An Unusual Presentation of Cholecystoduodenal Fistula: Massive Upper Gastrointestinal Bleeding

Yael Feferman*, **Vyacheslav Bard, Nimrod Aviran, Michael stein, Hanoch Kashtan and Eran Sadot**

The Department of Surgery, Rabin Medical Center, Campus Beilinson, Petach Tiqva, Israel

***Corresponding author:** Yael Feferman, The Department of Surgery, Beilinson Hospital, Jabotinsky 39, Petach Tiqva, Israel, Tel: +972-3-9376208; Fax: +972-3-9376251; E-mail: yaelfef@gmail.com

Received date: July 4, 2015; **Accepted date:** July 24, 2015; **Published date:** July 30, 2015

Copyright: © 2015 Feferman Y et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License; which permits unrestricted use; distribution; and reproduction in any medium; provided the original author and source are credited.

Abstract

Background: Cholecystoduodenal fistula (CDF) as a cause of severe upper gastrointestinal bleeding (UGIB) is a rare event that has few reported cases.

Methods: Here we discuss the case of an 86-year-old male who presented with UGIB due to a CDF.

Results: The patient was diagnosed promptly and underwent successful emergent operation.

Discussion and Conclusion: The following is a discussion of the case, accompanied by a brief review of entero-biliary fistulas. Physicians involved in the management of patients with UGIB should entertain the possibility of a biliary-enteric fistula as a possible cause, particularly in patients with risk factors for gallstone disease. Computed Tomography (CT) might enable prompt diagnosis.

Keywords: Fistula; Biliary-enteric; Cholecystoduodenal; Upper gastrointestinal hemorrhage

Introduction

Cholecystoenteric fistulas are rare complication of gallstone disease, with a reported incidence of 3-5% in patients with cholelithiasis. CDF is the most common biliary-enteric fistula [1-4]. Clinical presentation is variable and may include a history of pain in the right upper quadrant and/or epigastrium, jaundice, and flatulent dyspepsia that is aggravated with the intake of fried food [3].

Massive UGIB, caused by CDF, is rare with only few cases reported in the literature [5-13]. Demonstrating the fistula as the cause of bleeding is difficult, and the majority of non-obstructive biliary-enteric fistulas cases will be found incidentally only in the operating room.

We report the 10th English- language published case of a CDF that presented with hemorrhagic shock due to massive UGIB [5-13]. The inconclusive Esophagogastroduodenoscopy (EGD) findings led us to perform an abdominal CT and the combination of these two modalities made the diagnosis of bleeding from CDF.

Case Report

An 86-year-old male presented to the emergency room with vomiting of coffee-ground content and melena. His comorbidities included hypertension, chronic renal failure, osteoporosis and gout. He had no past surgical history. Two months prior, he was admitted to an outside hospital due to similar presentation. He underwent EGD which did not reveal any source of active bleeding and he was therefore discharged with proton pump inhibitors (PPI) treatment.

During his later admission he was afebrile and pale. Abdominal physical examination was normal. Digital rectal examination demonstrated melena. Hemoglobin level declined from a baseline of 13 g% to 7.4 g%.

An urgent EGD was performed which revealed a large ulcer located at the posterior wall of the duodenal bulb, encircling about 2/3rd of its diameter. Fistula tract was suspected at the inferior part of the ulcer. Following the examination, the patient became hemodynamically unstable with blood pressure dropped to 77/40 mmHg. Resuscitation with vasopressors and blood products was initiated. Later, abdominal CT demonstrated contrast material in the gallbladder and CDF was diagnosed (Figure 1a and 1b).

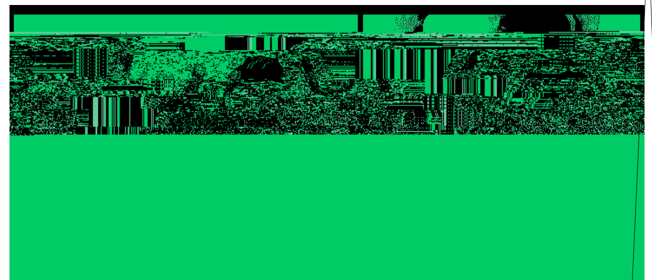

Figure 1: CT of the abdomen and pelvis demonstrating a cholecystoduodenal fistula (single arrow) with gallbladder filled with oral contrast agent. Duodenum (double arrow) Gallbladder (arrowhead). A) Axial view. B) Coronal view.

Kosugi [6]	2006	66	Female	Cholecystectomy, cystic artery ligation, omental patch on the duodenum	Discharged on the 53rd postoperative day. Three months after surgery, endoscopy revealed a persisting duodenal opening without any symptoms
Mohammed [13]	2013	44	Female	Conservatively treatment with antibiotics and elective open cholecystectomy with repair of the CDF	-

Table 1: Clinical features of previous English-language publications of cases with UGIB as the presenting symptom of CDF [5-13].

Upper gastrointestinal hemorrhage associated with biliary fistula has previously been reported as the presenting symptom in Bouveret's syndrome, which is characterized by the formation of gastric outlet obstruction due to gallstone in the duodenum [20]. This is a rare clinical condition, with few cases reported in the literature [21]. Bleeding usually arises secondary to ulceration of the duodenal bulb,