



OH NO! I CANNOT SPEAK! A CASE REPORT OF TRAUMATIC LARYNGEAL INJURY

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INTRODUCTION

Laryngeal trauma is a rare but potentially deadly injury. We report a case of blunt traumatic laryngeal injury that was presented at our center.

CASE DESCRIPTION

A 20-year-old Malay gentleman was involved in a motor vehicle accident while seated in the passenger seat without a seatbelt. During the collision, the airbag deployed and struck his neck. Following the trauma, he reported neck pain. Post trauma, he exhibited stridor, with an oxygen saturation of 88%, was unable to speak, and had crepitus over the anterior neck extending to the chest. Bruises were also noted over the suprasternal notch and left anterior chest.

He was urgently transferred to our center, where he was intubated using a direct laryngoscope for airway protection by the anesthesiologist team. The Otorhinolaryngology (ORL) team was consulted, and a CT scan of the neck revealed a fracture of the right cricoid cartilage. Direct laryngoscopy and tracheoscopy identified a Schaefer-Fuhrman Grade III laryngeal injury under general anesthesia. A surgical tracheostomy was performed, and he was discharged home on the 19th day of his admission.



Figure 1: Bruises seen at suprasternal notch and left anterior chest

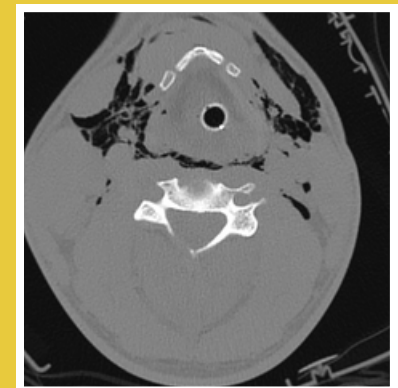


Figure 2: CT scan shows extensive air locules at paratracheal and bilateral parapharyngeal spaces that can be palpated externally as crepitus.

DISCUSSION

Laryngeal fracture is not a common injury, especially in blunt trauma due to the flexibility of the larynx and protected by the mandible and sternum¹. Usually, it will present with symptoms of stridor, hoarseness of voice, difficulty breathing, hemoptysis or dysphagia. Local examinations will elicit neck bruises, crepitus, emphysema or pain². The more sinister its presentation, the more severe the suspected laryngeal injury that may lead to impending airway collapse. Thus, securing the airway is the initial step in managing laryngeal injury^{3,4} either by intubation or tracheostomy, followed by other investigations. Depending on the severity of the laryngeal injury based on Schaefer-Fuhrman grading, such patients may require either conservative or intrusive management. Schaefer suggests that Groups I and II should be handled conservatively, while Groups III and IV should be addressed surgically⁵. Luckily, in this case, the patient was able to be intubated by the anesthesiologist team. The intubation should be done carefully, either by using video-assisted equipment or skilled personnel to avoid further aggravation of the injury or cause further obstruction.²

If there is a displaced fracture on imaging or disruption of the internal laryngeal structures this should be repaired within 48 hours post trauma. Early recognition and treatment, typically within 48 hours of the onset of injury, leads to improved outcomes in voice, swallowing, and airway. Later on, laryngeal treatment with speech therapy sessions is also considered important to help improve long-term vocalization and deglutition.⁴

CONCLUSION

Blunt traumatic laryngeal injury may present with aphonia. Prompt diagnosis and management are crucial in preventing long-term complications.

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