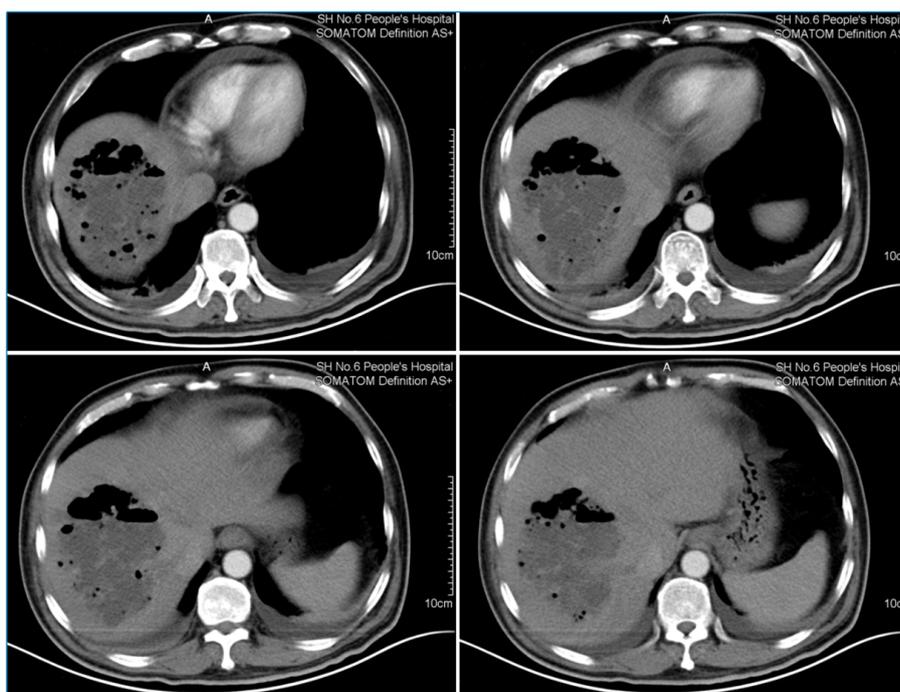


## Images in Infectious Diseases

# Gas-forming pyogenic liver abscess due to *Klebsiella pneumoniae*

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**FIGURE 1:** Contrast-enhanced CT scan of the abdomen showing a large abscess (12 cm x 11 cm x 9 cm) with gas formation in the right lobe of the liver.

A 57-year-old man with poorly controlled diabetes mellitus (DM) was admitted to our hospital with a four-day history of fever, chills, and mild right upper quadrant pain. On physical examination, mild tenderness in the right upper quadrant of the abdomen was observed. Laboratory data showed leukocytosis ( $15.3 \times 10^9/L$ ) with hyperglycemia and minor changes in liver values. A contrast-enhanced computed tomography (CT) scan of the abdomen revealed a large gas-forming abscess measuring 12 cm x 11 cm x 9 cm in the right lobe of the liver (**Figure 1**). The patient underwent CT-guided percutaneous catheter drainage and was given broad-spectrum intravenous antibiotics and insulin.

*Klebsiella pneumoniae* was cultured from both blood and pus. With a gas-forming pyogenic liver abscess (GFPLA) diagnosis, he received six weeks of antibiotic therapy and had a satisfactory response to the medical treatment without any complications.

GFPLA is an uncommon and potentially fatal disease, accounting for 5.6-31.8% of pyogenic liver abscesses<sup>1</sup>. Most patients with GFPLA have poorly controlled DM, which plays an important role in the development of GFPLA<sup>1</sup>. *K. pneumoniae* is the most common pathogen of GFPLA and is found in 85.9% of positive liver pus cultures in GFPLA patients<sup>1</sup>. *K. pneumoniae* infection in

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DM patients is the cornerstone for the development of GFPLA<sup>2</sup>. The mortality rate of GFPLA ranges from 25.7% to 37.1%<sup>1</sup>. CT findings such as globular configuration, shaggy margins, alveolar internal structure, and total gas content are significant predictors of mortality<sup>3</sup>. To manage GFPLA effectively, appropriate broad-spectrum antibiotics, good control of glucose, and early adequate drainage are compulsory<sup>1,2</sup>.

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