

CLINICAL IMAGE

Giant hepatic cyst causing lower extremity edema and scoliosis

Ichiro Hirayama¹  | Ryota Inokuchi²  | Masataka Fukue³ | Kent Doi¹

¹Department of Emergency and Critical Care Medicine, The University of Tokyo Hospital, Bunkyo-ku, Japan

²Department of Health Services Research, Faculty of Medicine, University of Tsukuba, Tsukuba, Japan

³Department of Surgery, Koga General Hospital, Koga General Hospital, Koga, Japan

Correspondence

Ryota Inokuchi, Department of Health Services Research, Faculty of Medicine, University of Tsukuba, 1-1-1 Tenno-dai, Tsukuba, Ibaraki, 305-8575, Japan.
Email: inokuchir-icu@md.tsukuba.ac.jp

Abstract

Hepatic cysts usually do not cause symptoms and may be detected incidentally on abdominal imaging. However, a giant hepatic cyst can rarely compress the inferior vena cava, right lung, and spine, leading to edema of lower extremities and scoliosis.

KEYWORDS

endoscopy, huge cyst

Question

What is this condition?

Answer

A giant hepatic cyst compresses the inferior vena cava, right lung, and spine, leading to spinal curvature toward the left.

1 | CASE PRESENTATION

We present the case of an 89-year-old man with a giant hepatic cyst that was compressing the inferior vena cava, right lung, and spine. This resulted in the curvature of the spine to the left, difficulty in ambulation, and edema of the lower extremities.

Over several years, an 89-year-old Japanese man had experienced edema of the lower extremities, recurrent abdominal pain, and difficulty in breathing and walking. The physical examination showed poor posture, reduced breath

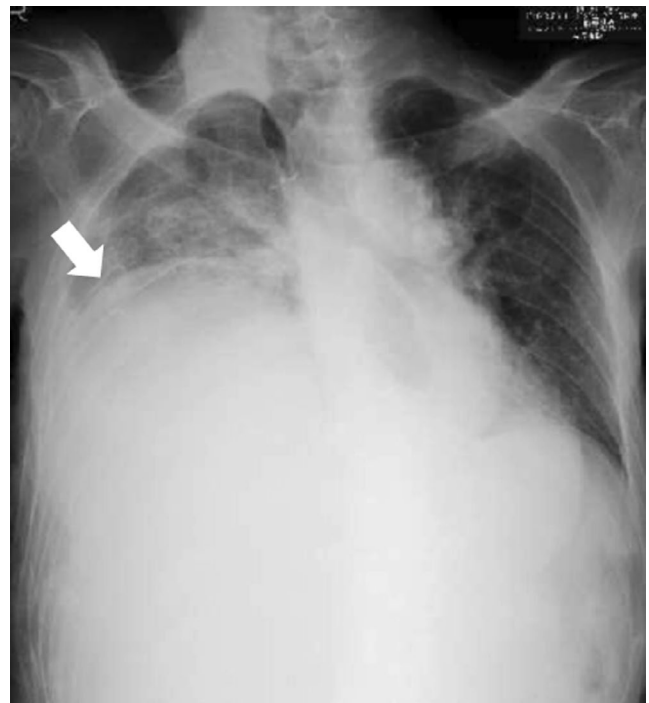


FIGURE 1 Anterior-posterior chest radiograph demonstrating elevated right hemidiaphragm compressing the right lung (arrow)

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2021 The Authors. *Clinical Case Reports* published by John Wiley & Sons Ltd.



FIGURE 2 Noncontrast computed tomography of the chest in the coronal view demonstrating a giant large hepatic cyst (arrow). The pressure exerted by the cyst resulted in the curvature of the spine toward the left

sounds in the basal right hemithorax, and an asymmetrically enlarged abdomen because of a palpable mass in the right upper quadrant that extended below the umbilicus. The chest radiograph revealed an elevated right hemidiaphragm (Figure 1). Computed tomography revealed a giant hepatic cyst (Figure 2). Resection was recommended; however, the patient declined to undergo surgery.

2 | DISCUSSION

Hepatic cysts usually do not cause symptoms and may be detected incidentally during abdominal imaging.¹ However,

they may cause pain in the right upper quadrant. When these cysts compress on the surrounding organs, symptoms including portal hypertension and jaundice may develop.² In this case, compression of the inferior vena cava caused edema of the lower extremities. The cyst also compressed the patient's right lung and resulted in the spine curving to the left. In such cases, surgical resection is usually recommended because of the challenge in accurately diagnosing the cyst as benign.

CONFLICT OF INTEREST

None declared.

AUTHOR CONTRIBUTIONS

IH and KD: contributed to patient management. IH: drafted the initial manuscript. RI: critically reviewed manuscript. All authors: contributed to writing the manuscript and provided written consent for publication.

ETHICAL APPROVAL

Written informed consent was obtained from the patient for publication of this case report and any accompanying images.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Ichiro Hirayama  <https://orcid.org/0000-0002-8811-4752>
Ryota Inokuchi  <https://orcid.org/0000-0001-6343-2298>

REFERENCES

1. Sato T, Imai M, Hayashi K, et al. Giant hepatic cyst with septal structure: diagnosis and management. *Int J Hepatol*. 2013;2013:981975.
2. Asuquo M, Nwagbara V, Agbor C, et al. Giant simple hepatic cyst: a case report and review of relevant literature. *Afr Health Sci*. 2015;15:293-298.

How to cite this article: Hirayama I, Inokuchi R, Fukue M, Doi K. Giant hepatic cyst causing lower extremity edema and scoliosis. *Clin Case Rep*. 2021;9:2483–2484. <https://doi.org/10.1002/ccr3.3951>