Airway Management: Penetrating Neck Injuries

RLH TRAUMA INSIGHTS no.1

November 2024 Francois Taljard & Georgina Margiotta

Case overview:

A patient arrived at the Emergency Department with a self-inflicted penetrating neck injury. Initially, the patient presented with a hoarse voice, prompting an urgent CT scan to assess the extent of the injury. The imaging revealed an expanding neck haematoma compromising the airway.

What were the learning points?

As the patient's dyspnoea worsened, it became clear that urgent airway intervention was necessary. Significant anatomical distortion due to the haematoma made laryngoscopy and endotracheal intubation particularly challenging.

Key insights:

- Early recognition of airway compromise is crucial in managing penetrating neck injuries.
- Even if the airway is not immediately threatened, consider the potential for progression to a compromised state.
- Anatomical distortion can complicate airway management, necessitating advanced techniques and preparedness for difficult intubation.
- Early involvement of experienced and senior practitioners, including anaesthesia, critical care and trauma surgery, is essential.
- Prioritise time-critical interventions to ensure the best possible outcome.

Recognise

FEATURES SUGGESTIVE OF A THREATENED AIRWAY

Symptoms:

Hoarse voice Dyspnoea Odynophagia Dysphagia Inability to lie flat

Signs:

Stridor Respiratory distress Ecchymosis of the neck Surgical emphysema Tracheal deviation Haemoptysis/haematemesis Rapidly expanding neck haematoma Bubbling/sucking neck wounds

Escalate CRUCIAL TO INFORM

Senior anaesthetist & ITU ED consultant Trauma surgeon

Expedite TIME-CRITICAL INTERVENTIONS

Urgent airway management is essential to secure the airway if it is threatened and to facilitate surgical exploration of the neck. If there is a risk of progressive airway compromise, it remains safer to secure the airway before any transfers or further investigations.

Contact us with your feedback

Francois: <u>louisfrancois.taljard@nhs.net</u> Georgina: <u>gmargiotta@nhs.net</u>

