

# A rare view: giant liver abscess with underlying liver metastases

Leonor Vasconcelos Matos,<sup>1</sup> Patricia Moniz,<sup>2</sup> Jorge Oliveira Dantas,<sup>3</sup> Arturo Botella<sup>3</sup>

<sup>1</sup>Department of Oncology, Hospital Sao Francisco Xavier, Lisboa, Portugal

<sup>2</sup>Medicina III, Hospital São Francisco Xavier—Centro Hospitalar Lisboa Ocidental/NOVA Medical School, Faculdade de Ciências Médicas, Universidade Nova de Lisboa, Lisbon, Portugal

<sup>3</sup>Department of Internal Medicine, Hospital Sao Francisco Xavier, Lisboa, Portugal

## Correspondence to

Dr Leonor Vasconcelos Matos, [analeonormatos9@gmail.com](mailto:analeonormatos9@gmail.com)

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## DESCRIPTION

Liver abscess (LA) refers to a suppurated cavity caused by the invasion of liver parenchyma, most commonly by Gram-negative bacteria. Although rare, it is potentially life-threatening. Giant LA (>10 cm) is even more uncommon.<sup>1</sup> Symptoms and signs are non-specific and the diagnosis relies essentially on imaging with ultrasound (US) and CT scan. Treatment is based on antimicrobials, abscess drainage and approach to the underlying disease.<sup>2</sup> For pyogenic LA, prompt initiation of empirical broad-spectrum intravenous antibiotics,<sup>2</sup> usually a third-generation cephalosporin plus metronidazole, is essential with subsequent adjustment to culture and sensitivity, usually for 10–14 days, depending on clinical and radiological response. Together with CT scan or US-guided percutaneous catheter drainage (PD), it is the initial treatment of choice.<sup>1</sup> However, large LA >5 cm predicts failure of PD and the need for surgical drainage.<sup>3</sup> Malignancy and multiloculation are also risk factors for therapy failure. The

best outcome is achieved with close coordination of a multidisciplinary team and rigorous drain management protocol.<sup>1</sup> We report the case of a 74-year-old woman with pancreatic carcinoma with liver metastasis that required a biliary prosthesis. She presented with fever, abdominal pain and jaundice and was diagnosed with cholangitis, starting intravenous antibiotics, adjusted to blood cultures (*Streptococcus anginosus*, *Raoultella*

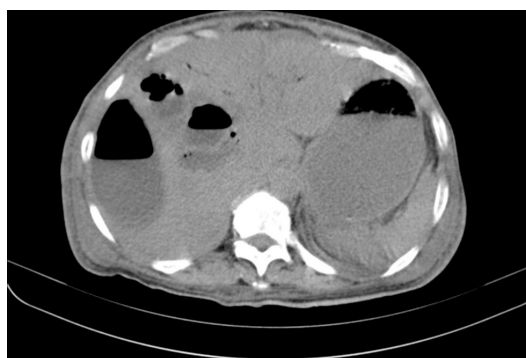


Figure 1 Thoracoabdominal CT scan, axial.



Figure 2 Thoracoabdominal CT scan, axial, with intravenous contrast, after drainage, abscess size progression, one giant.



Figure 3 Thoracoabdominal CT scan, coronal, with intravenous contrast, after drainage, abscess size progression, one giant.



Figure 4 Thoracic X-ray, posteroanterior, showing air under the right side of the diaphragm.



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*planticola* and *Enterobacter cloacae*). An endoscopic retrograde cholangiopancreatography showed occlusion of the prosthesis, then replaced. After 5 days of unresolved infection, a new CT scan revealed multiple liver metastases and abscesses (figure 1). A CT-guided percutaneous drainage was performed: *E. cloacae*, *Enterococcus faecalis* and *Candida glabrata* were isolated in the pus, and antimicrobials adjusted. After 4 days, the patient got worse, with signs of severe organ failure. CT scan revealed a giant subcapsular liver abscess, with

16 cm, and worsening of the previous abscesses (figures 2-4). The patient died 2 days later.

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## REFERENCES

- 1 Ahmed S, Chia CL, Junnarkar SP, *et al*. Percutaneous drainage for giant pyogenic liver abscess—is it safe and sufficient? *Am J Surg* 2016;211:95–101.
- 2 Lardiére-Deguelte S, Ragot E, Amroun K, *et al*. Hepatic abscess: diagnosis and management. *J Visc Surg* 2015;152:231–43.
- 3 Tan Y-M, Chung AY-F, Chow PK-H, *et al*. An appraisal of Surgical and Percutaneous Drainage for Pyogenic liver Abscesses Larger than 5 cm. *Ann Surg* 2005;241:485–90.

## Learning points

- ▶ Giant liver abscess is a very rare disease, but with up to 46% mortality.
- ▶ Prompt initiation of parenteral broad-spectrum antibiotics, early ultrasound or CT to confirm diagnosis, percutaneous drainage, tissue culture and repeated scans, if sepsis persists, are the main approaches to achieve the best optimal outcome.
- ▶ Giant size and multiloculation are predictors of failure of percutaneous drainage and need for surgical drainage.

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