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Case Report

A Rare Case of Colon Cancer Penetrated to the Spleen

Homeyra Ommati[1], Mitra Ahadi[2], Hasan Vosoghinia[3], Elham Mokhtari Amirmajdi[4], Nema Mohammadian Roshan[5], Mohammadreza Farzanehfar[2]

[1] Gastrointestinal Fellow, Department of Gasteroenterology and Hepatology, ,Ghaem Hospital, Mashhad University of Medicine Science, Mashhad, Iran
[2] Assistant Professor, Department of Gasteroenterology and Hepatology, Ghaem Hospital, Mashhad University of Medicine Science, Mashhad, Iran
[3] Associated Professor, Department of Gasteroenterology and Hepatology, Ghaem Hospital, Mashhad University of Medicine Science, Mashhad, Iran
[4] Assistant Professor, Department of Gasteroenterology and Hepatology, Neyshaboor faculty of Medical sciences, Neyshaboor, Iran
[5] Assistant Professor, Department of Pathology, Ghaem Hospital, Mashhad University of Medicine Science, Mashhad, Iran

ABSTRACT

There is still been no report of splenic involvement in the wake of colon cancer. In this case, air was seen in the spleen and liver following the penetration of colon cancer to the continuous spleen. Colon cancers always do not present with clear and common symptoms. Some times with a non-specific and uncommon symptoms and signs present that would be amazed physicians and researchers. It is very rare that we present, a middle aged man who presented with abdominal pain and rectal bleeding and in our investigation was seen air in spleen and liver in CT scan study. After surgery we found that air in spleen and liver is due to infiltration and invasion of splenic flexure colon cancer to spleen. Has had no cases of invasive colon cancer that causes the air in the spleen and liver have been reported.

Keywords: Colon Cancer; Spleen; Invasion

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INTRODUCTION

Colorectal cancer constitutes the second most common cause of death due to malignancy(1). Splenic involvement as a result of this condition has been reportedly rare, with merely few cases presented in English-Language literature to the best of our survey (2-5). Yet, there has not been any mention of contiguous splenic penetration akin to what we report here.

Corresponding author:
Mohammadreza Farzanehfar, MD
P.O. Box: 91766-99199, Mashhad, Iran
Tel: +98 511 8012388
Fax:+98 511 8932481
E-mail: Farzanehfm@mums.ac.ir
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CASE REPORT

A 59-year-old man presented at our emergency room with left upper abdominal pain as well as rectal bleeding. He described the pain as crescendo by nature during the first eight hours following its commencement the day before when it initially started. It remained constant afterwards until his coming to the hospital. The pain, though radiating to back, was within his tolerance threshold, with no variation in severity during food intake and positional changes. There was no accompanying symptom such as nausea,

Table 1:Laboratory finding

WBC = 11000(4,500 - 10,000 cells/ml)	BUN = 34(7 - 20 mg/dl)	AST = 32(<35IU/l)
RBC = 3.6(4.5-5.5 x 10^6 /ml)	Cr = 1(0.5 - 1.4mg/dl)	ALT = 36(<35IU/L)
HB = 9.8(13.5-16.5g/dl)	Na=140(135-147mEq/L)	ALP = 250(33 – 131)IU/L
MCV = 78(80 – 100)	K= 4.6(3.5 -5.2mEq/l)	Amylase = 65(25-115 IU/L)
MCH = 26 (26 – 34)	BS = 95(60-110mg/dl)	Lipase = 70(114-286 IU/L)
Plt = 200.000(100,000 to 450,000 cells/ml)	ESR = 80(0-10mm/hr)	

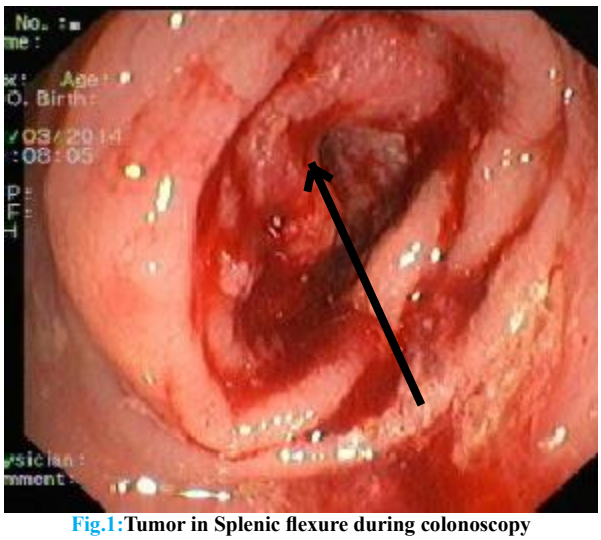

Fig.1:Tumor in Splenic flexure during colonoscopy

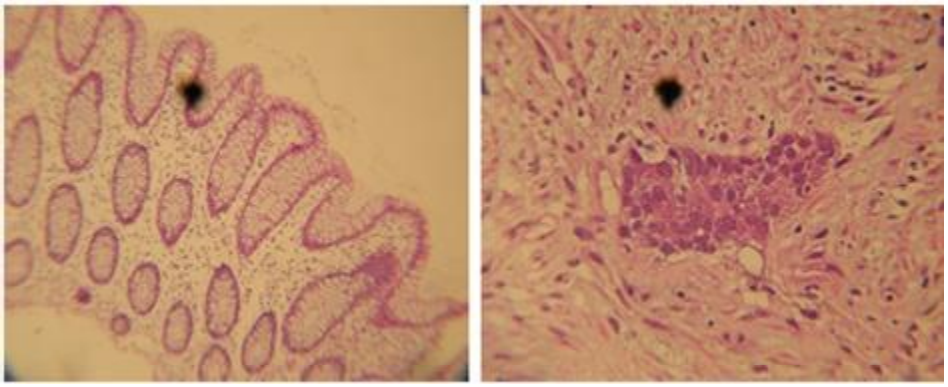

Fig.2:Histopathological Finding

vomiting or fever.

In this history, he mentioned a considerable weight loss of 15 kg as well as self-limited bright rectal bleeding on three occasions, which he dismissively attributed to hemorrhoid. There was not anything in his drugs and family history.

On exam, he was conscious, with a blood pressure of 110/90 and other vital signs within normal limits. With neither lymphadenopathy nor any other abnormality in head and neck, heart and lungs, we proceeded to

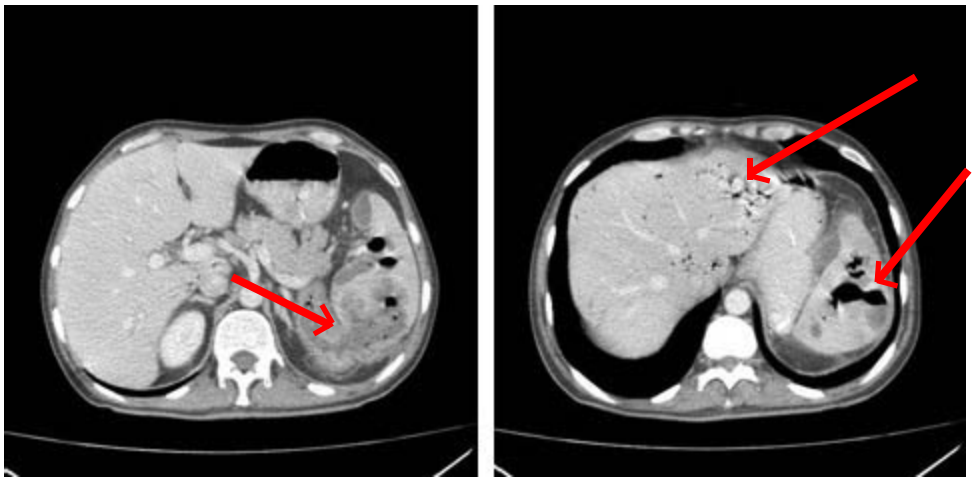

Fig.3:CT Scan findings

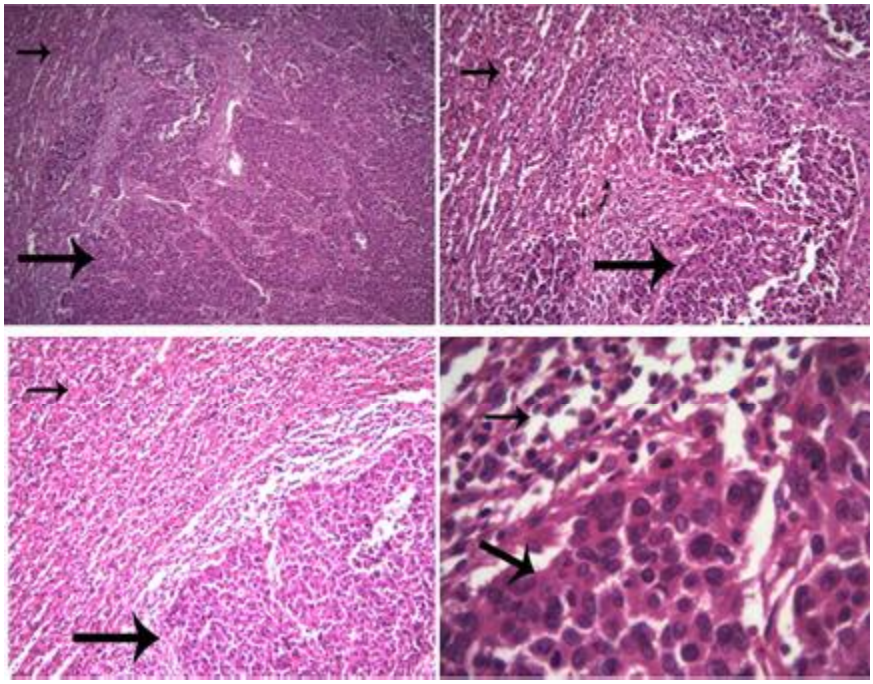

Fig.4: Histopathologic Finding post surgery(Small arrow is Spleen tissue and Larg arrow is Tumor)

abdomen where there was merely slight pain on deep palpation in the left subcostal margin, yet fresh blood was detected per anus. Lab finding can be seen in the (Table 1):

While there was air in the spleen on US, esophagogastroduodenoscopy was normal. Thus, it was decided for him to undergo colonoscopy, where there could be found an ulcerovegetative mass, having obstructed the splenic flexure of the colon (Figure1). Biopsy results were indicative of adenocarcinoma (Figure 2), which had metastasized to the spleen as can be seen on CT-Scan (Figure 3). This was later confirmed during surgery, where penetration to both splenic and pancreatic tail was removed following hemi colectomy, splenectomy and partial pancreactomy. Histopathology examination was adenocarcinoma and confirmed our diagnosis(Figure 4). Needless to mention that fluid resuscitation was efficiently carried

out prior to surgery.

DISCUSSION

Colon cancer has been known to metastasize to regional lymph nodes, liver and peritoneum as most common sites, with bone as rare and spleen as an exceptionally rare target. There were only few cases of isolated splenic metastasis on our search of the past literature, with no mention of contiguous splenic penetration owing colonic cancer.

In this case, splenic penetration was incidentally detected on imaging, which surprisingly revealed that the liver had remained intact despite its notoriety for being one of the most common target sites in such large tumor cases extending to the spleen and the contiguous peritoneum.

Biliary-enteric fistula was first described by Bartholin in 1654, but it was only in 1840 that Long established its etiological association with duodenal ulcer. Hunt and Herbst in 1915 first reported the radiographic diagnosis of spontaneous internal biliary fistula: that is, cholecystoduodenal fistula complicating cholelithiasis. Cholelithiasis is a common cause of these fistulas accounting for up to 90% of cases while ulcer disease accounts for only about 5 percent of biliary-enteric communications(6). While cholelithiasis has been associated with cholecystoduodenal fistulas, peptic ulcer accounts for up to 80% of choledochoduodenal fistulas.

Other rare causes that have been reported include duodenal diverticulum, paraduodenal abscess, operative trauma , Post ERCP, and carcinoma of the duodenum, stomach and bile duct(7,8).

But from then on must be another reason for the presence of Gas in Spleen and Liver in addition to the above mentioned, and the invasion of colon tumors to this organ is this new cause.

Given the rarity of such penetration and the paucity of evidence on isolated splenic involvement, this cases is worth noting for the presence of air in the spleen as well as intact portal system in the liver minus spleenic rupture.

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