

**OP22 WHY CAN'T I BREATHE? – A
CASE OF TRACHEOBRONCHIAL
INJURY**

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Introduction

In 2018, The Advanced Trauma Life Support (ATLS) was updated to emphasize the detection of tracheobronchial tree injuries during primary survey as a life-threatening injury. A high index of suspicion is needed for diagnosis as these injuries are uncommon, but associated with high mortality rates.

Case Description

We present a case of a 29-year-old gentleman who had a high impact motorcycle collision with a lorry. He exhibited respiratory distress with right-sided clinical flail segment and extensive subcutaneous emphysema over the right neck and chest wall. Breath sounds were markedly reduced over the right lung, and he was hypotensive. eFAST was difficult due to presence of air artifacts. Immediately right finger thoracostomy was done due to suspicion of tension pneumothorax. Gush of air was noted upon entering the pleural cavity and the lung was down. Subsequently, chest tube was inserted, and continuous bubbling was noted in the chest drain. A provisional diagnosis of tracheobronchial tree injury was made and urgent Whole Body CT request and referral to Thoracic Team were done. CT imaging demonstrated a defect in the anterior portion of the right main bronchus, near to the carina, resulting in severe pneumomediastinum, pneumopericardium

and bilateral pneumothoraces. A large right anterior chest wall flail segment was also reported, associated with segmental 1st to 5th rib fractures, lung contusions, and extensive subcutaneous emphysema. Patient was brought to operating theatre for right thoracotomy and right mainstem bronchoplasty. He was discharged well after 10 days.

Discussion

Tracheobronchial tree injuries usually occur following rapid decelerating force to the chest wall. Clinical features are non-specific thus clinical experience plays a vital role for early detection. Although gold standard to confirm diagnosis is bronchoscopy, CT imaging may suffice to delineate the extent of the injuries as well as to provide pre-operative diagnosis for the surgical team.

Conclusion

Rapid assessment, high index of suspicion, life-saving ED intervention, early diagnostic imaging and surgical intervention of patients with tracheobronchial injuries are crucial to improve patient outcome.

Keywords: tracheobronchial, flail, emphysema