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Muramae, Naokazu
Kobayashi, Takashi
Otsui, Kazunori
Sakaguchi, Kazuhiko

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[PICTURES IN CLINICAL MEDICINE]

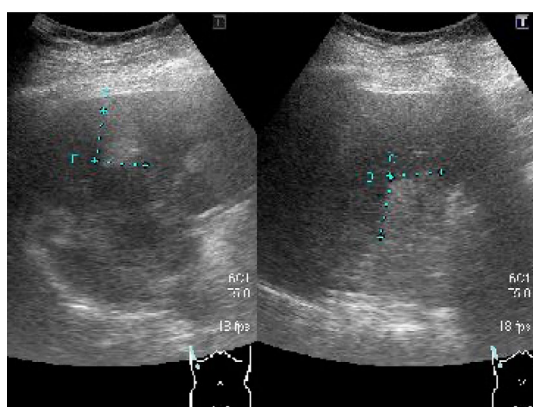
Focal Hepatic Steatosis Caused by Metastatic Malignant Insulinoma

Naokazu Muramae, Takashi Kobayashi, Kazunori Otsui and Kazuhiko Sakaguchi

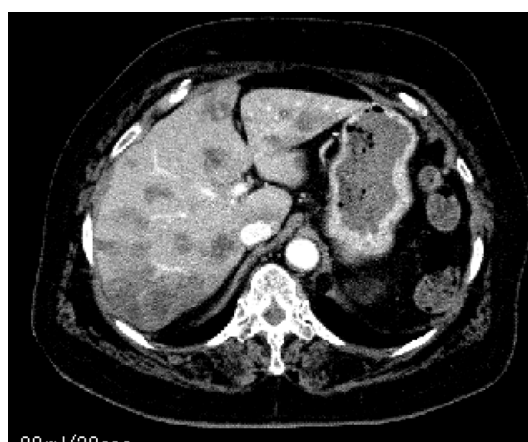
Key words: focal hepatic steatosis, malignant insulinoma, chemical shift image, ASVS

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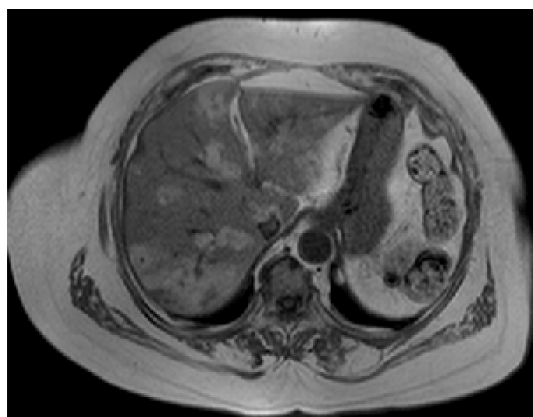
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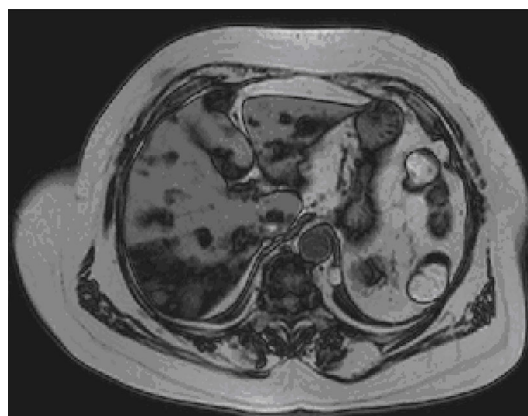
Picture 1.



Picture 2.



Picture 3.



Picture 4.

A 77-year-old woman with a history of distal pancreatectomy for insulinoma 3 years previously presented with recurrent symptoms of hypoglycemia. The results of 72-hr fasting test were marginal. Abdominal echography showed multiple spherical-shaped, high-echoic lesions in the liver

without any findings in the pancreas (Picture 1). An enhanced CT scan revealed non-enhanced multiple heterogeneous low density areas in the liver (Picture 2). T1 weighted MRI showed multiple heterogeneous high intensity lesions

Division of General Internal Medicine, Department of Internal Medicine, Kobe University School of Medicine, Japan

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Correspondence to Dr. Naokazu Muramae, nmuramae@med.kobe-u.ac.jp

(Picture 3). A chemical shift image corresponding to Picture 3 indicated focal hepatic steatosis (Picture 4). Although the target liver biopsy showed large fatty droplets to be deposited in hepatocytes, no tumor cells were found in the specimen. A significant increase in the serum immunoreactive insulin (IRI) level on the celiac and proper hepatic arterial stimulation in arterial stimulation venous sampling (ASVS) were observed, and therefore a diagnosis of liver metastasis of malignant insulinoma was made.

Though typical insulinoma occurs as a hypervascular tumor, focal fatty liver around the small metastatic foci occasionally demonstrate characteristic image findings (1, 2).

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

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