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Pneumococcal Hemolytic Uremic Syndrome

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We report Hemolytic Uremic Syndrome (HUS) induced by Streptococcus pneumoniae in a 20-month-old girl. She responded well to hemodialysis.

Key words: *Hemolytic Uremic Syndrome, Streptococcus pneumoniae.*

Hemolytic Uremic Syndrome, induced by *Streptococcus pneumococcus* is rare(1) . We report a 20-month-old girl who presented with pneumonia and subsequently developed (HUS). This patient presented with history of high fever, cough and breathlessness for 5 days. She had temperature of 39.7ºC, pulse rate 200/minute and respiratory rate of 64/min. Her oxygen saturation in air was 93% and capillary refill time was less than 2 seconds. The respiratory system showed signs of right lower lobe pneumonia with pleural effusion, which was confirmed on chest *X*-ray.

Blood investigations showed a hemoglobin level of 8.8 g/dL, white cell count 20000/cu mm with polymorphs of 90% and lymphocytes of 10%, platelet count 210000/cumm and C-reactive protein 206 mg/L. Serum electrolytes and urea were normal. She was treated with intravenous coamoxiclav.

The patient showed sudden pallor 3 days after admission. Her hemoglobin level had reduced to 4.5 g/dL, platelets to 60000/cu mm while the white cell count remained unchanged. The urine output was 0.6 mL/kg/hour and blood pressure was elevated at 154/74 mm of Hg. The blood urea was 72 mg/dL, creatinine 2.5 mg/dL, prothrombin time 13.9 seconds (control 12.6 seconds), activated partial thromboplastin time 40 seconds (control 33 seconds) and INR 1.1. The peripheral smear showed schistocytes (fragmented red cells) and thrombocytopenia. Blood culture grew colonies of *Streptococcus pneumoniae*. Direct Coomb's test and peanut agglutinin tests were negative. Serum LDH level was normal at 150 U/L. Ultrasound showed both kidneys to be slightly hyperechoic, suggestive of medical renal disease.

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The patient was managed with hemodialysis and discharged after 20 days, with normal renal functions. She remains healthy and well with normal growth and blood pressure on follow up.

Discussion

Severe pneumococcal infections have been associated with HUS, usually with a poor clinical outcome when compared with *Escherichia coli* gastroenteritis associated HUS(1). Association with *S. pneumoniae* is defined by culture of pneumococcus from a normally sterile site within a week before or after the onset of HUS. Clues to a pneumococcal cause, in addition to cultures, may include severe clinical disease, especially pneumonia, empyema, pleural effusion and meningitis; hemolytic anemia without a reticulocyte response; positive direct Coomb's test; and difficulties in ABO cross-matching or a positive minor cross-match(2). Plasmapheresis or administration of fresh frozen plasma may exacerbate HUS caused by *S. pneumoniae* and should be avoided(3).

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Two Children with Invasive Gastrointestinal Aspergillosis

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We report two immunocompromised infants aged six and four months with invasive gastrointestinal aspergillosis. Both patients presented with weight loss and diarrhea. The underlying disorders were combined immunodeficiency and transient hypogammaglobulinemia of infancy. The diagnosis of gastrointestinal aspergillosis was established by gastrointestinal endoscopy and histopathological examination of the tissue specimens. Both children responded well to Amphotericin B.

Key words: *Aspergillosis, immunodeficiency syndromes, gastrointestinal tract.*

Invasive aspergillosis is a life-threatening fungal infection that commonly affects immunocompromised patients. Respiratory tract is usually the main portal of entry and site of infection. But, involvement of gastrointestinal tract is rare(1). We report two infants with histopathologically proven invasive gastro-intestinal aspergillosis infection.

Case 1

A six-month-old male infant presented with weight loss and diarrhea for three months. Parents were third-degree relatives (cousins) and their two

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