

# A Rare Cause of Upper Gastrointestinal System Bleeding: Gallstones

Emin Bodakçi<sup>ID</sup>, Mesut Gümüşsoy<sup>ID</sup>, Ramazan Erdem Er<sup>ID</sup>, Muhammet Fatih Karakaya<sup>ID</sup>

Department of Gastroenterology, Ankara University, Faculty of Medicine, Ankara, Turkey

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**Corresponding author:** Emin Bodakçi, e-mail: doktor.emin.0903@hotmail.com

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## Abstract

Upper gastrointestinal tract bleeding may occur due to different reasons. The most common causes are peptic ulcer, acute gastritis, esophageal variceal bleeding, Mallory–Weiss syndrome, and bleeding due to malignancies.<sup>1</sup> In this case, an 80-year old male patient with known coronary artery disease and no history of surgical. The patient developed hematemesis and after the hemoglobin decreased to 3 gr/dl, endoscopy revealed a gallstone with diameter of 3 cm in the distal pylorus and causing bleeding. A case of gallstones with a size of 3 cm, which was seated in the duodenal bulb after cholecystoduodenal fistula and caused mucosal bleeding due to trauma, is presented.

**Keywords:** Cholecystoduodenal fistula, gallstone, upper gastrointestinal bleeding

## INTRODUCTION

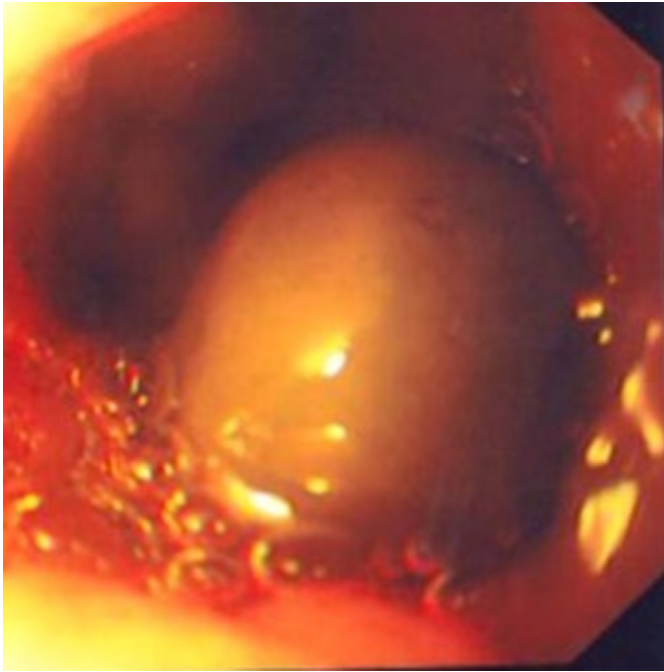
Upper gastrointestinal bleeding is bleeding from the oropharynx to the ligament of Treitz. Upper gastrointestinal bleeding can occur due to various reasons. The most common causes are peptic ulcer, acute and chronic gastritis, esophageal varices, Mallory–Weiss syndrome, and tumors. The frequency of spontaneous internal biliary fistulas varies between 1.2% and 5% in large cholecystectomy series.<sup>2</sup> These fistulas are often detected during surgery due to diagnostic difficulties.<sup>3,4</sup> Cholecystoduodenal fistula, which is an isolated bilioenteric fistula, accounts for approximately 51% of internal biliary fistulas. In this case, a 3-cm gallstone that sits in the bulb after cholecystoenteric fistula and causes mucosal bleeding in the duodenum is presented.

## CASE PRESENTATION

An 80-year-old male patient, who was followed up with known coronary artery disease, applied with the complaint of hematemesis. Upper gastrointestinal endoscopy was performed because of a decrease of 3 g/dL in hemoglobin. Although the patient was fasting for 24 hours at the endoscopy, the stomach was filled with food residues and hematinized material. After the nasogastric tube was inserted and the gastric contents were drained, the patient was taken for an endoscopy again. In the endoscopy, a 3 cm, black pigmented gallstone was detected 3 cm distal to the pylorus, filling the bulb lumen almost completely (Figure 1). An erosive area covered with an adherent clot was detected on the edge of the stone. The procedure for the patient who did not have active bleeding was terminated, and the patient underwent computed tomography imaging with oral+IV contrast. In the imaging, pneumobilia in the intrahepatic biliary tract (Figure 2), cholecystoduodenal fistula, and a lesion without contrast material that almost completely filled the duodenal lumen were observed (Figure 3). After hemodynamic stabilization, the patient was transferred to the general surgery unit for fistula repair and stone removal.

## DISCUSSION

Bilioenteric fistulas may develop as a result of chronic inflammation in chronic gallbladder diseases. The gallbladder may be fistulized into the duodenum, stomach, and colon.<sup>5-7</sup> Gallstone ileus, perforation, and bleeding can be seen as complications of cholecystoduodenal fistulas. It should be kept in mind that gallstones may be a rare cause of upper gastrointestinal bleeding that may develop in patients with cholecystoduodenal fistula.



**Figure 1.** Gallstone causing bleeding in the bulb.



**Figure 2.** Phnomobilia in the intrahepatic biliary tract.



**Figure 3.** Cholecystoduodenal fistule and gallstone in the bulb.

**Informed Consent:** Written informed consent was obtained from the patient and relatives of the patient who participated in this study.

**Peer-review:** Externally peer-reviewed.

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