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In Response to the Article “CT of Hepatic Sarcoidosis: Small Nodular Lesions Simulating Metastatic Disease”. Pol J Radiol, 2015; 80: 178-180

Authors' Contribution:

- A** Study Design
- B** Data Collection
- C** Statistical Analysis
- D** Data Interpretation
- E** Manuscript Preparation
- F** Literature Search
- G** Funds Collection

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Dear Editor,

The article by Ufuk F. et al. [1] on CT features of hepatic sarcoidosis was quite informative and made an interesting reading.

Sarcoidosis is a systemic disorder of unknown etiology, characterized by non-caseating epithelioid granulomas. It has been suggested that sarcoidosis results from exposure to antigens like aerosols and infectious agents in genetically predisposed individuals [2]. Virtually any organ system may be involved. Although the involvement of the abdominal viscera is less frequent as compared to pulmonary and mediastinal diseases, when it occurs, it may mimic more common infectious or neoplastic conditions and pose a perplexing diagnostic problem.

Hepatic involvement is very common in patients with sarcoidosis; liver granulomas were seen in as many as 70% of cases with sarcoidosis in an autopsy series [3]. Most patients with hepatic sarcoidosis are asymptomatic and have normal liver enzyme tests. Hepatosplenomegaly (15–40%) and abdominal pain (5–15%) are the most common clinical findings [3]. Herein we discuss a case of hepatic sarcoidosis in an asymptomatic female patient in whom routine ultrasound abdomen revealed multiple hypoechoic nodules in the liver.

A 42-year-old woman who had been asthmatic was referred to our department for ultrasound of the abdomen. She was a follow-up case of appendectomy which was carried out six months earlier. The ultrasound revealed multiple hypoechoic areas in both lobes of the liver (Figure 1). Those did not show any vascularity on color Doppler flow imaging and did not exert any mass effect on the surrounding liver parenchyma. Hepatic vessels and

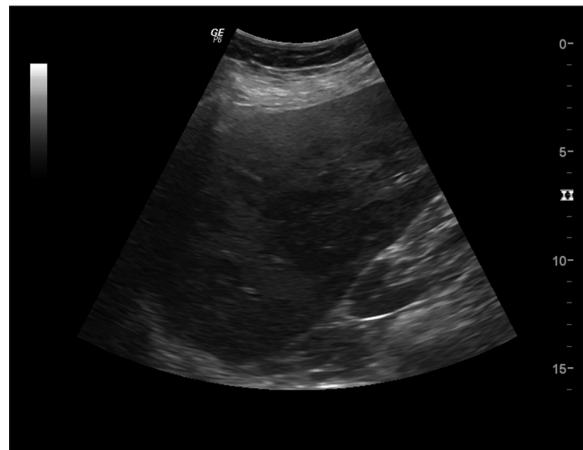


Figure 1. Trans-abdominal ultrasound showing multiple hypoechoic areas in the liver.

portal vein were normal. To better characterise the lesions, three-phase CECT of the abdomen was planned. However, the patient did not give consent for contrast administration (As she had a history of atopy and reaction to exogenous drugs and injections). Plain CT of the abdomen was performed which showed presence of multiple round hypodense areas in both lobes of the liver, the largest one measuring 13×9 mm in the right lobe, with their average CT value ranging from 20 to 35 HU (Figure 2A, 2B). The liver measured 15.5 cm in cranio-caudal span indicating borderline hepatomegaly. Also noted were small lesions of similar density in the spleen which was also mildly enlarged in size (Figure 2C). HRCT of the chest showed that lungs were bilaterally grossly normal (Figure 3). No significant abdominal or mediastinal lymphadenopathy

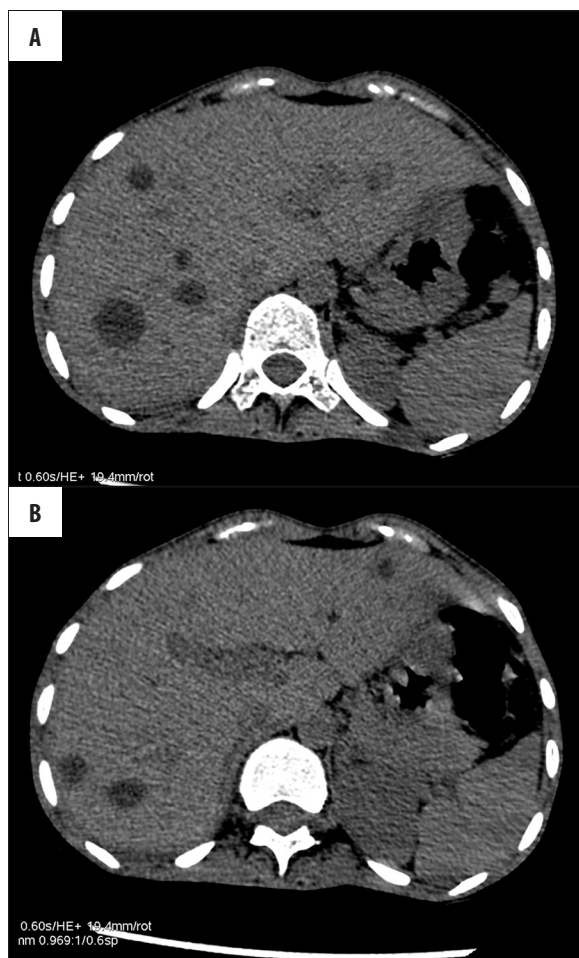


Figure 2. Plain CT of the abdomen showing presence of (A, B): multiple round hypodense areas in both lobes of the liver, the largest one was seen in the right lobe; (C) similar-density small lesions were also seen in the spleen.



Figure 3. Coronal view of HRCT of the chest showing grossly normal bilateral lung fields.

was seen. Based on those sonographic and CT findings a differential diagnosis of sarcoidosis, lymphoma, and tuberculosis was made, with less likely possibility of metastasis (from an unknown primary tumour). Ultrasound-guided biopsy of one of the lesions in the liver revealed non-caseating granulomas. No acid-fast bacilli were seen. Similar histologic appearance was obtained from the lesion in the spleen which was subjected to CT-guided biopsy. Her biochemical and laboratory tests including liver enzymes were normal. She had no history of jaundice, fever or any other complaint except for generalised weakness. Her past history was insignificant except for appendectomy. There was

no history of fever, decreased appetite or weight loss. As the patient did not have any clinical or laboratory evidence of liver dysfunction, a final impression of asymptomatic hepato-splenic sarcoidosis was made. No treatment was instituted and the patient was discharged with the advice of follow-up check-ups.

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