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## Decortication in children with empyema

**Introduction:** this study evaluates surgery and decortication in children with empyema following pneumonia.

**Method:** this descriptive study was performed in 1370-1380 in Imam Reza hospital. 31 patients with empyema following pneumonia admitted and treated in pediatric and surgical wards. Various methods of treatment and related factors evaluated. These methods include antibiotic therapy, thoracocentesis, chest tube insertion, open surgery with decortication. Patient response evaluated with improvement in general condition and clinically. Pleural thickening in CT per se don't need additional treatment. Fibrinolytic drugs such as streptokinase and urokinase didn't used.

**Findings:** the patients divided in two groups. Group 1 includes 23 patients and had response to antibiotics and chest tube drainage of pleural cavity. Group 2 includes 8 patients that need to decortication. 3 patients undergo pneumonectomy due to lung abscess. Delay in pleural cavity drainage with chest tube in group 2 was 18 days and in group 1 was 5/4 days. All patients in group 2 had response to surgery.

**Conclusions:** Empyema following pneumonia in pediatrics response to early antibiotic therapy and pleural cavity drainage and seldom need to surgery. Deciding to surgery and decortication based on clinical especially infectious findings and pleural thickening in CT scan per se doesn't need surgery. **Key words:** Empyema, pneumonia, decortication, chest tube.