


Restrictive ventilatory impairment and thrombosis due to a giant liver cyst

Keitaro Nakamoto¹ , Chika Miyaoka¹, Aya Hirata¹, Yasuhiro Nakamura², Tetsuya Nakazato² & Hajime Takizawa¹

¹Department of Respiratory Medicine, Kyorin University School of Medicine, Mitaka, Japan.

²Department of Surgery, Kyorin University School of Medicine, Mitaka, Japan.

Keywords

Liver cyst, needle aspiration, restrictive ventilatory impairment, thrombosis.

Correspondence

Keitaro Nakamoto, Department of Respiratory Medicine, Kyorin University School of Medicine, 6-20-2 Shinkawa, Mitaka, Tokyo 181-8611, Japan.
E-mail: keichon2000@yahoo.co.jp

Received: 12 December 2019; Revised: 9 January 2020; Accepted: 14 January 2020; Associate Editor: Trevor Williams.

Respirology Case Reports, 8 (2), 2020, e00524

doi: 10.1002/rcr2.524

Clinical Image

An 83-year-old woman visited our hospital complaining of right chest pain and swelling. Chest X-ray showed right pleural effusion and elevation of her right diaphragm (Fig. 1). Chest computed tomography (CT) showed right pleural effusion and a giant liver cyst with a major axis of 18 cm (Fig. 1). The cyst was compressing the right lung, inferior vena cava (IVC), and stomach. Laboratory data showed elevation of D-dimer (3.19 µg/mL), and deep venous thromboses were found by leg ultrasonography. Respiratory function tests showed severe restrictive ventilatory impairment (% vital capacity (VC): 50.8%, % forced vital capacity (FVC): 51.8%). After cyst drainage by percutaneous needle aspiration revealed thrombus in the IVC (Fig. 1), anticoagulant therapy was performed in parallel. Fluid aspirated from the cyst showed no bacteria or findings of malignancy. Following the percutaneous needle aspiration, injection of minocycline hydrochloride was performed, after which her symptoms disappeared. Respiratory function test results also improved dramatically (%VC: 99.3%, %FVC: 107.2%). A small number of patients with liver cysts present with

Key message

Most patients with liver cysts are asymptomatic and require no treatment. In this patient with symptoms and restrictive ventilatory impairment, percutaneous needle aspiration with injection of minocycline hydrochloride was effective.

symptoms [1]. Percutaneous needle aspiration with injection of a sclerosing agent can be an effective non-surgical treatment for patients with symptomatic cysts, and to our knowledge, this is the first case to show improvement of restrictive ventilatory impairment [2].

Disclosure Statement

Appropriate written informed consent was obtained for publication of this case report and accompanying images.

References

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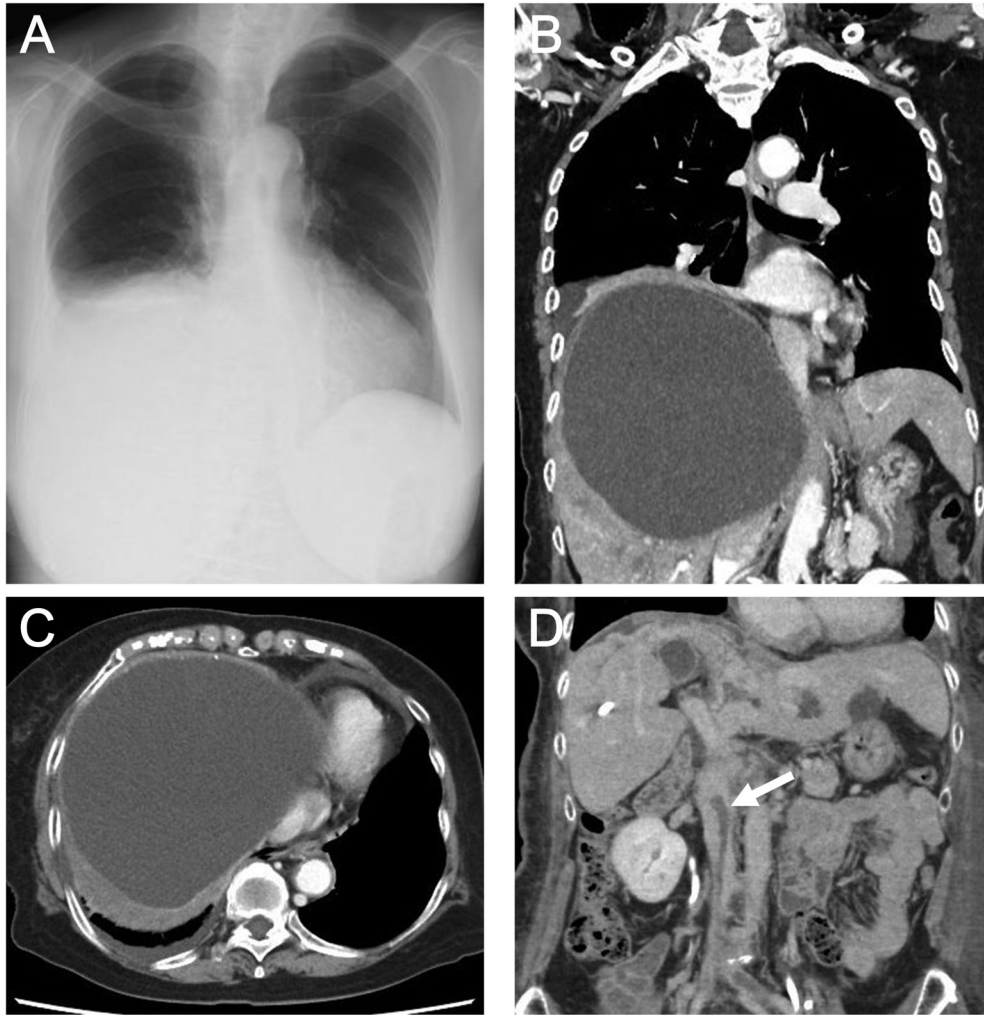


Figure 1. (A) Chest X-ray showed right pleural effusion and elevation of the right diaphragm. (B, C) Chest computed tomography (CT) showed right pleural effusion and a giant liver cyst with a major axis of 18 cm. (D) Contrast CT after drainage of the cyst by percutaneous needle aspiration revealed thrombus (arrow) in the inferior vena cava.