№ 36

A Thin Line between Life and Death: A Gash to Throat

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Introduction

Airway trauma is a life-threatening condition resulting from blunt or penetrating injuries to the face, neck, and chest. The management ofxpenetrating neck wounds requires a prompt assessment of airway patency, breathing mechanics, circulation, and potential skeletal or neurological damage before definitive operative intervention.

Case Description

A 50-year-old woman, recently discharged following treatment for organophosphate poisoning, presented to the emergency department (ED) with a self-inflicted neck wound. She had used a kitchen knife to cut her throat, sustaining a deep laceration wound over the anterior neck. Upon arrival, her GCS was E3V2M2, with RR 24 and SpO2 of 98% on room air.

Examination revealed (Figure 1) a 15 cm × 5 cm deep horizontal wound over the anterior neck (Zone II), exposing thyroid cartilage & strap muscles. Gushing air was noted persistently from the wound. Airway protection was prioritized, and video laryngoscopy-assisted intubation was successfully performed (POGO 100%). The wound was covered with wet gauze, and an urgent otorhinolaryngology (ENT) consultation was obtained.

High-resolution computed tomography (HRCT) of the neck revealed injuries to the strap muscles, thyroid cartilage, and left vocal cord, with intact major neck vessels. Emergency wound exploration, debridement, and deep laceration repair was done.

Postoperatively, the patient was co-managed by ICU, ENT and psychiatry teams. She was discharged after three weeks. By 15 weeks, she passed the swallowing test successfully, albeit a flexible scope examination showed left vocal cord paresis, compensated by the right vocal cord with a small phonation gap.

Figure 1: Deep laceration over Zone II with visible thyroid cartilage

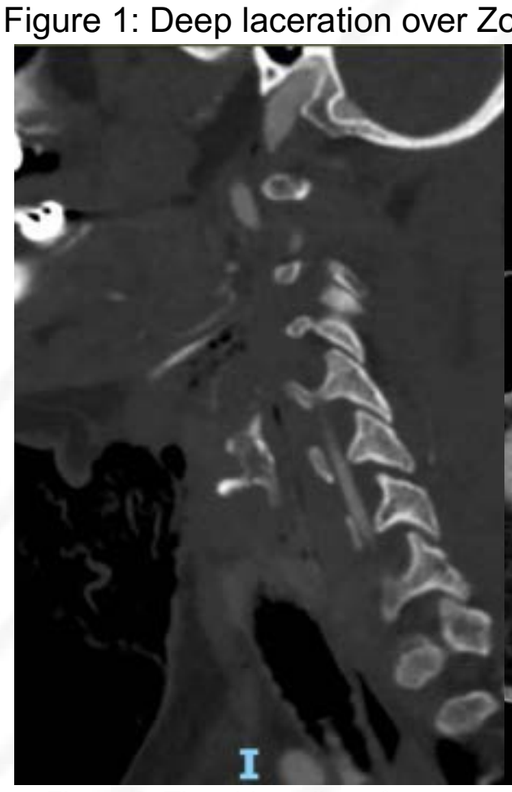

Figure 2: Thyroid cartilage fracture

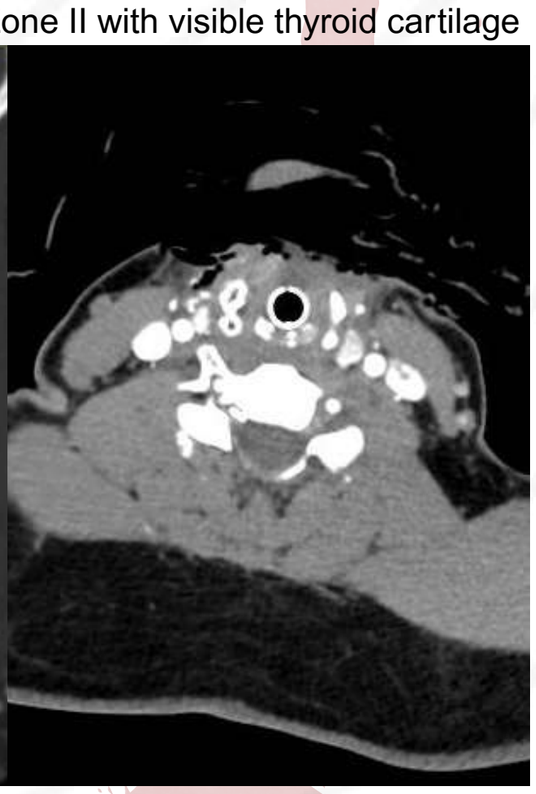

Figure 3: Multiple airpockets seen over anterior neck

Discussion

This case highlights the complexity of managing airway trauma following penetrating neck injury, particularly in the Zone II region. The decision to proceed with video laryngoscopy-assisted orotracheal intubation rather than front-of-neck access (FONA) was based on several factors: the visible glottic structures (POGO 100%), stable respiratory rate and oxygen saturatio and controlled ED environment. Although open wound intubation via the exposed trachea is described in literature as a viable option, in this case, the approach through the mouth preserved anatomical integrity and minimized further trauma. In this patient, HRCT imaging provided crucial detail, ruling out vascular injury while identifying laryngeal and vocal cord damage. This guided the ENT team's decision for early surgical intervention, which helped prevent secondary complications such as infection, airway stenosis, and aspiration.

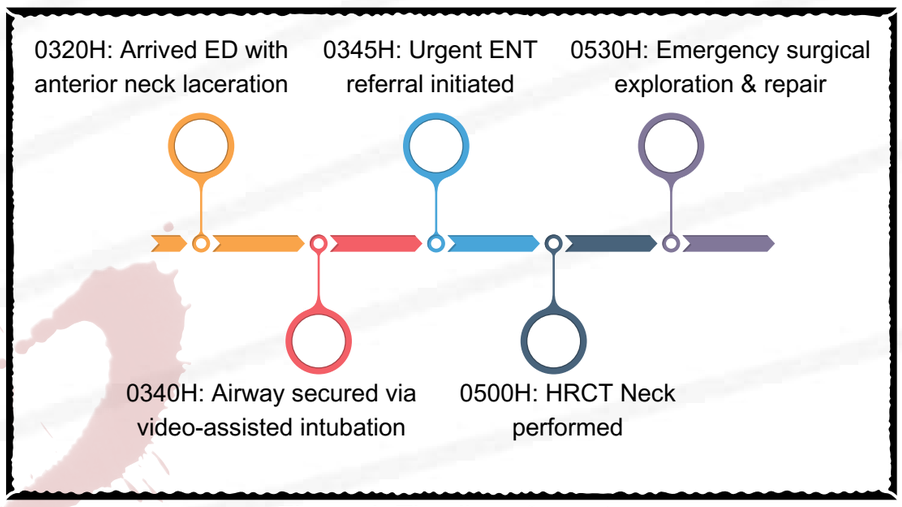

Figure 4: Timeline of events

Conclusion

This case reinforces the need for prompt assessment, multidisciplinary care, and long-term follow-up in managing complex airway trauma. Prompt surgical exploration and multidisciplinary management contributed to a favourable outxcome, with the patient regaining adequate phonation and swallowing function over time.

References:

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