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COMPLICATED PNEUMOCOCCAL PNEUMONIA: FROM PLEURAL EFFUSION TO THORACOTOMY

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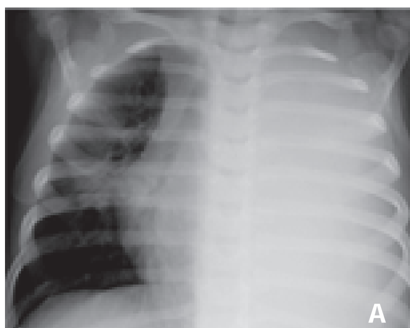

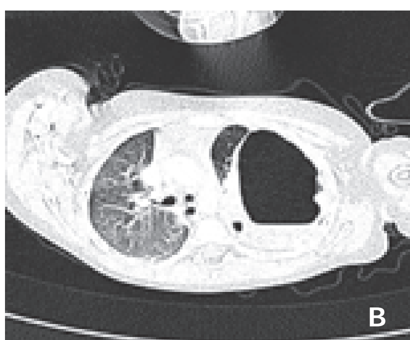

We present the case of a 2 year old girl with left sided pneumonia and a number of complications (pleural effusion, pyothorax, pneumothorax, pneumatocele). The girl was ill for 10 days with symptoms of upper respiratory tract infection. Three days prior to admission the cough became more intense, breathing shallow and rapid. On the day of admission the girl's general condition was disturbed, she was tachydispnoic and was using auxiliary respiratory muscles. Auscultation over the entire left lung was weakened and late inspiratory rales were audible. Lung X-ray (Panel A) showed the shadow of the entire left hemithorax with a large pleural effusion (pleural TO), and displacement of the heart, mediastinum and trachea to the right. The highlights of initial laboratory findings were elevated WBC with significant neutrophilia and CRP of 255 mg/l. Thoracic drainage was performed and an active suction set was placed. Drainage obtained 150 ml of purulent secretion. Microbiological analysis isolated *Streptococcus pneumoniae* and a drug susceptibility test showed that the isolate was sensitive to penicillin. We started intravenous treatment with ceftriaxone (1x1 g), and later we introduced azithromycin (1x120 mg) with vancomycin (3x180 mg). Clinically there was gradual improvement and on the 12th day the thoracic chest tube was removed. Four days later clinical deterioration occured and MSCT of lungs (Panel B) showed development of pyopneumothorax with formation of septa, tension pneumothorax with bronchopleural fistula and presence of 3 cm abcess in the lower lung lobe. Chest drainage was re-established. Given that conservative treatment did not lead to clinical and radiological improvement, a surgical procedure was performed – thoracotomy with adhesiolysis and decortication of the lower lobe and the lower third of the upper lobe of the lung with closure of the bronchopleural fistula. The postoperative course passed normally and total hospital treatment lasted eight weeks.

Key words: Pneumococcal pneumonia ▪ Pleural effusion ▪ Decortication

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