



# PENETRATING NECK INJURY – EVERY EMERGENCY DEPARTMENT'S NIGHTMARE

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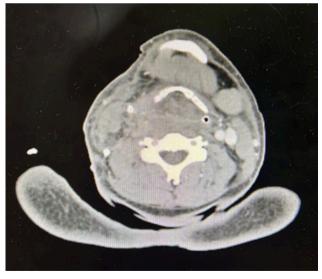
### **INTRODUCTION**

Penetrating neck injuries are potentially calamitous due to the structures in that lie within the neck – mainly the trachea, carotid and vertebral arteries, jugular veins and sophagus.

### **CASE DESCRIPTION**

A 28 years old gentleman who was stabbed in Zone II of the neck was brought to casualty. There was a deep laceration wound over the right lateral side of his neck that was continuously oozing with hematoma surrounding it. He was not intubated during the initial resuscitation as there were no signs of airway or breathing compromise. Circulatory and hemorrhage control was done by packing the wound with guikclot combat gauze, hemostatic suturing of the wound, and transfusion of blood products. Computer Tomography Angiography (CTA) of the neck revealed injury to the right coronary artery (RCA), forming cervical hematoma extending down to superior mediastinum causing mass effect to surrounding structures. Patient was pushed to the operating theatre where emergency tracheostomy was performed due to failed intubation secondary to severe tracheal deviation and compression by a large neck hematoma. Wound exploration was proceeded however RCA repair was not attempted as patient was in severe hypovolaemic shock as there was 90% of arterial wall loss. Patient then succumbed following massive right cerebral acute infarction with cerebral edema.





CTA Neck findings: Large area of contrast extravasation seen at the right side of the neck, epicenter at the level of C4 vertebra. The contrast extravasation is arising from the right common carotid artery.

### **DISCUSSION**

Evaluation for airway and respiratory compromise take precedence during the initial and subsequent assessments. Signs of injury include stridor, difficulty in breathing and cyanosis should be looked out for. Subcutaneous emphysema, bubbling at the wound site, pneumomediastinum, tenderness over the neck during palpation, and unilateral reduction of breath sounds are other important manifestations of respiratory injury.

Although this patient seemed to have no issues with airway and breathing during initial assessment, early intubation should have been considered in anticipation of deterioration. The team should also be prepared to encounter difficulties during the procedure, thus difficult airway management plans should come into play and the Anaesthesiology and Otorhinolaryngology teams should be alerted early in aiding the resuscitation.

#### CONCLUSION

Any penetrating neck injury involving Zone II should be carefully assessed and managed appropriately. The delay or failure in identifying ptential and real injuries may result in patient's morbidity and mortality.

## **REFERENCES**

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