

## **NECROTIZING PNEUMONIA AND ITS COMPLICATIONS IN CHILDREN: A REPORT OF 32 CASES**

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Necrotizing pneumonia (NP) is a severe complication of community acquired pneumonia with increasing incidence reported in the last decades. The study presents etiology, clinical features, treatment strategies and prognosis of 32 children with NP.

### Methods

Children with NP aged between 1 month to 18 years, treated between April, 2008 and July 2013 were included in the study. Cases of NP were selected from prospectively collected electronic database of patients with pneumonia running since 2003.

### Results

Necrotizing pneumonia was diagnosed in 32 children, median age 4 years. There were no children with primary or secondary immunodeficiencies. Patients had significantly elevated acute phase reactants. Anemia and thrombocytosis were a common findings. In 12/32 children (37.5%) the causative pathogens were identified. *Streptococcus pneumoniae* was the predominant microorganism (6/32). The median duration of antibiotic treatment was 28 days (IQR 22.5 – 32.5). All but one patient had NP associated complications with parapneumonic effusion/empyema being the most common, followed by bronchopleural fistula (BPF). All of these patients required additional local treatment. The duration of hospital stay ranged between 13 to 44 days (median 26). No deaths occurred in the study group. All patients had complete clinical and radiological resolution within 6 months.

### Conclusions

Necrotizing pneumonia affects mainly immunocompetent children with no underlying disorders and the most common causative organism is *Streptococcus pneumoniae*. The clinical course of NP is usually complicated by parapneumonic effusion/empyema and/or BPF and pneumothorax. Necrotizing pneumonia can be successfully treated with antibiotics and pleural drainage.