MEDDOCS Open Access Publisher

Journal of Case Reports and Medical Images

Open Access | Case Report

An unusual finding of dilated stomach in the pelvic cavity secondary to gastric outlet obstruction by cholangiocarcinoma

Kyryll Chulak*; Faisal Awan

Department of General Surgery, Saint Luke's Hospital, Kilkenny, Ireland

***Corresponding Author(s): Kyryll Chulak,**

Department of General Surgery, Saint Luke's Hospital, Kilkenny, Ireland

Tel: +353-8717-96652

Email: chulakok@tcd.ie

Received: Mar 14, 2018

Accepted: May 05, 2018

Published Online: May 10, 2018

Journal: Journal of Case Reports and Medical Images

Publisher: MedDocs Publishers LLC

Online edition: http://meddocsonline.org/

Keywords: Imaging; Radiology; Cholangiocarcinoma; Oncology; General surgery; CT

Abstract

Cholangiocarcinomas is a rare malignancy, often presenting in advanced, difficult-to-treat stages because of varied locations in the biliary tree.

This case describes a 78 year-old female who presented with history of anorexia, significant loss and intractable vomiting. On imaging there was extensive gastric dilatation secondary to gastric outlet obstruction to a degree that the stomach reached the pelvic cavity.

Early diagnosis of cholangiocarcinoma remains challenging. In many cases of advanced disease, prognosis and survival remain poor, highlighting importance of awareness, diagnostic process and complex management pathways.

Introduction

Cholangiocarcinomas arise from epithelial cells of intrahepatic and extra hepatic bile ducts representing 3 percent of all gastrointestinal malignancies with incidence of 1-2 cases per 100,000 [1]. Although these cancers are rare, they often carry a poor prognosis due to delayed nature of presentation. Adenocarcinomas are the commonest type of neoplasia, subdivided into nodular, sclerosing and papillary. Perihilar disease represents 50 percent of the cases, distal disease 40 percent and intrahepatic disease less than 10 percent [2].

Imaging findings associated with different tumour locations include dilated intrahepatic and extrahepatic ducts in distal lesions, intrahepatic ductal dilatation with normal extrahepatic ducts in perihilar cholangiocarcinoma and a mass lesion in intrahepatic cholangiocarcinoma.

Case Report

A 78 year-old female presented with a short history of intractable vomiting on a background of anorexia and 25kg weight loss over the past six months. Her past medical history was significant for hypertension and hypothyroidism.

On presentation, this woman described ongoing symptoms

Cite this article: Chulak K, Awan F. An unusual finding of dilated stomach in the pelvic cavity secondary to gastric outlet obstruction by cholangiocarcinoma. J Case Rep Clin Images. 2018; 1: 1001

of intractable vomiting for two weeks, being completely unable to tolerate any oral intake and vomiting up to twenty times per day. She has been suffering with increasing anorexia for the past six months and severe weight loss of four stone over the same period.

On examination the patient looked unwell, pale and cachectic. The abdomen was grossly distended. Respiratory examination was positive for crepitations in the right lower zone, likely due to aspiration pneumonia secondary to frequent episodes of vomiting.

Liver Function Tests were deranged including elevated bilirubin and alkaline phosphatase. CT Abdomen and Pelvis (Figure 1) showed severe dilatation of the stomach, packed with food debris, to a point where a greater curvature of the stomach was now present in the pelvic cavity. The above radiograph demonstrated that the gastric outlet was obstructed due to extra luminal compression by a large mass at the porta hepatis measuring 6.1 x 4.4 cm. It was unclear where this mass was primary or metastatic. Another nine-millimeter low attenuation lesion was seen in segment six of the liver. Intrahepatic ducts were dilated with normal diameter of the common bile duct. No focal mass was seen within the pancreas. Clinical and radiological findings were hence consistent with advanced metastatic hepatobiliary malignancy.

Patient was admitted under a surgical team and had their stomach decompressed via the means of a wide-bore nasogastric tube, which drained in excess of five litres of fluid and food debris. They were started on total parenteral nutrition in the coming days with close monitoring of electrolytes due to the risk of refeeding syndrome. The patient underwent oesophagogastroduodenoscopy as far as first part of duodenum. The scope was unable to pass thereafter and multiple duodenal biopsies were taken. The biopsies later returned as normal gastric mucosa, thus confirming that compression was extra luminal in nature. Ampulla was not visualized during this procedure and there were no facilities in this endoscopy center to facilitate stenting or other intervention. At a later date, the patient underwent explorative laparotomy with biliary-enteric bypass with multiple intra-operative biopsies. These returned as cholangiocarcinoma. No further subtyping was possible at that time.

After eleven weeks of inpatient stay, patient was transferred to hospice for end of life care.

Discussion

To date, cholangiocarcinomas remain as having poor prognosis. Incidence tends to increase with age, typically with patients being between 50-70 years of age. Other risk factors include liver cirrhosis, hepatic viral infections, hepatobiliary parasitic infections, chronic intrahepatic stone disease, primary sclerosing cholangitis, fibropolycystic liver disease.

Presentation varies depending on location of the lesion. Extrahepatic cholangiocarcinoma typically becomes symptomatic when the tumour obstructs the biliary tree leading to painless jaundice, dark urine, pale stools, abdominal pain and weight loss. Meanwhile intrahepatic lesions tend to present differently with jaundice being less common. These patients often describe a history of vague right upper quadrant pain and weight loss, and often have elevated alkaline phosphatase. Many cholangiocarcinomas are picked up incidentally or on further investigation of abnormal liver function tests. Invasion of the tumour into porta hepatis can lead to duodenal obstruction, as previously documented in literature and demonstrated by this case. The presence of duodenal obstruction implies unresectability and the focus for these patients is palliation to ensure quality of life is maintained. Cholangiocarcinoma remains a relatively rare cause of malignant gastric outlet obstruction, more commonly associated with pancreatic and distal gastric cancers. Some of the non-malignant causes include peptic ulcer disease, Crohn's disease, duodenal involvement in chronic pancreatitis and as a delayed complication of ingestion of caustic substances.

Some studies suggest that up to ninety percent of these patients are not candidates for curative resection [3]. Aim for these patients is palliation with chemotherapy and/or radiotherapy and/or surgical or endoscopic intervention. At least one retrospective review suggests patients palliated with addition of systemic chemotherapy to chemoradiotherapy had better survival than those treated with chemoradiotherapy alone (median survival 4.3 months vs 1.9 months, overall survival 9.3 months versus 6.3 months) [4]. For palliation of obstructive jaundice due to unresectable hilar cholangiocarcinoma, biliary-enteric bypass is recommended in cases undergoing explorative laparotomy. These procedures have significant complications and high mortality rates [5]. Meanwhile endoscopically-inserted stents, rather than gastric bypass, are recommended for those who have unresectable disease diagnosed on imaging or on laparoscopic approach and have been shown to demonstrate advantages and cost effectiveness over traditional surgical methods [6]. The main long term complication of endoscopically inserted duodenal stents is restricture due to tumour infiltration.The necessity of obtaining a tissue diagnosis prior to surgery depends on the clinical situation. It is not essential for peri-operative planning for patients with malignant biliary obstruction or palliative interventions.

Conclusion

In summary, given the non-specific nature of risk factors and presentation symptoms, as well as the rarity of the condition, early diagnosis of cholangiocarcinoma remains challenging. In many cases of advanced cholangiocarcinoma, prognosis and survival remain poor. This case supports the importance of awareness of this challenging condition, diagnostic process and complex management pathways.

References

1. Vauthey JN, Blumgart LH. Recent advances in the management of cholangiocarcinomas. Semin Liver Dis. 1994; 14: 109.

2. DeOliveira ML, Cunningham SC, Cameron JL, Kamangar F, Winter JM, Lillemoe KD, et al. Cholangiocarcinoma: thirty-one-year experience with 564 patients at a single institution. Ann Surg. 2007; 245: 755.

3. Anderson DA, Pinson CW, Berlin J, Chari RS. Diagnosis and Treatment of Cholangiocarcinoma. The Oncologist - Official Journal of Society of Transitional Oncology. 2003; 9: 43-57.

4. Kim YI, Park JW, Kim BH, Woo SM, Kim TH, Koh YH, et al. Outcomes of concurrent chemoradiotherapy versus chemotherapy alone for advanced-stage unresectable intrahepatic cholangiocarcinoma. Radiat Oncol. 2013; 8: 292.