Case Report

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Eosinophilic hepatitis mimicking hepatic metastases – a case report

Abstract

Focal eosinophilic infiltration is a rare disease entity that in patients with malignancies may mimic malignant hepatic nodules. Eosinophilic hepatitis is associated with a variety of disorders such as parasitic infestations, allergic conditions, internal malignancies, drug hypersensitivity, and hypereosinophilic syndrome. In daily clinical practice, eosinophilic abscess with typical or atypical imaging findings can mimic metastasis. We hereby report a patient of eosinophilic hepatitis that mimicked hepatic metastases.

Keywords: parasitic infestations, allergic conditions, internal malignancies, drug hypersensitivity, hypereosinophilic syndrome

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Case report

A 65 year old male presented with complaints of pricking sensation in the left side of throat for two months that got aggravated on feeding. CECT Face and neck reported faintly enhancing thickening measuring approximately 3.2x2x1.4cm in the left pyriform sinus and enlarged necrotic left cervical level II and III lymph nodes measuring approximately 0.8x1.6cm and 0.9x1.5cm. Biopsy from growth in left pyriform fossa reported squamous cell carcinoma .Upper GI Endoscopy was done and reported irregular growth seen in left pyriform fossa. USG Whole abdomen reported multiple hypoechoic space occupying lesions in segment VI/VII of right lobe of liver, largest measuring 2.1x1.7cm likely suggestive of metasatsis. FNAC from liver space occupying lesions revealed paucicellular smears with presence of few benign hepatocytes and occasional stromal fragment in a haemorrhagic background. USG guided true cut biopsy from liver space occupying lesions showed fragmented cores of liver displaying five portal tracts. Sheets of eosinophils were seen infiltrating the hepatic lobules. Focal necrosis with palisading histiocytes were seen. Portal tracts showed moderate mixed inflammation comprising of lymphocytes, neutrophils and eosinophils. These features were suggestive of eosinophilic hepatitis.

Patient was planned for concurrent chemoradiation.He was given a course of Antihelminthics. He developed difficulty in breathing, cough with expectoration and generalized weakness during the treatment. CECT Thorax was done that reported mild paraseptal and centrilobular emphysematous changes in bilateral lungs, mild fibrotic densities in bilateral apical lung regions and para tracheal air cyst. USG Whole Abdomen was also done which did not show any focal space occupying lesion in liver or dialatation of IHBR.

Discussion

In many literature reports,[1–6] several terms, such as "foci of eosinophil-related necrosis," "focal eosinophilic infiltration," "focal eosinophilic necrosis," and "eosinophilic abscess" have been used for eosinophil-related hepatic lesions. These terms have not yet been clearly defined histopathologically. In general, eosinophilic abscess means eosinophilic infiltration with focal necrosis, and focal eosinophilic infiltration means eosinophilic infiltration without focal necrosis.

The imaging findings of eosinophilic abscess or focal eosinophilic infiltration are well known and are usually similar regardless of the cause. On CT, eosinophilic abscess or focal eosinophilic infiltration usually appears as small, oval or round, and low attenuating nodules with well- or ill-defined margins. They are most conspicuous during the portal venous phase. They have iso/low, low/low, or mixed attenuation on the hepatic arterial/portal venous phases.[1–3,5–8] On sonographic examination, they manifest as small (usually <2cm), poorly or well-defined, oval or round, low echoic nodules without hyper or hypoechoic rims. On histopathology, eosinophilic abscess or focal eosinophilic infiltration is related to perivascular infiltration of eosinophils, predominantly in the periportal space, and hepatocellular necrosis.[1,3,5,9,10] We can speculate that portal flow obstruction by eosinophilic infiltration makes focal eosinophilic infiltration or eosinophilic abscess hypoattenuation on portal phase CT, and inflammatory hyperemia or compensatory arterial overflow causes enhancement on arterial phase CT and MRI. In summary, focal eosinophilic liver disease may be confused with those of liver malignancy, careful analysis with imaging and subsequent FNAC or biopsy from the lesion is mandatory.

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Conflict of interest

The author declares that there is no conflict of interest.

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