

Fascioliasis Mimicking Breast Cancer Recurrence

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ABSTRACT

In oncology practice, opportunistic infections are common. A rare infectious pathogen in a cancer patient can be challenging. Sixty-six year old female patient with a history of breast cancer presented with lesions in liver. PET revealed intense uptake in the multiloculated lesion in the right liver lobe. Eosinophilia and absence of symptoms conveyed us to a diagnosis of fascioliasis. Patient was treated. After 12 months of follow-up patient is still free of fascioliasis and breast cancer. Our experience while giving important data about PET experience with fascioliasis, reminded us a rare cause of hepatic lesion and importance of clinical management in a cancer patient. Here we present a patient with fascioliasis mimicking breast cancer recurrence.

Keywords: Breast cancer, fascioliasis, positron emission tomography, triclabendazole

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INTRODUCTION

Breast cancer is the most common cancer in women and leading cause of cancer related mortality. After surgery which is the only curative modality, and adjuvant therapy close follow up for recurrences is important. In addition to local failure, recurrences in solid organs especially in liver, lung and bones must be closely monitored. Here we present a patient with fasciola hepatica infection mimicking recurrence of a breast cancer.

CASE REPORT

A 66 year old female patient presented with mastalgia. Diagnostic workup revealed a nodular lesion and patient was treated with modified radical mastectomy. Pathology showed an invasive ductal carcinoma with a stage of T2N0M0, grade III, ki-67 %70. After adjuvant FEC [Fluorouracil- Epirubicin- cyclophosphamide)- Docetaxel regimen, patient was followed with letrozole. At the 2nd year of follow up, eosinophilia and dyspepsia ensued. Laboratory evaluation was normal except for eosinophil: $1,6 \times 10^9/L$, CRP: 9 mg/L [0-3) and erythrocyte sedimentation rate of 80. There were no signs and symptoms that could convey us for differential diagnosis of eosinophilia. Parasitological stool examinations were negative. Abdominal ultrasonography showed new hypoechoic lesions in liver which were suspicious for metastasis. Positron emission tomography showed intense uptake in the multiloculated lesion in the right liver lobe with a 17.7 SUVmax. Additionally periportal FDG avid [SUVmax: 12.4) lymph nodes were revealed [figure-1). Further workup with dynamic imaging of liver was consistent with fascioliasis of liver [figure-2a). Cholangiopancreatography and sphincterotomy were performed. A lesion in left hepatic lobe that has connection with intrahepatic bile ducts was observed. Imaging concluded a diagnosis of fascioliasis. Patient was treated with Triclabendazole 250 mg twice daily for two days. And

liver lesions progressively improved with treatment [figure- 2b). After 12 months of follow-up patient is still free of fascioliasis and breast cancer.

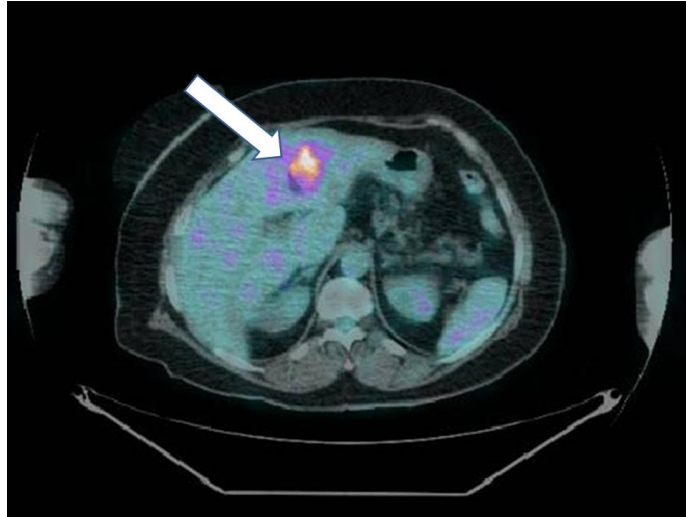


Fig. 1: Intense uptake in the multiloculated lesion in the right liver lobe with a 17.7 SUVmax.

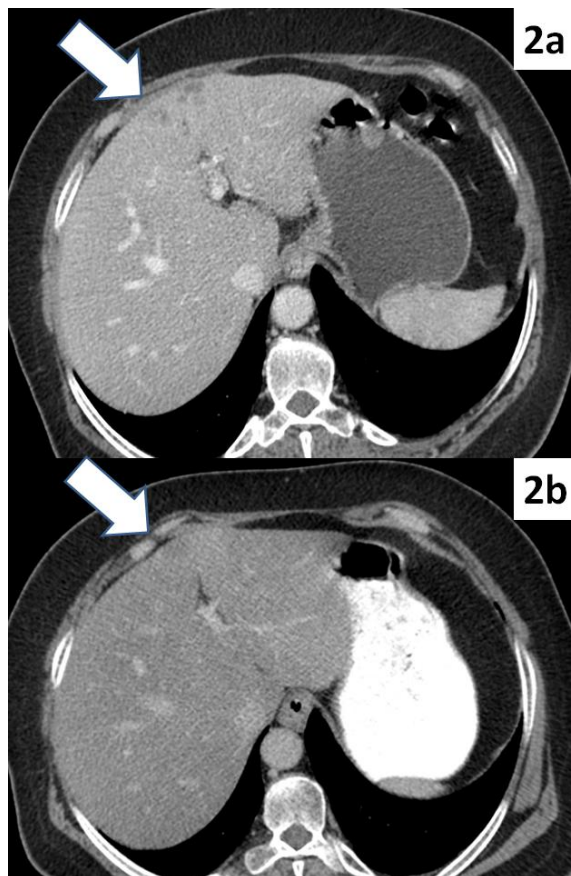


Fig. 2: Tubular hypodense lesions in the subcapsular region of segment 4 of liver (2a) and regression of the lesions after medical therapy (2b).

DISCUSSION

With improvements in surgery and radiotherapy modalities, local recurrences are rarely encountered. Distant failures are mostly observed in liver, lung and bones. Liver benign lesions especially hemangiomas are in differential diagnosis of metastasis in a cancer patient. Primary liver parasitic infections are rarely encountered in oncology practice.

Fasciolahepatica (FH) is a trematode flatworm which has a life cycle in herbivores and rarely human. Fascioliasis caused by FH, mainly effects liver and rarely ectopic soft tissues. Clinical reflexion of hepatic infection can range from malaise and to hepatic failure (1, 2). Diagnosis is generally challenging and time to diagnosis after symptoms can reach up to 208 weeks (3). Therapy with Triclabendazole is the standard treatment modality.

Limited or systemic infections can sometimes mimic recurrence or progression in cancer patients. Experience with fascioliasis in oncology practice is limited. Due to its nature and relation with hepatobiliary system, there are experiences with fascioliasis mimicking cholangiocellularcarcinoma (4-6). In these cases, patients presented with cholestatic hepatic dysfunction and after radiological evaluation endoscopic retrograde cholangiopancreatography concluded the diagnosis. Castillo Contreras et al. presented a case with solitary hepatic lesion mimicking hepatic tumor (7).

In all these experiences patients progressively improved with medical therapy. The diagnostic workup in our patient was challenging. Especially increased SUV-max values in hepatic lesions and regional lymph nodes reminded a recurrence of primary breast cancer. However, the most important finding that alerted us was the eosinophilia and increased acute phase reactants. The patient improved with triclabendazole therapy and lesions progressively regressed. Our experience while giving important data about PET experience with fascioliasis,

reminded us a rare cause of hepatic lesion and importance of clinical management in a cancer patient.

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