IMAGES IN EMERGENCY MEDICINE

Imaging

Man with fever and abdominal pain

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1 | PATIENT PRESENTATION

An 80-year-old male with history of chronic mesenteric ischemia presented to the emergency department with fever and abdominal pain for 4 days. This pain was different from his previous mesenteric ischemia. On examination, patient was febrile and tachycardic but normotensive and in no acute distress. He had mild tenderness to palpation of epigastrium without rigidity or guarding. Murphy's sign was negative, and there was no tenderness at McBurney's point. Labs including blood cultures were obtained, and patient was given a 4.5 g of intravenous piperacillin-tazobactam. Computed tomography (CT) of the abdomen and pelvis with intravenous contrast was ordered.



FIGURE 1 This emergency department visit: Computed tomography of the abdomen and pelvis with intravenous contrast showing chronic cystic lesions within right lobe of liver



FIGURE 2 Five years prior: Positron emission tomography computed tomography of abdomen and pelvis with cystic lesions within right lobe of liver

DIAGNOSIS

2.1 | Pyogenic hepatic abscess

CT scans demonstrate different large masses in the liver. The larger cystic structures are more obvious (Figure 1); however, these cysts have been present for more than 5 years (Figure 2). New lobulated abscesses are also present (Figures 3 and 4), making the final diagnosis. Although this patient has an obvious abnormality in his liver, the secondary more subtle finding in the imaging is more acutely

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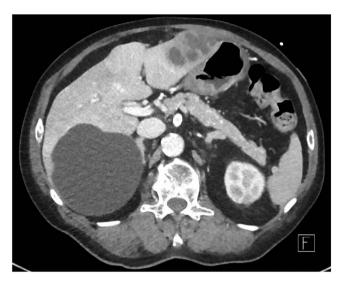


FIGURE 3 This emergency department visit: computed tomography of the abdomen and pelvis with intravenous contrast showing lobulated abscess within left lobe of liver

relevant. Timely diagnosis of patients >80 years old with abdominal pain is important as mortality nearly doubles with incorrect diagnosis at time of admission. Thus, liberal early imaging has been strongly recommended. Antibiotics to cover for gram negative bacteria known to cause liver abscesses are an important early step in management of hepatic abscesses. This patient was admitted, his abscesses were drained, and cultures grew *Klebsiella pneumoniae*. He was ultimately discharged on oral antibiotic therapy.

CONFLICT OF INTEREST

None.

DISCLAIMERS

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FIGURE 4 This emergency department visit: computed tomography of abdomen and pelvis with intravenous contrast showing lobulated abscess within left lobe of liver in coronal plane

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REFERENCES

- van Geloven AA, Biesheuvel TH, Luitse JS, et al. Hospital admissions of patients aged over 80 with acute abdominal complaints. Eur J Surg. 2000;166:866.
- Masneri DA, O'Brien MC. Chapter 71: Acute Abdominal Pain. In: Tintinalli's Emergency Medicine: A Comprehensive Study Guide. New York: McGraw-Hill Education; 2020.
- Liu L, Chen W, Lu X, Zhang K, Zhu C. Pyogenic liver abscess: a retrospective study of 105 cases in an emergency department from East China. J Emerg Med. 2017;52(4):409-416.

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