

[PICTURES IN CLINICAL MEDICINE]

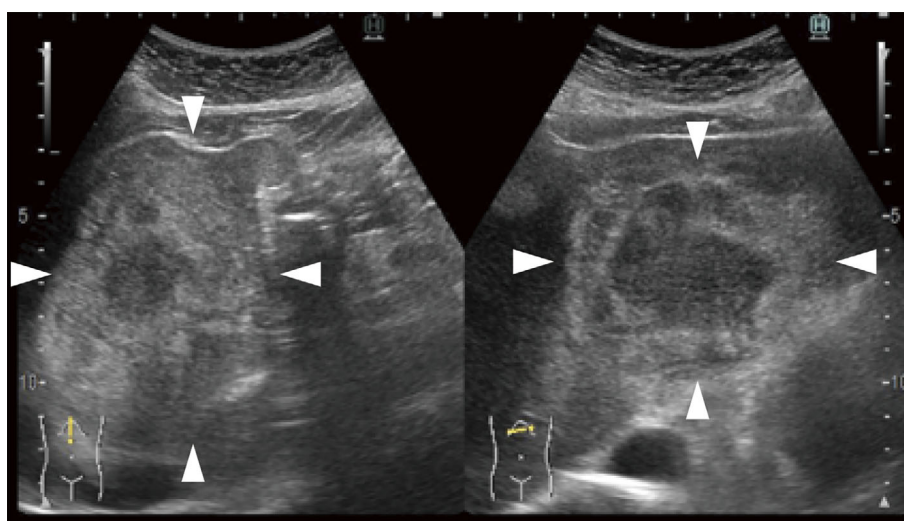
Internal Hemorrhaging of Hepatic Hemangioma Presenting with a Fever

Shunichiro Hanai^{1,2}, Kei Kobayashi^{1,2}, Ryosuke Ito^{1,2} and Daiki Nakagomi^{1,2}

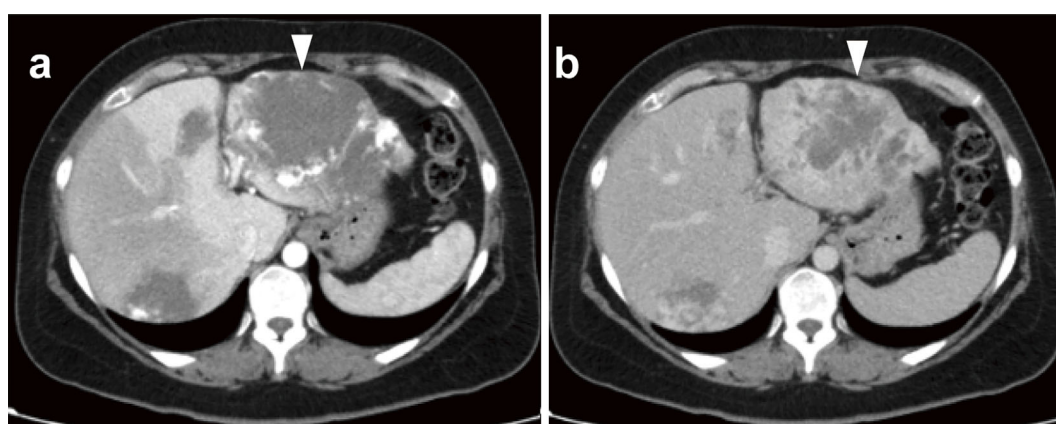
Key words: abdominal ultrasonography, computed tomography, fever of unknown origin, liver mass, magnetic resonance imaging, systemic lupus erythematosus

(Intern Med 61: 1475-1476, 2022)

(DOI: 10.2169/internalmedicine.7530-21)



Picture 1.

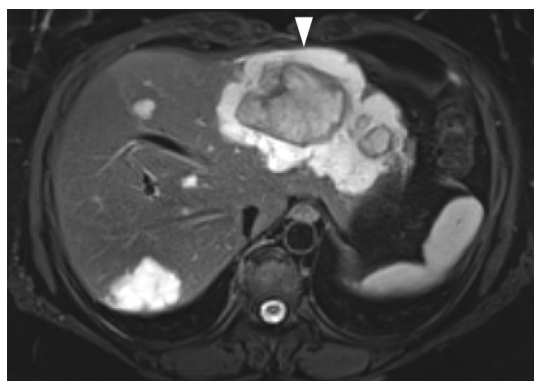


Picture 2.

¹Department of Rheumatology, University of Yamanashi Hospital, Japan and ²Third Department of Internal Medicine, University of Yamanashi, Japan

Received: March 11, 2021; Accepted: September 6, 2021; Advance Publication by J-STAGE: October 19, 2021

Correspondence to Dr. Shunichiro Hanai, shanai@yamanashi.ac.jp



Picture 3.

A 45-year-old woman with systemic lupus erythematosus presented to our department after the sudden onset of a high fever (39.0 °C) the previous day. No significant symptoms were associated with the fever. Laboratory findings on admission were as follows: hemoglobin, 10.0 g/dL; white blood cell count, 9,670/ μ L; neutrophils, 7,630/ μ L; lymphocytes, 1,360/ μ L; platelets, 55.6 \times 10³/ μ L; serum C-reactive protein, 25.7 mg/dL; aspartate aminotransferase, 19 U/L; alanine aminotransferase, 17 U/L; alkaline phosphatase, 488 U/L; γ -glutamyl transpeptidase, 86 U/L; and lactate dehydrogenase, 320 U/L. The titer of anti-double-stranded DNA antibody was 10 U/mL (normal, <12 U/mL). No renal dysfunction was evident. Abdominal ultrasonography (AUS) showed a huge, heterogeneous, hyperechoic mass with central hypoechoic regions in the left lobe of the liver (Picture 1). As neither AUS nor computed tomography (CT) had previously been performed, hepatic hemangioma had never been detected. Contrast-enhanced CT demonstrated peripheral enhancement in the early phase (Picture 2a) and a centripetal pattern during the late phase (Picture 2b). Magnetic

resonance imaging (MRI) revealed a well-demarcated, heterogeneous, hyperintense mass with central hypointense regions compared to the surrounding tissue on T2-weighted imaging (Picture 3). Internal hemorrhaging of hepatic hemangioma was diagnosed based on the findings from AUS, CT and MRI. The fever resolved gradually and spontaneously by six days after the onset without non-steroidal anti-inflammatory drugs or acetaminophen. Internal hemorrhaging of hepatic hemangioma can present as a fever of unknown origin and mimic infection (1, 2). Physicians should keep this pathology in mind as an unusual cause of a fever.

Written informed consent was obtained from the patient by the corresponding author. The signed consent forms have been retained by the corresponding author. Details of the patient have been anonymized as much as possible.

The authors state that they have no Conflict of Interest (COI).

Acknowledgement

The authors would like to thank Dr. Masaru Muraoka from the First Department of Internal Medicine, University of Yamanashi, for the diagnosis and surveillance of the hepatic hemangioma.

References

1. Liu X, Yang Z, Tan H, Zhou W, Su Y. Fever of unknown origin caused by giant hepatic hemangioma. *J Gastrointest Surg* **22**: 366-367, 2018.
2. Hao F, Yang X, Tian Y, Wang W, Ge M. Spontaneous internal hemorrhage of a giant hepatic hemangioma: a case report. *Medicine (Baltimore)* **96**: e8702, 2017.

The Internal Medicine is an Open Access journal distributed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view the details of this license, please visit (<https://creativecommons.org/licenses/by-nc-nd/4.0/>).