DESCRIPTION
A 48-year-old woman was referred to the gastroenterology outpatient department under the '2-week wait' referral system for suspected cancer. She complained of a 5-week history of nausea, vomiting, anorexia and epigastric pain. The patient also felt she had lost weight but was unable to quantify this. On examination she had no stigmata of chronic liver disease but she had massive tender hepatomegaly to the right iliac fossa. Blood tests showed a bilirubin of 32 μmol/litre (normal range 0–21 μmol/litre) and an alanine transaminase of 59 IU/litre (Normal Range 0–31 IU/litre). The rest of her liver function tests, biochemistry and full blood count were normal. Her inflammatory markers were raised with a C reactive protein of 14 mg/litre (NR 0–5 mg/litre) and erythrocyte sedimentation rate of 39 mm/h (NR 0–20 mm/h).

An ultrasound and subsequent CT scan of the abdomen were performed (figure 1). The images were discussed in our multidisciplinary meeting and, in the context of a history of alarming features, the initial working diagnosis was that of multiple hepatic metastases from an unknown primary tumour. Though the recommended work-up for lesions such as this involves sequential dynamic ultrasound-CT-MRI studies, an urgent liver biopsy was performed next in view of suspected cancer (figures 2 and 3). However, histology showed no overt atypia or malignancy. Although, as no native hepatic parenchyma was included, a primary or metastatic malignancy could not be entirely excluded since similar changes may be seen in the liver in the vicinity of a mass lesion. Based on the histological findings, the possibility of a benign vascular lesion was raised with the recommendation to correlate with imaging.

A MRI was then carried out to characterise these lesions further and the diagnosis of multiple hepatic haemangioma was confirmed by the classical MRI appearances (figures 4–6). An alternative, though similarly benign, differential diagnosis would also include hepatic peliosis. This condition is characterised by blood-filled lacunar cavities throughout the liver, which can occasionally also be seen in the spleen, kidneys and lungs. Though the pathogenesis is unknown it has been observed in association with malignancy, infections such as HIV and drugs such as corticosteroids and azathioprine.

The patient has been regularly followed up in clinic and at 6 months, with only symptomatic treatment (proton pump inhibitor for dyspeptic symptoms), she is asymptomatic and her weight is stable. Her liver function tests and inflammatory markers have now normalised.

Images shown here demonstrate the characteristic histological and radiological findings seen in hepatic haemangiomas and illustrate one of the benign differentials of a liver with multiple areas of abnormality.

Competing interests None.
Patient consent Obtained.

Figure 3  High power image of the liver biopsy showing dilated thin-walled blood vessels and bile duct-like structures within fibrous stroma. Cores of fibrous tissue can be seen containing ducts with bland cyto-architectural morphology resembling bile ducts within expanded portal tracts.

Figure 4  Coronal T2-weighted MRI showing multiple high signal liver lesions. The signal remained high on long echo time (TE) weighted images. Septae and fluid levels were noted but no significant fat content was seen.

Figure 5  Axial T2-weighted MRI showing multiple high signal liver lesions.

Figure 6  Axial T1-weighted MRI post-contrast (arterial phase) showing enhancement of the lesions. During the dynamic enhancement series several of the lesions demonstrate centripetal enhancement, which increased on delayed phase imaging.

REFERENCE