Empyema Following Kerosene Poisoning

Accidental kerosene poisoning continues to be a common childhood menace in India(1). The major toxicity of kerosene oil is its potential to cause pneumonitis when aspirated(2). Empyema following kerosene poisoning is very rare, only few cases have been reported(3) and none from India.

A two year old male child presented to pediatric emergency ward with history of accidental consumption of kerosene oil. There was history of breathlessness, vomiting and altered sensorium. No history of fever, convulsions and pain abdomen. On examination child was drowsy and tachypneic. There was frothy sputum and kerosene smell from mouth. Respiratory system examination revealed occasional crepitations on right side of the chest. Other systems were within normal limits. Chest X-ray was taken at 2 hours of presentation, showed bilateral basal pneumonitis. Child was given supportive therapy, but fever and tachypnea persisted and a repeat chest X-ray on day five revealed left sided pleural effusion. Diagnostic pleural tap was done which showed pus, then ICD insertion was done under local anesthesia. Around 450 mL of pus was drained. ICD was kept for 5 days. Microscopy of pleural fluid showed plenty of pus cells but Gram Stain and culture

did not yield any organism. Child improved with ICD and antibiotics therapy without any sequale.

An earlier study noticed empyema following kerosene poisoning and attributed it to aspiration of oral micro-organisms and to impairment of pulmonary defence mechanism(3). Similar mechanism was also explained in other studies(4,5).

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