A 46-year-old Man with Acute Fever and Shortness of Breath

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Right lobar pneumonia caused by Streptococcus pneumoniae

Pneumonia is one of the most common community-acquired infections worldwide.1 It is associated with significant morbidity, mortality and health care utilization. The etiologies of community-acquired pneumonia (CAP) and their frequencies also vary. Anyhow, Streptococcus pneumoniae is still one of the most common identified pathogens. In Thailand, it is identified as a pathogen in 7.9-17% of bacteremic pneumonia.2 Patients with pneumococcal pneumonia frequently present with acute onset symptoms of fever, productive cough, dyspnea and pleuritic chest pain.3 Chest radiographs may show lobar or patchy infiltrates (Figure 1). Sputum Gram stain typically reveals numerous lancet-shaped gram-positive diplococci with capsule (Figure 2). There are many guidelines address the management of CAP.4-6 Treatment of pneumococcal pneumonia should be given promptly and many patients need admission in the hospital and/or ICU. Selection of initial empirical antibiotic therapy is based on region, severity of CAP and susceptibility pattern of common pathogens. Currently, there is increasing antibiotic resistance of S. pneumoniae especially to penicillins and macrolides worldwide. In severe CAP, third generation cephalosporins such as ceftriaxone or ceftotaxime is recommended. Macrolides or fluoroquinolones may be added to cover atypical
pathogens. The duration of antibiotic therapy is between 5-14 days depending on clinical response.

References