse thickening of the gallbladder wall and the presence of gallstones and common bile duct stones (▶ **Fig. 1**). Endoscopic retrograde cholangiography revealed stones in the common bile duct, which were removed using a basket catheter. A hydrophilic guidewire was then used to probe the cystic duct, and a catheter was placed in the gallbladder. Cholecystog-



▶ **Fig. 1** Computed tomography showed gallstones and common bile duct stones.



▶ **Fig. 2** Cholecystography showed leakage into the hepatic flexure of the colon.



▶ **Fig. 3** Over-the-scope clip system (Ovesco Endoscopy AG, Tübingen, Germany). Source: Ovesco Endoscopy AG.

raphy showed multiple stones within the gallbladder and extravasation of contrast medium outside the gallbladder, so gallbladder perforation was suspected (▶ **Fig. 2**).

To prevent leakage of infected bile into the peritoneal cavity, percutaneous transhepatic gallbladder drainage was performed. Repeat cholecystography revealed leakage into the hepatic flexure of the colon, leading to a diagnosis of cholecystocolonic fistula. Surgery was considered but deemed too invasive given the patient's age and overall condition. Therefore, endoscopic fistula closure was planned.



▶ **Fig. 4** Deployment of the over-the-scope clip.

A colonoscope was advanced to the hepatic flexure, and the fistula was identified based on cholecystography and endoscopic findings (► **Video 1**). The scope was withdrawn and then reinserted with the cap for the OTS clip system attached (► **Fig. 3**). The colonic mucosa with the fistula was suctioned into the cap. After confirming no leakage into the colon via cholecystography, the fistula was clipped (► **Fig. 4**). After the procedure, follow-up cholecystography confirmed closure of the cholecystocolonic fistula.

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Conflict of Interest

The authors declare that they have no conflict of interest.

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