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BMH Med. J. 2014;1(1):13-16 **Case Report**

Atypical Presentation of Epithelial Ovarian Carcinoma as Isolated Hepatic Metastases From Unknown Primary

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Abstract

Epithelial ovarian carcinoma usually presents in very advanced stages with extensive intraabdominal disease in the form of omental and peritoneal deposits and gross ascites. Liver surface deposits are fairly common with such advanced stages of the disease. But intrahepatic parenchymal lesions are very unusual and are described as stage IV disease. Here we report a case of hepatic space occupying lesion that was found to be a metastatic deposit from ovarian cancer, but surprisingly with no other clinically obvious intraabdominal disease.

Key words: epithelial ovarian carcinoma, endometrioid adenocarcinoma, liver metastases, hepatic resection, subsegmentectomy

Introduction

Epithelial ovarian cancer is a common cause of mortality among gynaecologic cancers [1]. Because of the advanced stages at presentation, most cases are associated with poor long term outcomes. It is a curious clinical fact that even in the face of fairly advanced intraabdominal involvement, Stage IV disease at presentation in the form of intrahepatic parenchymal metastases is very rare in ovarian cancer [2]. Here we are reporting a case where a patient presented to us with a resectable liver metastasis, with no obvious primary; which later turned out to be from endometrioid type ovarian cancer.

Case presentation

A 45 year old lady presented to the Medical Gastroenterology Department of Baby Memorial Hospital. Her chief complaints were abdominal pain for the last three months, and fullness following meals. She also had anorexia, nausea and history of recent weight loss. She gave no significant past history of any diseases or surgeries.

She had been under treatment elsewhere for vague abdominal symptoms for the past 5 months. Ultrasound examination done two months back had shown no abnormalities except for a minimally bulky uterus. Upper GI endoscopy was also done and was found to be normal. She had a repeat ultrasound examination later, that showed multiple isoechoic space occupying lesions in the

segment III of the liver and a simple left adnexal cyst. She was hence referred to our hospital for further work up of the hepatic lesions. On examination, there was a hard mass in the epigastrium measuring about 8 x 5 cm.

A CT scan of the abdomen and pelvis was taken which showed a well marginated hypodense lesion in the segment III of her liver (**Figure 1)**. The portal vein was uninvolved. Other abdominal and pelvic structures were normal. There was no ascites or omental/peritoneal disease. Both ovaries were found to be normal. Diagnosis was solitary hepatic mass lesion; possibilities: 1. Fibrolamellar hepatocellular carcinoma 2. Cholangiocarcinoma.

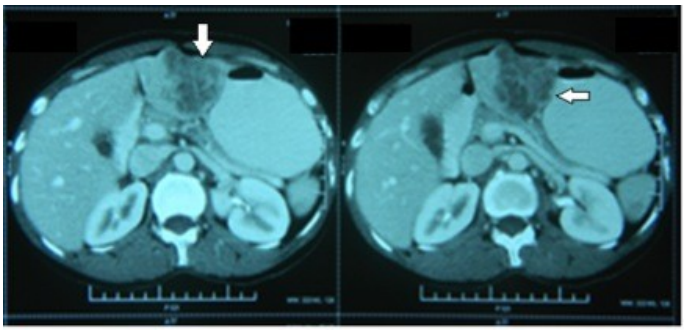

Figure 1: CECT abdomen showing segment III mass lesion with no extrahepatic disease

With a provisional diagnosis of hepatic space occupying lesion, ?hepatoma/cholangiocarcinoma, ? liver secondary, she was investigated further using tumour markers and FNAC/trucut biopsy. AFP was 5.34 ng/ml, serum CEA was 2.35ng/ml. Preoperative CA 125 was not sent. HBsAg, HCV and HIV were negative. Trucut biopsy from the hepatic lesion was reported as metastases from adenocarcinoma; to look for primary in the colon. We did a colonoscopy but there was no disease anywhere along the visualized colon. At this juncture, the case was referred to the Oncology department for further work up and management by our multidisciplinary tumour board. The board decided to do a complete metastatic work up. Bilateral mammogram was taken, which showed fibrocystic disease only. CT thorax was also done and was essentially normal. With a provisional diagnosis of fibrolamellar hepatocellular carcinoma, she was worked up for exploratory laparotomy. At laparotomy, there was no ascites, omental or peritoneal disease. 5 x 4 cm partially exophytic mass lesion with central umbilication was noticed in the left lateral segment of the liver. There were a few satellite nodules also in segment III. Right lobe of liver was free of any disease. Hence we proceeded with a left lateral segmentectomy (**Figure 2**).

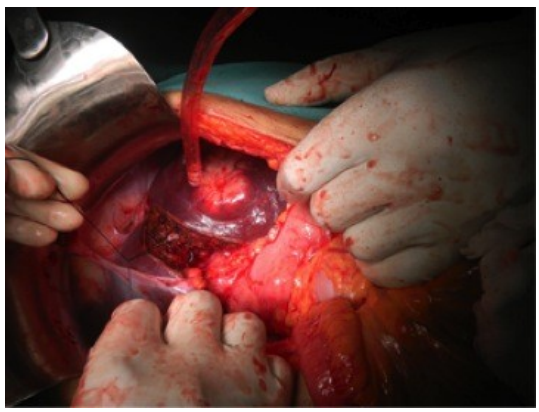

Figure 2: Left hepatic lateral subsegmentectomy in progress

The clinical impression was more in favour of metastatic disease rather than hepatocellular carcinoma. A thorough palpation of the entire abdomen was done to identify any probable occult primary lesion. Two subcentimeter surface nodules of doubtful significance were palpable in the right ovary, and these were excised and sent for biopsy.

The patient had an uneventful recovery in the postoperative period and was discharged on postoperative day 7. Her histopathology report was available at her first follow up visit. The final diagnosis was adenocarcinoma, endometrioid type, grade 3 involving right ovary with liver metastases (**Figure 3, 4**). Resected margins of liver were free from tumour.

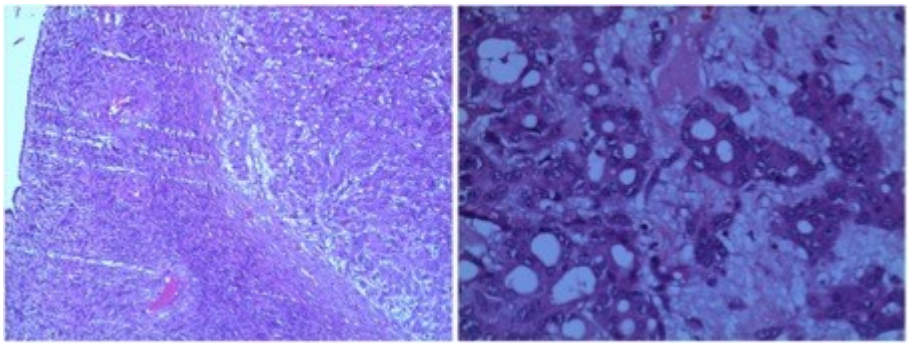

Figure 3: Histopathology slides showing endometrioid adenocarcinoma of ovary

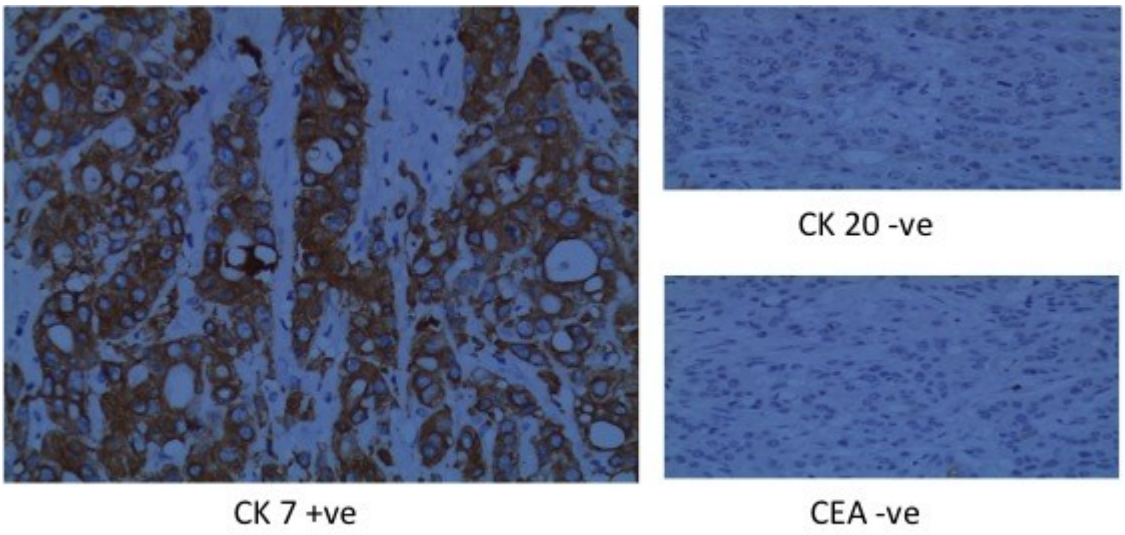

Figure 4: IHC showing CK7+ve, CK20-ve,CEA-ve hepatic nodule suggestive of metastasis from ovarian primary

Her case was discussed again in the multidisciplinary tumour board and it was decided to treat her with paclitaxel and carboplatin chemotherapy. She is presently undergoing chemotherapy.

Discussion

Epithelial ovarian cancer is a common cause of mortality due to gynaecologic cancers. More than 70% of the cases are diagnosed in advanced stages, leading to poor survival of these patients. Patients with advanced epithelial ovarian cancer often presents with extrapelvic disease in the form of omental caking, peritoneal and mesenteric deposits, subdiaphragmatic nodules, lymph nodal disease and liver surface deposits. Intrahepatic parenchymal metastatic lesions are, however, very

rare in ovarian cancer; and when present, denotes stage IV disease. This peculiar behavior is well explained by the usual patterns of spread of ovarian epithelial cancers.

Ovarian cancer typically spreads within the peritoneal cavity by direct seedling and implantation, lymphatic spread, and rarely by haematogenous route. Intraparenchymal liver lesions are very rare even in the presence of extensive intraabdominal disease, and are seen mostly with recurrent disease rather than at initial presentation. Synchronous appearance of ovarian cancer with hepatic metastases at presentation is thus a very rare clinical entity. There are a few reports of liver resections being done on ovarian cancer metatsases, but these were at least eleven months to a few years after treating the ovarian primary disease [3-5]. Isolated liver metastasis from an unsuspected ovarian primary is so far not reported in the literature to our knowledge.

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