Death in the Trauma Bay: Management of the Unanticipated Difficult Airway

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Intro
The unanticipated difficult airway is a challenge for all anesthesiologists. Morbidity and mortality increases with each failed intubation attempt and associated airway trauma may make subsequent attempts more technically difficult. Further, approaching the difficult airway in a foreign setting like the trauma bay introduces an additional challenge.

Case Description
A 90-year old male presented to the ED as a transfer from an outside hospital after being struck by a car several hours earlier. On arrival he was hemodynamically stable and phoning well with minimal complaints aside from mild sore throat. Report from the transferring EMTs included a C6 endplate fracture and there was no obvious deformity or bruising noted on initial exam.

As the head of the bed was lowered to facilitate the secondary survey the patient suddenly became unresponsive and cyanotic. Initial intubation attempts by ED provider with the video laryngoscope were unsuccessful and the patient rapidly became hypotensive requiring initiation of ACLS. Subsequent intubation and ventilation attempts by the anesthesiologist were equally unsuccessful necessitating an emergent cricothyrotomy.

ROSC was complicated by hemorrhage from the oropharynx and after approximately one hour of resuscitation the patient's family decided to withdraw care.

Discussion
This case highlights several pertinent topics regarding the unanticipated difficult airway in the emergency room. Retropharyngeal hematoma is a rare diagnosis that may complicate traumatic cervical spinal fractures. It may be more common in the elderly due to increased use of anticoagulants. Asphyxia caused by these lesions can occur in any age and can present suddenly.

Airway management in the ED involves a complex interaction between ED physicians and anesthesiologists. While ED providers are often skilled in advanced airway procedures, management of the complex airway may require the unique expertise of an anesthesiologist or surgeon. It is important to make this distinction early in the course of securing the airway as the initial attempt is often the least traumatic and most successful.