Radiology Case Reports xxx (2016) 1–5

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: http://Elsevier.com/locate/radcr

Case Report

Hepatic Hodgkin lymphoma with delayed enhancement on CT and MRI

Yukie Higuma MD[a], *Ryo Yamauchi MD*[b], *Ritsuko Fujimitsu MD*[a], *Keiko Sakamoto MD*[a], *Yoshinobu Shinagawa MD*[a], *Ayako Morita MD*[a], *Hiroshi Urakawa MD*[a], *Morishige Takeshita MD*[c], *Kengo Yoshimitsu MD*[a,*]

[a] *Department of Radiology, Faculty of Medicine, Fukuoka University, 7-45-1 Nanakuma, Jonan-ku, Fukuoka 814-0180, Japan*
[b] *Department of Gastroenterology, Faculty of Medicine, Fukuoka University, Fukuoka, Japan*
[c] *Department of Pathology, Faculty of Medicine, Fukuoka University, Fukuoka, Japan*

ARTICLE INFO

Article history:
Received 12 October 2016
Received in revised form
6 November 2016
Accepted 23 November 2016
Available online xxx

Keywords:
Liver
Hodgkin lymphoma
Delayed enhancement
Biopsy failure

ABSTRACT

Hepatic Hodgkin lymphoma is a rare disease, characterized by the presence of abundant granulofibrous stroma, and its radiological features have rarely been described. We report a 67-year-old man, who presented with liver masses that showed apparent delayed enhancement, along with systemic lymphadenopathy and musculoskeletal lesions. Repeated percutaneous needle biopsy, however, failed to confirm the diagnosis, and surgical biopsy finally revealed small amount of Hodgkin cells and Reed-Sternberg cells. In this report, the radiological features of hepatic Hodgkin lymphoma will be presented and discussed, in correlation with its histological findings.

© 2016 the Authors. Published by Elsevier Inc. under copyright license from the University of Washington. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Case report

A 67-year-old man, who had been suffering from persistent fever for more than a month, was admitted to our institution to scrutinize liver mass and multiple lymphadenopathy in the neck and abdomen. Abnormal laboratory test data on admission included mild leukocytosis, mildly elevated liver function tests, and moderately to markedly elevated C-reactive protein and soluble interleukin-2 receptor. Neither hepatitis B virus surface antigen nor hepatitis C virus antibody was positive. Other tumor

Acknowledgments: The authors are indebted to Professor Kazuki Nabeshima, Department of Pathology; Professor Shotaro Sakisaka, Department of Gastroenterology; and Professor Yasushi Takamatsu, Department of Medical Oncology, Hematology, and Infectious Diseases, for providing pathological and clinical information.

Declaration: All procedures performed in this study were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This case report has never been published or is not under consideration for publication elsewhere in English or other language. Informed consent was waived by our institutional review board in this case report. This study was not funded by any company.

Competing Interests: The authors have declared that no competing interests exist.

* *Corresponding author.*
E-mail address: kengo@fukuoka-u.ac.jp (K. Yoshimitsu).

http://dx.doi.org/10.1016/j.radcr.2016.11.013

1930-0433/© 2016 the Authors. Published by Elsevier Inc. under copyright license from the University of Washington. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

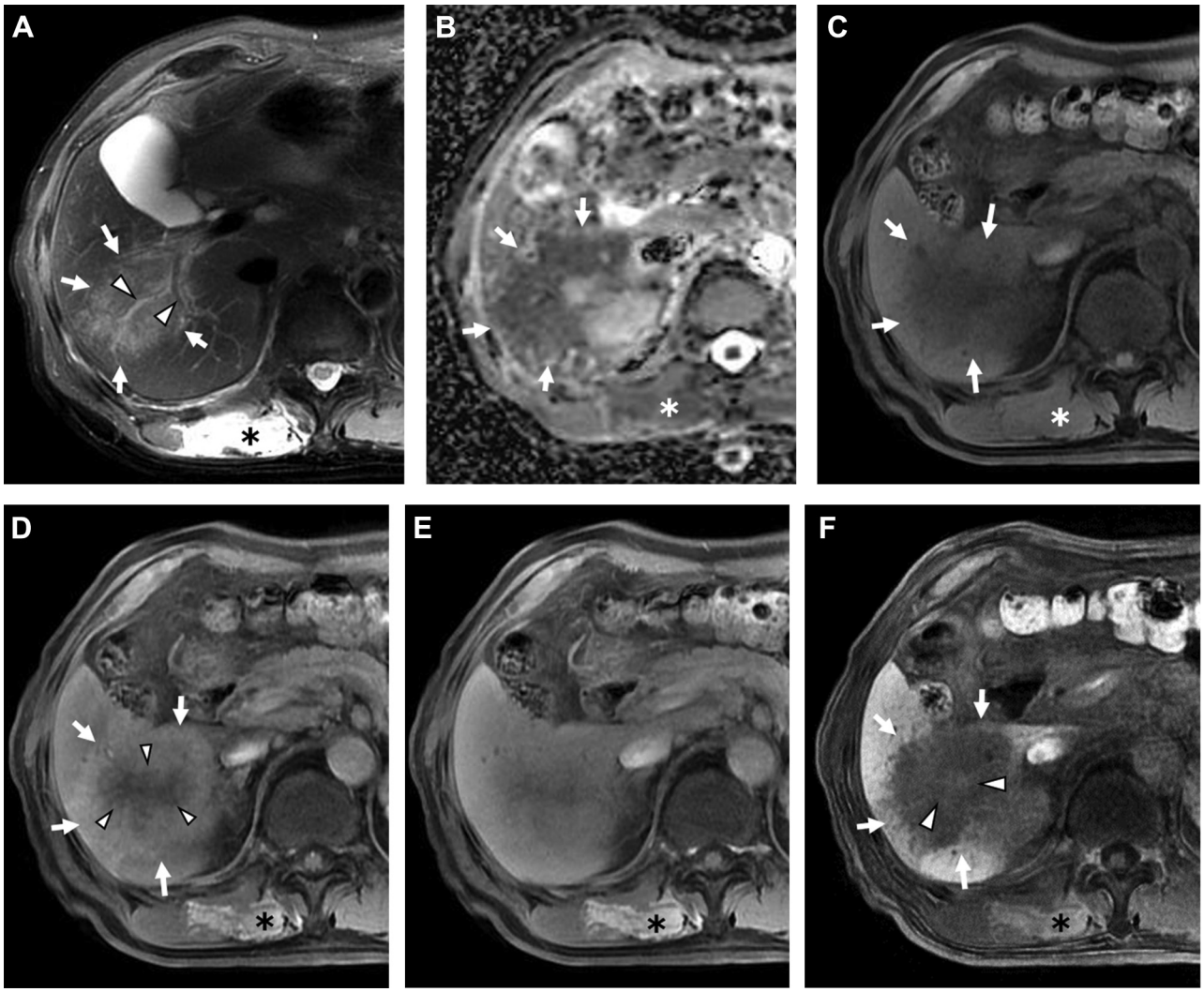

Fig. 1 – Magnetic resonance (MR) imaging of the liver. (A) T2-weighted image with fat suppression (repetition time [TR]/echo time [TE] = 8000/85.9 ms). A slightly hyperintense mass of 7 cm in its largest dimension is seen (arrows). Note branches of portal vein are penetrating the mass without occlusion (arrowheads). There is another hyperintense mass involving the right paraspinal muscle (asterisk). (B) Apparent diffusion coefficient (ADC) map 2 cm caudad to panel A, calculated from echo-planar diffusion-weighted image (TR/TE = 7000/64.5 ms, b factors 0 and 800 s^{-1}). ADC value of the hepatic mass (arrows) was 0.99 × 10^{-3} mm^2/s. The lesion in the right paraspinal muscle also shows similar ADC value (asterisk). (C) Precontrast 3DT1-weighted image (TR/TE/flip angle [FA] = 6.3/2.2 ms/15°) through the same slice as panel B. The mass is shown as a faintly hypointense area (arrows). The lesion in the right paraspinal muscle shows almost similar signal intensity as the surrounding tissue (asterisk). (D) Arterial phase of the dynamic scan obtained using bolus tracking method through the same slice as panel B. Note faint enhancement of the mass (arrows) with central part sparing (arrowheads). The lesion in the right paraspinal muscle also shows apparent enhancement (asterisk). (E) Transitional phase (180 seconds) of the dynamic scan through the same slice as panel B. The mass exhibits mostly homogeneous enhancement, suggesting delayed enhancement of the central part. No necrosis is evident. The lesion in the right paraspinal muscle also shows persistent enhancement (asterisk). (F) Hepatobiliary phase of gadoxetate enhancement obtained 15 minutes after gadoxetate enhancement through the same slice as panel B. Note fuzzy margin of the mass, suggesting the infiltrative nature of the lesion (arrows). There is a faint uptake of contrast in the central part of the mass (arrowheads), corresponding to the spared area in the early enhancement in panel D. The lesion in the right paraspinal muscle shows apparent persistent enhancement (asterisk).

markers including carcinoembryonic antigen, carbohydrate antigen 19-9, alphafetoprotein, and protein induced by vitamin K absence or antagonist-II, were all negative.

Magnetic resonance imaging (MRI) using gadoxetate (Primovist; Bayer, Osaka, Japan) enhancement was performed for the liver lesion; an ill-defined, irregularly shaped mass of 7 cm in diameter was found in the right hepatic lobe, showing slight T1 and T2 prolongation, diffusion restriction, and vessel penetration sign, along with several satellite lesions. The central part of the mass showed delayed enhancement on the

Download English Version:

https://daneshyari.com/en/article/8825470

Download Persian Version:

https://daneshyari.com/article/8825470

Daneshyari.com