

Otolaryngology – Fellowship Questions

SAQ 1

A 60-year-old male presents with one hour of anterior epistaxis. He has a history of HTN and AF, for which he is on warfarin. His observations are: BP 110/60, HR 60, Afebrile, Sats 98% RA.

- a. List five immediate steps in your management of this patient.

Move patient to resuscitation room

Full PPE

Nasal pressure for 15 minutes

Sit patient upright

IV access and take bloods

- b. Simple pressure fails to control his bleeding and you have already suctioned all visible clots. List three more invasive options to control his bleeding directly.

Cautery – silver nitrate

Nasal packing (rapid Rhino, tampon)

Cophenylcaine pledgets

- c. His bleeding persists despite these efforts and ENT input is requested. They are travelling from another hospital, and request reversal of his warfarin in the interim. What drugs and doses will you administer to achieve reversal?

Vitamin K 5-10mg IV

Prothrombinex 25-50 units/kg IV

FFP 1-2 units

- d. How does complete reversal of his warfarin affect his annual risk of stroke, assuming he has no other medical issues and his AF is chronic?

Risk of stroke in AF without warfarin – 5%

Risk of stroke in AF on warfarin – 1.5%

SAQ 2

A 4-year-old boy presents with a peanut up his left nostril.

- a. Give four methods for removing the peanut in ED.

Suction

Fine forceps under direct vision

Kiss method

Glue on stick

- b. After removing the peanut, you notice the child is hypotensive, floppy, and has a widespread urticarial rash. You diagnose anaphylaxis and decide to intubate the child. Complete the following table with appropriate values.

Factor	Value
Estimated weight of child	16kg
Size(s) of ETT	5, 4.5
Induction – sedation	Ketamine 16mg
Induction – paralysis	Suxamethonium 16mg
Fluid bolus	160ml NS
Adrenaline dose (IM)	160mcg (0.16ml of 1:1000)

SAQ 3

A 45-year-old male is brought into ED by ambulance after attempting to hang himself with a belt in his bedroom. On arrival, he is GCS 7.

- a. Briefly describe the different mechanism of death in judicial vs non-judicial hanging.

Judicial: *drop is at least height of victim; fall causes hyperextension – C spine # - cord transection – death by respiratory failure*

Non-judicial: *venous obstruction – cerebral hypoxia – loss of consciousness – muscles relax – airway occlusion and arterial occlusion.*

- b. Give five anticipated complications of hanging in this patient.

Laryngeal oedema

Laryngeal fracture

ARDS

Cerebral oedema

Pulmonary oedema

Seizures

SC injury

Thrombus/embolus

Hypoxia, vascular injury, aspiration pneumonia

- c. List five symptoms/signs that predict a poor outcome in hanging victims.

GCS on arrival is NOT prognostic! The following features are prognostic:

C spine #

Long hanging time

Anoxic brain injury on CT

Cardiopulmonary arrest

Hypotension on arrival

Low PaO₂/FiO₂ on arrival (<100)

SAQ 4

A 58 year old female presents to your rural ED with 5 days of sore throat and progressive dysphagia. Examination shows she is febrile, with stridor at rest. Oropharyngeal examination is unremarkable.

- a. Give 4 differential diagnoses for her symptoms

Retropharyngeal abscess

Epiglottitis

Anaphylaxis/angioedema

Foreign body with abscess

Bacterial pharyngitis

- b. A lateral neck X ray is obtained. List 3 findings (positive or negative) on this x-ray and suggest the most likely diagnosis.



+ Widened prevertebral soft tissue shadow at C2-C4.
+ Loss of normal airway contour/narrowed airway.
- Thumb sign (enlarged epiglottis) not present

Most likely dx: retropharyngeal abscess.

- c. Give four management options for this patient with doses where appropriate.

Antibiotics – metronidazole 500mg IV and ceftriaxone 2g IV

Dexamethasone 8mg IV

Nebulised adrenaline 5ml of 1:1000

Urgent ENT input – likely early airway issue

SAQ 5

A 25-year-old male presents with facial pain following an alleged assault on Saturday night (see image).



- a. List four features on this image that suggest a fracture involving the zygomatic bone or zygomatico-maxillary complex.

Periorbital bruising, oedema
Restriction of upgaze
Cheekbone depression
Subconjunctival haemorrhage

- b. List four other clinical findings that would suggest this injury.

Surgical emphysema around eye
Vertical diplopia
Enophthalmos/exophthalmos
Infraorbital anaesthesia (numb lower lid, cheek, side of nose, upper lip/gum)
Palpable step at infraorbital margin or lateral brow area
Decreased visual acuity – suggests retrobulbar haemorrhage (urgent Ophthalm)

- c. What features on examination mandate urgent operative management of this fracture?

Significant cosmetic/functional deformity
Visual compromise
Exophthalmos/enophthalmos
EOM entrapment
Globe displacement
Significant orbital floor disruption

- d. After surgical review, the patient is discharged with operative management in 5 days time. What advice will you give the patient on discharge?

Do not blow nose – risk of emphysema
Prophylactic antibiotics – high risk of communication with sinuses
Return if increased symptoms

- e. The following day, the patient returns with increased pain and decreased acuity (image).



- i. What is the diagnosis? *Traumatic retrobulbar haemorrhage*
- ii. Briefly describe the steps involved in lateral canthotomy.

Inject 1% lignocaine with adrenaline around the lateral aspect of the eye

Advance a haemostat from the lateral canthus to the outer orbital rim and clamp to devascularise the tissue

Use small scissors to cut from the lateral canthus to the outer orbital rim

Cut the lower canthal tendon to decompress the globe

If IOP remains raised, cut the upper canthal tendon as well