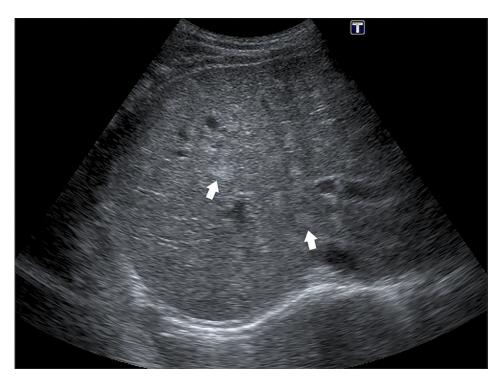
## [ PICTURES IN CLINICAL MEDICINE ]

## Features of Dynamic Computed Tomography Imaging of Glycogenic Hepatopathy

Ting-Fu Hsu<sup>1</sup>, Tung Liu<sup>2</sup>, Sung-Hua Chiu<sup>1</sup> and Wei-Chou Chang<sup>1</sup>

Key words: glycogenic hepatopathy, diabetes mellitus

(Intern Med 60: 1319-1321, 2021) (DOI: 10.2169/internalmedicine.6079-20)



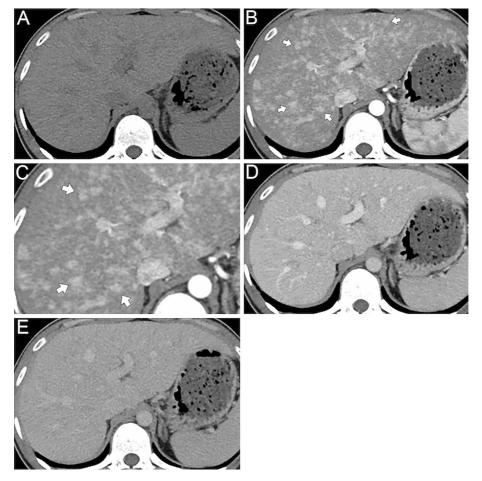
Picture 1.

A 23-year-old man with type I diabetes mellitus showed increased levels of serum alanine transaminase (ALT, 53 U/L) with multiple hyperechoic hepatic nodules (Picture 1, arrows) on a sonogram. Dynamic computed tomography (CT) (Picture 2) revealed multiple arterial-enhancing hepatic nodules (Picture 2B, C, arrows) that became isodense in the portal venous and delayed phases. Dynamic magnetic resonance imaging showed the same features, and a normal appearance was seen on T2-weighted and diffusion-weighted imaging (Picture 3). A histopathologic examination demonstrated glycogenated nuclei (Picture 3A, arrows) and glyco-

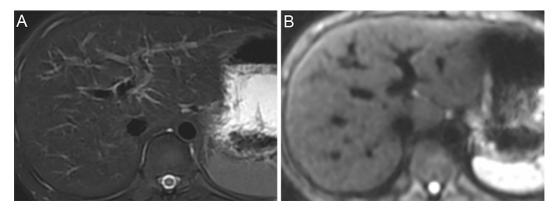
gen aggregates within hepatocytes, which were confirmed by periodic acid-Schiff and de-periodic acid-Schiff stain (Picture 4B, C). Glycogenic hepatopathy (GH) was diagnosed. GH is a rare cause of increased serum transaminase levels in diabetic patients (1), and continuous glucose monitoring improves both hyperglycemia and the liver function (2). In our patient, the ALT level normalized after glucose control. We herein report the first case of GH with multiple arterial-enhancing hepatic nodules, which may be an important imaging feature of GH.

Received: August 10, 2020; Accepted: September 14, 2020; Advance Publication by J-STAGE: November 2, 2020 Correspondence to Dr. Wei-Chou Chang, weichou.chang@gmail.com

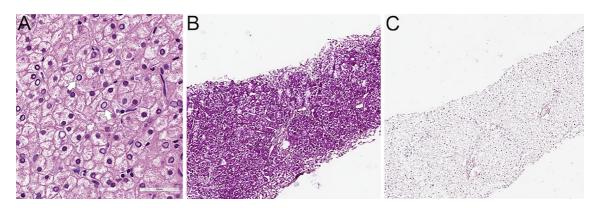
<sup>&</sup>lt;sup>1</sup>Department of Radiology, Tri-Service General Hospital and National Defense Medical Center, Taiwan and <sup>2</sup>Department of Pathology, Tri-Service General Hospital and National Defense Medical Center, Taiwan



Picture 2.



Picture 3.



Picture 4.

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

## References

**1.** Ikarashi Y, Kogiso T, Hashimoto E, et al. Four cases of type 1 diabetes mellitus showing sharp serum transaminase increases and hepatomegaly due to glycogenic hepatopathy. Hepatol Res **47**: E201-

E209, 2017.

**2.** Asada S, Kawaratani H, Mashitani T, et al. Glycogenic hepatopathy in type 1 diabetes mellitus. Intern Med **57**: 1087, 2018.

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/).

© 2021 The Japanese Society of Internal Medicine *Intern Med 60: 1319-1321*, 2021