

中文題目：克雷白氏肺炎及肺炎鏈球菌肺炎引起之急性呼吸衰竭：一病例報告

英文題目：Acute Respiratory Failure Due to Klebsiella Pneumoniae with Pneumococcal Pneumonia: A Case Report

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**Background:** *Klebsiella pneumoniae* is an important pathogen, increasingly notorious for its ability to become resistant to antimicrobial agent. We report acute respiratory failure due to *klebsiella pneumoniae* with pneumococcal pneumonia in a diabetic and cirrhotic patient.

**Case Report:** A 74-year-old male of idiopathic thrombocytopenic purpura related thrombocytopenia, old cerebrovascular accident, diabetes and old tuberculosis suffered from generalized weakness and ecchymosis for days. He was brought to emergency department on April 28, 2016. Laboratory data revealed WBC, 11,100 /  $\mu$ L with 1.9% bandemia; platelet count, 29,000 /  $\mu$ L; c-reactive protein, 302 mg/L and creatinine, 1.13 mg/dL. CXR showed suspect pneumonia in bilateral lower lungs. Abdominal echography showed small right renal stone and adenomyomatosis of gallbladder. He was admitted to ward. Empiric antibiotic treatment with piperacillin-tazobactam was given. Disturbance consciousness was found. CXR showed mixed alveolar and interstitial infiltration over bilateral lung, favoring pneumonia. ABG showed CO<sub>2</sub> retention. Intubation was performed. Then he was transferred to intensive care unit on May 1. Fluid resuscitation and vasopressor agent were given for hypotension. Sputum culture yielded *klebsiella pneumoniae*. Positive of pneumococcal urinary antigen test was found. We shifted antibiotics with imipenem and levofloxacin. CXR showed right low lobe consolidation and left lower lobe air-space disease with faint hazy infiltration. Bronchoscopy was also done bedside showed no vocal cord palsy and whitish clear secretion on May 5. Extubation was performed. He was transferred to the ward. Kept imipenem was given for over two weeks. The respiratory pattern was smooth since then without obvious distress. Due to general condition improvement, he was discharged on May 13.

**Conclusion:** *Klebsiella pneumoniae* is a common Gram-negative pathogen that could cause pneumonia, bacteremia, urinary tract infection, meningitis, intra-abdominal infections, and pyogenic liver abscess *klebsiella pneumoniae* is an uncommon cause of community-acquired pneumonia except in alcoholics. *Klebsiella* is best treated with third- and fourth-generation cephalosporins, quinolones, or carbapenems. Early and accurate microbiological identification and susceptibility evaluation are crucial in order to optimize antibiotic therapy. The diagnosis of severe pneumococcal

infections is inadequate, relying heavily on culture of *Streptococcus pneumoniae* from blood or other normally sterile fluids, and is severely limited by prior administration of antibiotics. Antigen was still detectable in 83% on treatment day 3. Detection of urinary antigen is a valuable, sensitive, and rapid test for the early diagnosis of bacteremic pneumococcal infections in adult patients, even after antibiotic treatment has commenced.