

CASE REPORT : MANAGING AN EXTENSIVE OPEN PNEUMOTHORAX IN DISTRICT HOSPITAL

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INTRODUCTION

Open pneumothorax is known as life-threatening and fatal condition. Managing extensive open pneumothorax commonly require thoracic team involvement. An early resuscitation and damage control surgery by general surgeon in district hospital is a life saving and produced a good outcome.

CASE REPORT

Herein, we report a case of a 17-year-old, boy, alleged motorbike skidded, sustained an open pneumothorax with extensive thoracic injury. He was brought to ED by ambulance, during transfer he was supported with high flow oxygen mask (HFMO₂) and 3 sided occlusive dressing was applied as initial pre-hospital care. Upon arrival, he was tachypnoeic (RR 26), tachycardic (HR114) and hypoxic (SpO₂ 92%). Breath sound reduced over right side. On examination, there was right chest wall extensive wound, measuring 20cm x 20cm with multiple ribs loss, extensive skin, subcutaneous tissue and anterior chest wall muscles losses exposing the right pleural cavity and lung parenchyma with intact mediastinum. Patient was intubated and right chest tube inserted. CT showed right anterior chest wall opening exposing right pleural cavity and right lung complicated with right lung laceration, right hydropneumothorax, pneumomediastinum and dislocation of right anterior 1st to 5th ribs. Emergency wound exploration, debridement, toilet and suturing of anterior chest wall was done as damage control surgery. Post operatively patient was admitted to ICU and done early tracheostomy after consulting thoracic team. Wound was complicated with abscess and underwent second wound debridement and drainage. Patient was successfully wean off from mechanical ventilation and transferred to HDU for continuation of care.

DISCUSSION AND CONCLUSION

Open pneumothorax with extensive thoracic injury is rare in district hospital but its management requires rapid resuscitation with simultaneously insertion of chest tube and tracheal intubation and subsequently wound closure in operating room.