

## Liver abscess with metastatic brain abscess

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**Background:** *Klebsiella pneumoniae* is an important gram-negative opportunistic pathogen that causes a variety of infectious diseases, including urinary tract infection, bacteremia, pneumonia, and liver abscess. *Klebsiella pneumoniae* invasive syndrome (KPIS) is a rare clinical condition characterized by primary liver abscess associated with metastatic infection. We report a case of liver abscess and metastatic brain abscess.

**Case Presentation:** A 61-year-old male presented with fever and epigastric discomfort for a week. He had a past history of hypertension and hyperlipidemia. On physical examination, there was epigastric tenderness. Laboratory examination showed White Blood Cell 13,500/uL, C-reactive protein 24.74 mg/dL, total bilirubin 1.93mg/dL, and direct bilirubin 0.67mg/dL. Biliary Pancreas Dynamic CT showed about 8.5 x 6.5 x 5.5 cm multi-septated hypodense mass in left dome of the liver(S2/3) (Fig 1). We administered intravenous antibiotics with ceftizoxime and metronidazole and inserted percutaneous catheter for drainage of liver abscess. After 4 days, abscess culture yielded *Klebsiella pneumoniae*, ESBL (-), and we discontinued metronidazole. On hospital day 19, we checked fistulography and removed percutaneous catheter. On the day, he presented with right side numbness that developed 1 week ago. Brain MRI revealed two small hyperintense lesion with perilesional edema in right basal ganglia and left thalamus (Fig 2). These findings suggested brain abscess. As the lesion was small and the patient had suspected source of infection, we suspended draining it and only administered intravenous ceftriaxone 2g every 12 hours. He successfully recovered and was discharged on hospital day 53. Although lumbar puncture should be performed in patients with suspected bacterial meningitis, it is contraindicated in the focal symptoms or signs (eg, unilateral headache or numbness) so we reserved the test.

**Conclusion:** Although metastatic brain abscess is a rare case, physician should pay attention to any neurologic signs or symptoms and promptly perform diagnostic imaging if suspected.



Figure 1. Biliary Pancreas Dynamic CT showed about 8.5 x 6.5 x 5.5 cm multi-septated hypodense mass in left dome of the liver(S2/3).

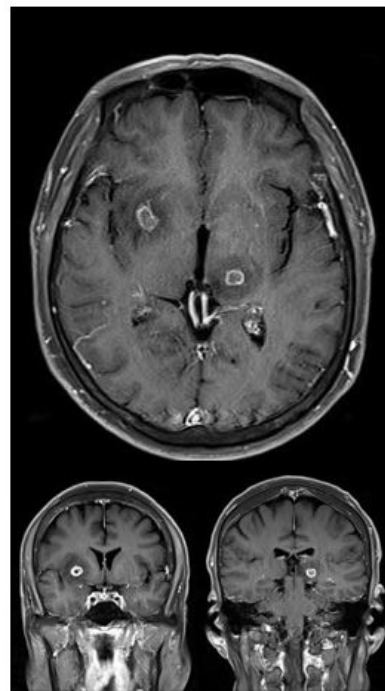


Figure 2. Brain MRI showed two small hyperintense lesion with perilesional edema in right basal ganglia and left thalamus.