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## An Uncommon Complication of Pneumonia: Necrotizing Pneumonia

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Necrotizing Pneumonia (NP), first reported in 1994 in adults, is a severe complication of pneumonia. Its pathogenesis lies between abscess and necrosis within the infected lung tissue. Progression to a NP may occur from either virulence of the microorganism or predisposing factors of the host, or both. The diagnosis is made by chest imaging studies showing one or more small thin-walled cavities within areas of pulmonary consolidation. Pathological examinations from autopsies or resected lung specimens reveal pulmonary inflammation, alveolar consolidation and thrombosis of intrapulmonary vessels with accompanying necrosis and multiple small cavities (Masters et al, Pneumonia, 2017). Here we represent a case report of a NP. A 2 years old male child previously diagnosed with Sturge-Weber Syndrome was presented 3-day history of with fever and cough, and worsening in the symptoms accompanied with confusion and dyspnea, to the emergency department. His chest x-ray showed opacities on the left middle and lower lung. The white blood cell count was 7,640/mcL (65% neutrophils, 22% lymphocytes, and 7% monocytes), hemoglobin was 9.2 g/dL, hematocrit was 32%, and platelets were 114 000/mcL. CRP was 290mg/L. Creatinine was 1.40mg/dL, BUN was 39. Liver enzymes were normal. In blood gas analysis pH:7.19, pCO<sub>2</sub>: 51, pO<sub>2</sub>: 30.7. He was admitted to paediatric intensive care unit and clarithromycin and sulbactam-ampicilline was administered empirically in addition to high flow oxygen. Respiratory virus panel was negative. Cultures did not able to detect any microorganism. He was transferred to paediatric inpatient clinic on the 7<sup>th</sup> day of the treatment due to improvement in his symptoms. On the 12<sup>th</sup> day, he had fever and CRP was elevated to 54mg/L. His chest x-ray revealed minimal pleural effusion and atelectasis on the left side. Chest CT scan showed multiple thin-walled cavities and bilateral pneumonic consolidations compatible with NP. The patient's therapy was switched to ceftriaxone and teicoplanin. His fever reduced on the first day. On the 7<sup>th</sup> day of treatment, recovery was recorded on the chest x-ray. He was discharged with oral antibiotics on the 14<sup>th</sup> day of the second antibiotic regiment. NP, as a rare disease seen mostly in immunocompetent patients, should be considered in prolonged or complicated pneumonia cases.

**Keywords:** Immunocompetent patients, necrotizing pneumonia, paediatric infections