Iatrogenic Thoracic Subcutaneous Emphysema, Pneumothorax, Pneumomediastinum and Pneumoperitoneum in a Preterm Baby Following a Difficult Intubation

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Clinical Image
Iatrogenic tracheobronchial perforation is a rare complication of endotracheal intubation in neonates and carries a mortality rate of 70% [1]. Baby Swas born at 27+5 week’s gestation weighing 838 g. Elective intubation was performed at 30 hours of age due to respiratory distress. The procedure was successful after 7 attempts, following which, crepitus was palpable in the neck and chest wall and a right-sided pneumothorax (Figure 1) was identified. 100mls of air were aspirated via needle thoracocentesis and a chest drain inserted. A Penrose drain was inserted in view of a pneumoperitoneum. 80mls of air were aspirated subcutaneously from the thoracic emphysema. He was successfully extubated at 8 days of age and discharged home self-ventilating and on full enteral feeds. Conservative management of tracheal injury involves passing an endotracheal tube beyond the perforation, mechanical ventilation for 7-10 days using low ventilatory pressures or high-frequency oscillation, drainage of the accumulated air and adequate sedation [1, 2].

References