Case Report

Life Threatening Bilateral Tension Pneumothorax Complicating Artificial Ventilation in an Infant with Severe RSV Bronchiolitis

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Abstract

Acute bronchiolitis is a common cause for childhood hospitalisation and respiratory syncytial virus (RSV) is the most important cause of bronchiolitis during infancy. We report a case of life threatening bilateral tension pneumothorax complicating bronchiolitis in an infant. A 2-month-old infant girl suffered from respiratory failure due to severe RSV bronchiolitis. While on hand ventilation (hand bagging) through endotracheal tube in the Accident & Emergency Department, she developed cyanosis and bradycardia because of bilateral tension pneumothorax. She responded to cardiopulmonary resuscitation and tube thoracostomy. She was supported by mechanical ventilation with the strategy of permissive hypercapnia in paediatric intensive care unit (PICU). Her condition improved uneventfully and she recovered without long-term adverse sequelae.

Keyword: Bronchiolitis; Permissive hypercapnia; Respiratory syncytial virus; RSV; Tension pneumothorax