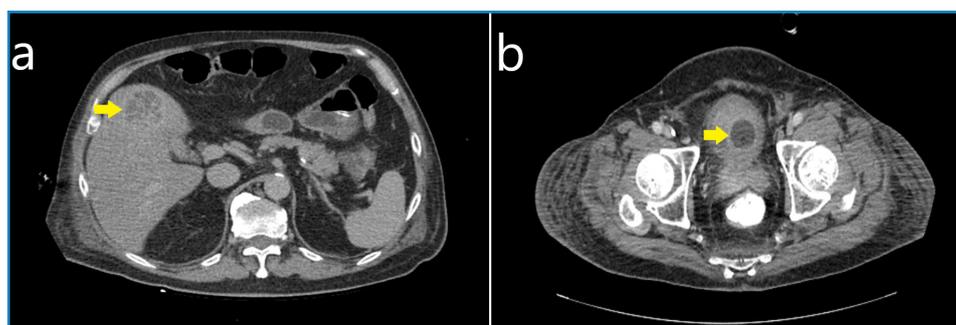


## Images in Infectious Diseases

# *Klebsiella pneumoniae*-induced liver and prostate abscesses

Chee Yik Chang<sup>[1]</sup> 

[1]. Medical Department, Hospital Sungai Buloh, Selangor, Malaysia.



**FIGURE 1:** A CT scan of the abdomen and pelvis showing (a) a liver abscess in segment V measuring 3.9 x 3.6 x 2.9 cm and (b) a prostate abscess measuring 3.5 x 3.2 x 3.7 cm.

A 72-year-old man with diabetes mellitus presented with a 2-day history of fever, lethargy, and shortness of breath. Upon admission, the patient was in a septic shock with severe respiratory distress, which required the administration of inotropic agents and mechanical ventilation. An urgent computed tomography (CT) scan of the abdomen and pelvis revealed a liver abscess in segment V and a prostate abscess (Figure 1). No physical examination findings indicated meningitis or endophthalmitis. He was administered an empirical antibiotic (intravenous piperacillin-tazobactam). Blood cultures revealed *Klebsiella pneumoniae*, which was susceptible to ampicillin-sulbactam. Consequently, we switched to ampicillin-sulbactam. However, the patient's clinical condition deteriorated, and he developed severe thrombocytopenia due to sepsis, which precluded surgical drainage. A 1-week follow-up scan revealed that the size of the liver and prostate abscesses had reduced slightly. Unfortunately, the patient passed away 3 weeks later because of a nosocomial infection.

Compared with classic *K. pneumoniae* strains, hypervirulent strains of *Klebsiella pneumoniae* are more likely to cause severe disseminated infections such as community-acquired infections, including liver

abscesses, pneumonia, meningitis, and endophthalmitis<sup>1</sup>. Prostate abscess is a rare complication of *K. pneumoniae* infection; however, in Taiwan, *K. pneumoniae* is the most common pathogen associated with prostate abscess, especially in patients with diabetes<sup>2</sup>. The optimal management of *K. pneumoniae*-induced liver and prostate abscesses includes confirming via imaging, administering appropriate antimicrobial therapy, and ensuring adequate drainage<sup>3</sup>.

### ACKNOWLEDGEMENTS

None.

### REFERENCES

1. Chang CY, Ong ELC. Positive string test in hypervirulent *Klebsiella pneumoniae* liver abscess. *Oxf Med Case Reports*. 2022;2022(4):omac035.
2. Liu KH, Lee HC, Chuang YC, Tu CA, Chang K, Lee NY, et al. Prostatic abscess in southern Taiwan: another invasive infection caused predominantly by *Klebsiella pneumoniae*. *J Microbiol Immunol Infect*. 2003;36(1):31-6.
3. Jun JB. *Klebsiella pneumoniae* Liver Abscess. *Infect Chemother*. 2018;50(3):210-18.

**Corresponding author:** Dr. Chee Yik Chang. **e-mail:** ccyik28@gmail.com

**Authors' contribution:** CYC: Conception and design of the study, acquisition of data, drafting the article, final approval of the version to be submitted.

**Conflict of Interest:** The author declares that there is no conflict of interest.

**Financial Support:** None.

**Received** 31 May 2023 • **Accepted** 14 June 2023