



RE: Metastasis of Gallbladder Adenocarcinoma to Bauhin's Valve: An Extremely Rare Cause of Intestinal Obstruction

Edoardo Virgilio, MD, Valentina Giaccaglia, MD, Genoveffa Balducci, MD

All authors: Medical and Surgical Sciences and Translational Medicine, Faculty of Medicine and Psychology "Sapienza", St. Andrea Hospital, Rome 00189, Italy

Index terms: Gallbladder adenocarcinoma; Intestinal metastasis; Bauhin's valve

We would like to offer our experience with an unreported type of metastasis to Bauhin's valve deriving from gallbladder adenocarcinoma as well as determining intestinal obstruction.

An 83-year-old woman presented with intestinal obstruction of 2 days duration. Contrast-enhanced CT scan of the abdomen documented distended small-bowel loops and a 31 x 23 mm lesion in the right iliac fossa with distal ileal and cecal involvement (Fig. 1); additionally, a centimetric metastasis was observed in segment IV of the liver. An initial conservative management resulted successful permitting elective colonoscopy to visualize a polypoid lesion at the Bauhin's valve (Fig. 2); biopsies were noncontributory. At this point, we decided to perform a right colectomy associated with an ultrasound-guided

ethanol injection of liver metastasis. At operation, we also had to remove a diverticulum arising from gallbladder fundus (not described by the previous CT), which was indissociable from the right colic flexure. Histological examination revealed, to our surprise, a well-differentiated adenocarcinoma of the gallbladder infiltrating to the muscular layer of the right colic flexure (pT3), metastasizing to the Bauhin's valve with extrinsic submucosal invasion of the cecum (pM1) and no lymph nodal involvement (pN0). The patient did well after the operation and thus was scheduled for adjuvant capecitabine.

Biliary carcinoma mimicking a primary tumor of the small or large bowel is an extremely rare event. We found only 5 cases in the world literature (1). In two instances, an intrahepatic cholangiocarcinoma metastasized to the hepatic and splenic flexure of the colon, respectively, 5 and 6 years after resection of the primary tumor (1).



Fig. 1. Contrast-enhanced CT scan of abdomen showed 31 x 23 mm lesion in right iliac fossa with distal ileal and cecal involvement (within red circle).

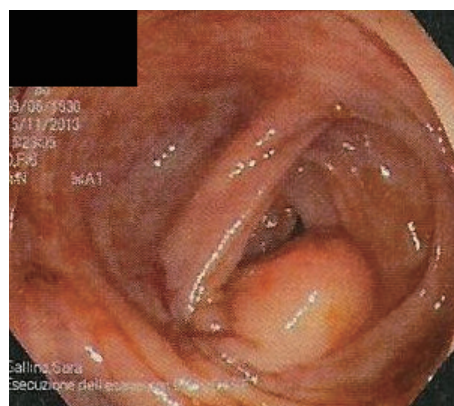


Fig. 2. Colonoscopy documented polypoid lesion at Bauhin's valve.

Received June 7, 2014; accepted after revision June 22, 2014.

Corresponding author: Edoardo Virgilio, MD, Medical and Surgical Sciences and Translational Medicine, Faculty of Medicine and Psychology "Sapienza", St. Andrea Hospital, via di Grottarossa 1035-39, Rome 00189, Italy.

• Tel: (39) 633775989 • Fax: (39) 633775322

• E-mail: aresedo1992@yahoo.it

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/3.0>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

A metachronous intestinal metastasis (none involving the ileocecal valve) ensued from an extrahepatic cholangiocarcinoma (gallbladder excluded) in two cases and from a carcinoma of the intrahepatic bile ducts in one case. Of interest, all of these patients were elderly men. To date, there has been no previous description of a gallbladder adenocarcinoma causing a synchronous or metachronous metastasis to the Bauhin's valve; the presence of intestinal obstruction particularly renders such a clinical context. Given the absence of infiltration of colonic mucosa, lymph node involvement and intraperitoneal deposits, we think that hematogenous spread was the most likely pathway of metastasis occurring in our patient (1). Moreover, alcohol ablation of liver metastases from gallbladder cancer represents another fortuitously interesting aspect of the

presented case, as only one previous example is documented in the literature (2).

REFERENCES

1. Tokodai K, Kawagishi N, Miyagi S, Takeda I, Sato K, Akamatsu Y, et al. Intestinal obstruction caused by colonic metastasis from intrahepatic cholangiocarcinoma 6 years after removal of the primary tumor: report of a case. *Surg Today* 2012;42:797-800
2. Amemiya T, Yokoyama Y, Oda K, Nishio H, Ebata T, Abe T, et al. A patient with gallbladder cancer with paraaortic lymph node and hepatic metastases who has survived for more than 13 years after the primary extended radical operation. *J Hepatobiliary Pancreat Surg* 2008;15:648-651