

VAQ 2010.1.4 (Photo)

A 25 year old man has been brought in to your emergency department after sustaining a knife wound to his neck in an assault. His vitals signs and GCS are normal.



- Describe his photograph (50%)
- List the likely associated injuries (50%)

This man has sustained a complex, deep left neck laceration which traverses zones II and III of the neck with the potential for involvement of multiple structures, particularly concerning for venous, arterial, airway or neurological injury. Although in the photograph he is pale suggesting blood loss, in the presence of normal vital signs this may not be the case.

Photograph

- left side of neck
- comfortable looking patient from limited view
- no airway support
- ECG dots and dressings seen
- considerable local blood loss on dressings but no significant ongoing bleeding is visible
- blood splatter to face

Laceration to left side of neck

- large zigzag or Y shape
- from near tragus of ear to near midline at approximately level of hyoid** (obscured by dressing)
- 'branch' extends toward point of chin
- includes zones II, III** ; at least approaches junction of zones I and II
- widely gaping with deep tissue disruption
- no clearly identified structures in deep part of wound
- but significant depth in context of nearby vital structures

Likely associated injuries

superficial structures closely related to course of laceration – high likelihood of involvement

skin

platysma

sternocleidomastoid

facial artery

parotid gland

trigeminal nerve

facial nerve

adjacent structures of clinical concern

vascular

venous

internal jugular

external jugular

thyroid veins

arterial

carotid artery

thyroid arteries

nerves

recurrent laryngeal nerve

vagus nerve

sympathetic chain

gastrointestinal

oesophagus

glandular

parotid and duct

thyroid

parathyroid

submandibular

lymphatic

local lymph nodes and drainage – various

airway

pharynx

structures of **larynx**

trachea

thyroid cartilage

potential spaces

submental space

very deep structures (cervical vertebrae and spinal cord, cervical nerve roots) less likely to be involved