

EXAMPLES – FELLOWSHIP EXAMINATION SHORT ANSWER QUESTIONS (SAQ)

The following SAQ example questions are provided for the Fellowship Exam (Written).

SAQ Example 1

A three year old child presents with their parents who are concerned that she has aspirated a toy. The child is not distressed.

Vital signs are:

P	100	Beats/min (regular)
BP	95/70	mmHg
SaO ₂	98	% on air
Temperature	37.3	°C

- i. What are three (3) indications for bronchoscopy in a child with a possible inhaled foreign body?

1. _____
2. _____
3. _____

Answer: historical choking/ coughing or persistent cough post choke, unilateral wheeze or atelectasis, or hyperinflation on expiration on X-Ray.

- ii. In acute total upper airway obstruction in a child, list the four (4) initial treatment steps in sequential order.

1. _____
2. _____
3. _____
4. _____

Answer: BLS with back blows and chest thrusts, attempted ventilation with BVM, direct visualization possibly attempted removal, ETT to advance obstruction.

iii. What three (3) features in history are most relevant when assessing a child for possible foreign body aspiration?

1. _____

2. _____

3. _____

Answer: age, opportunity, cough/choking, sudden onset, no prodrome.

SAQ Example 2

You are the duty consultant in a northern Australian emergency department during the summer months. You receive a thirty-five year old female surfer that has been being “dragged” from the water and brought in by car. She is extremely distressed by leg pain.

Vital signs are:

P	140	Beats/min (regular)
BP	150/90	mmHg
RR	26	/min
SaO ₂	92	% on air
GCS	15	

A photo of her right leg is shown.



i. What is your initial interpretation of the wounds?

Answer: Extensive Chironex fleckeri (Box jelly fish) stings to the leg with potential for systemic envenomation.

ii. List three (3) possible causes of her hypoxia.

1. _____

2. _____

3. _____

Answer: Possible near drowning, pulmonary edema post envenomation, chest injury sustained in the water > contusion/PTx, (medical cause such as asthma).

iii. What is the recommended initial treatment of the local leg injury?

Answer: Vinegar should be liberally applied if not already done so. Analgesia: IV narcotic, large doses often required. Remove tentacles with gloves if any remain attached.

iv. What would be the two (2) indications for anti-venom in this case?

1. _____

2. _____

Answer: If patient develops cardiovascular instability/cardiac arrest (usually occurs soon after sting). Ongoing severe local pain not controlled by IV narcotics.

SAQ Example 3

A member of the police force presents to your urban district hospital emergency department after being stabbed in the shoulder with a freshly used hypodermic needle whilst working. Assessment of the patient shows no acute wound repair is needed.

- i. What is the approximate relative risk in this setting of the infection transmission of the following:

HIV

HCV

HBV

- ii. List four (4) key issues that should be addressed in the assessment of this patient.

1. _____

2. _____

3. _____

4. _____

Answer: Patient anxiety, infection counselling, follow up with appropriate work services, confidentiality.

- iii. List three (3) blood tests that are essential to aid in the assessment of this patient.

	Blood Test	Clinical Meaning
1		
2		
3		

iv. What four (4) specific discharge counselling topics should be provided to this patient?

1. _____
2. _____
3. _____
4. _____

Answer: Follow up results, further serological testing, referral to appropriate services, explanation of infection risk in layman's terms.

v. What are three (3) ethical and legal principles involved when giving discharge counselling?

1. _____
2. _____
3. _____

Answer: Confidential labelling of specimens, notification of appropriate work authorities, work cover certificate.

SAQ Example 4

A 38 year old man walks up to the triage desk. He is agitated, shouting and uncooperative with simple instructions He is poorly kempt, clammy and tremulous.

- i. List five (5) differential diagnostic categories you would consider when trying to assess this man? Give two (2) examples from each category.

	Category	Example
1		1. 2.
2		1. 2.
3		1. 2.
4		1. 2.
5		1. 2.

Answer:

Trauma	1. Major visceral injury with blood loss 2. Head injury (bleed, concussion)
Toxidrome	1. Amphetamines, opiates, cannabis, usual antipsychotic medication e.g. Lithium 2. Alcohol, serotonin syndrome
Acute withdrawal	1. Alcohol, cannabis 2. Opioids
Electrolyte disorder	1. Hypo/hyperglycemia 2. Hyponatremia, hypercalcemia
Environmental	1. Snake bite 2. Red back spider bite
Psychiatric	1. Schizophrenia 2. Acute mania
Endocrine	1. Hyperthyroidism 2. Adrenal crisis
Sepsis	1. CNS 2. Infective endocarditis
Post-ictal	1. Known epilepsy, related to causes above 2. Withdrawal seizure

ii. Briefly describe two (2) different strategies for gaining the cooperation of this man.

1. _____

2. _____

Answer:

- Five person physical restraint
- Chemical restraint: benzodiazepine, butyrophenone, phenothiazine

iii. List the legal principles that guide your management.

Answer: Competence, informed consent.

SAQ Example 5

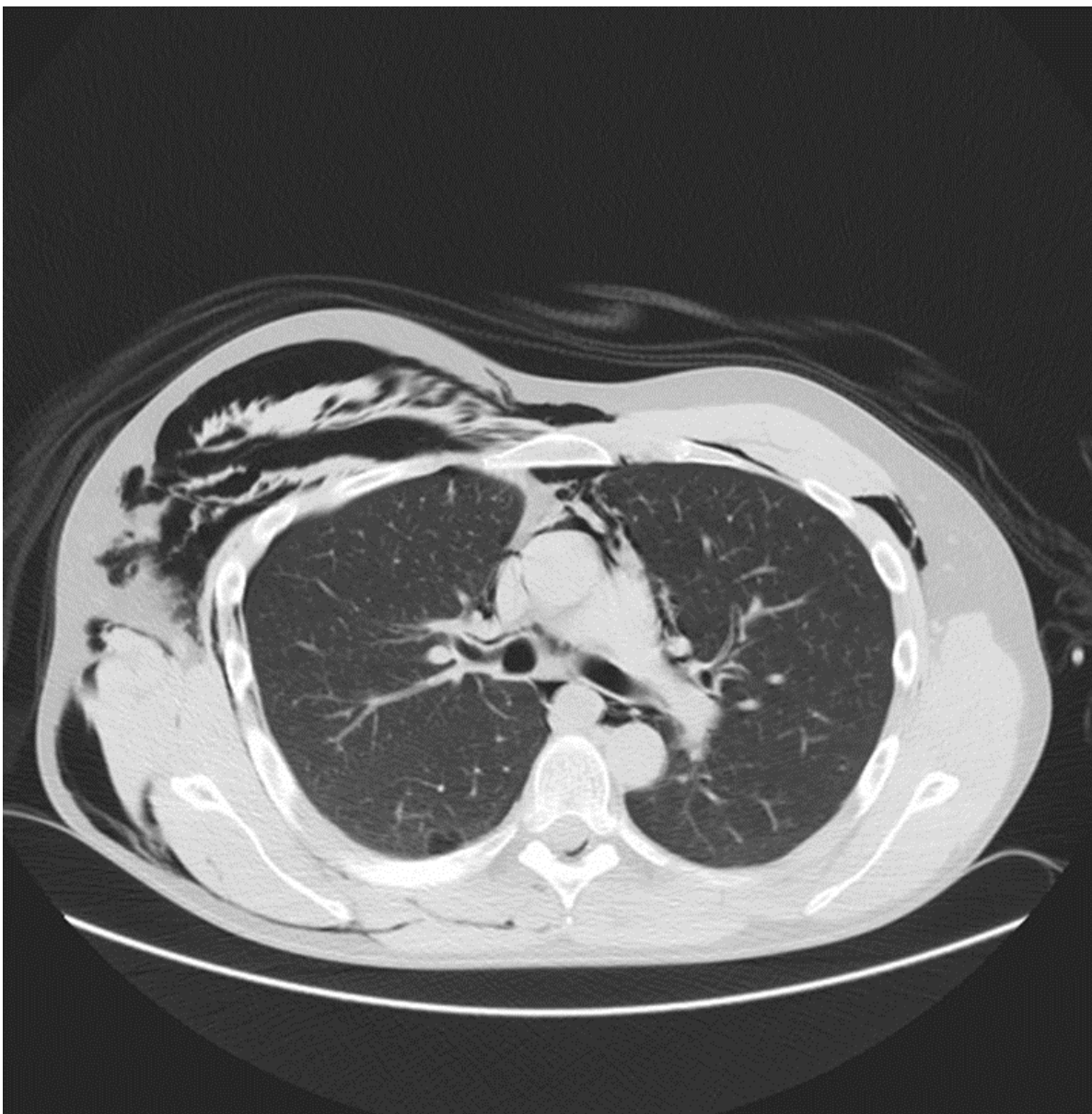
A 28 year old male presents to ED after being involved in a high speed MVC. He was the driver, restrained, deployed airbag, required extrication. On arrival he is short of breath and complaining of right sided chest pain.

Vital signs are:

SaO ₂	95	%	On 5L/min by Hudson mask
P	105		Sinus tachycardia
BP	110/70		Afebrile

He has no significant past history and is on no medication.

A CT chest is performed as part of his workup. A single axial slice is given.



i. Give an interpretation of the image providing;

Five (5) positive findings

1. _____
2. _____
3. _____
4. _____
5. _____

Extensive right and left chest wall surgical emphysema; Epidural air; Pnemo-mediastinum; Right sided pneumothorax; Small emphysematous bleb posteriorly

Two (2) negative findings

1. _____
2. _____

No tension; No chest tube; No haemothorax

ii. List three (3) potential complications of these changes.

1. _____
2. _____
3. _____

Tension pneumothorax; Air embolism, stroke; Airway compromise from tracking to larynx/pharynx; Pneumopericardium progressing to cardiac tamponade

iii. List three (3) options for the treatment of the changes shown.

1. _____
2. _____
3. _____

Conservative: repeat CXR in 24 hours specifically looking for increase in pneumothorax size with view to ICC; Small lumen right sided catheter inserted using Seldinger technique for drainage of pneumothorax; Small bore ICC inserted using Seldinger technique; Small bore ICC inserted using incision/surgical technique; Large bore ICC specifically to treat pneumothorax and possible haemothorax; Catheters on Heimlich valve/UWSD +/- suction.

SAQ Example 6

A 60 year old man presents with a painful left hand. You note some increased heat, redness and swelling. An X-Ray is done and reproduced here.



i. Give four (4) abnormal findings on the image provided.

1. _____
2. _____
3. _____
4. _____

Air in soft tissues; DIP joint dislocation ring finger; Healed fracture shaft distal phalanx little finger; Fracture base middle phalanx ring finger; Fused PIP joints middle and index fingers; Sub-periosteal bone cysts ring ?middle fingers; ?Metallic foreign body PIP joint middle finger

ii. Give three (3) aetiologies for this appearance.

1. _____
2. _____
3. _____

Trauma; Osteomyelitis; Necrotising fasciitis; Charcot joint/joints; Infected wound/foreign body

iii. Outline five (5) key features of his treatment and discharge planning.

1. _____
2. _____
3. _____
4. _____
5. _____

Supportive: Analgesia/anti-pyretic; Elevation; +/- Splinting

Specific: IV antibiotic – broad spectrum i.e. Tazobactam; IV normal saline if likely necrotising fasciitis; Surgical referral – general/orthopaedic for possible OT treatment; Euglycemic treatment; (+/- HBO); Reduction of acute dislocation/fractures under ring block

SAQ Example 7

A 48 year old male self presents to the emergency department.

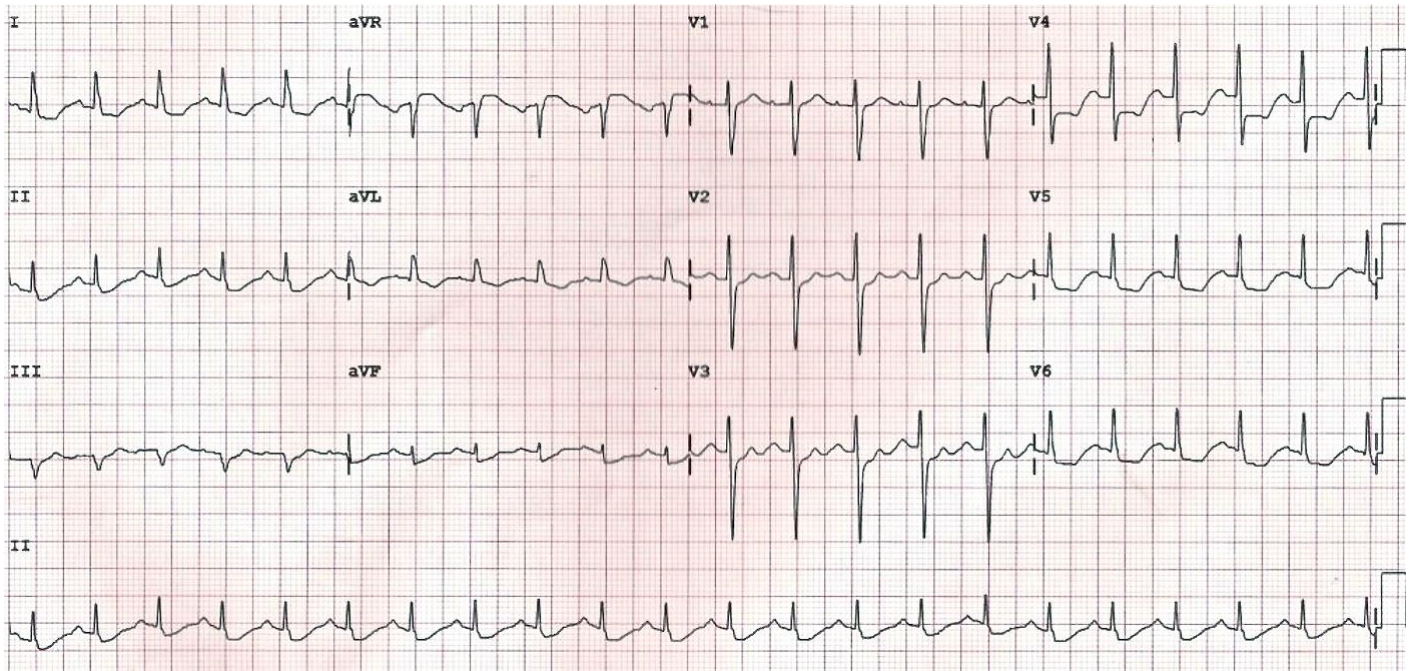
He is complaining of severe, heavy central chest pain with sweating, nausea and shortness of breath. The pain has been present for one hour.

You work in an emergency department that is 65 minutes from interventional services.

Initial vital signs are:

BP	95/55		
P	125	Regular	
SaO ₂	92	%	On 6L via Hudson mask

His ECG on arrival is below.



i. Interpret the ECG giving three (3) positive findings.

1. _____
2. _____
3. _____

Critical LAD STEMI; Widespread anterior ST depression; Sinus tachycardia

ii. List five (5) drugs with doses needed within the first hour of arrival to emergency department.

1. _____
2. _____
3. _____
4. _____
5. _____

- Oxygen: titrated to keep SaO₂ > 95%
- Aspirin: 300mg orally stat
- GTN: 1-2 sprays sublingual, patch, infusion (50mg in 100mg normal saline titrated to pain and BP)
- 11a111b inhibitor: clopidogrel 600mg orally stat, prasugrel 60mg orally stat, ticagrelor 180mg orally stat
- Heparin versus clexane: heparin 5000 iu stat IV, clexane 1mg/kg s/c stat
- Morphine/fentanyl: morphine 0.1mg/kg titrated to effect IV, fentanyl 1µg/kg IV or intranasal titrated to effect
- Anti-emetic: maxolon 10mg IV, ondansetron 4mg s/l
- Thrombolysis: tenectaplastase dose adjusted to weight
- Inotrope: adrenaline, metaraminol, dobutamine as required.

iii. Outline four (4) factors that will determine definitive treatment of this patient.

1. _____
2. _____
3. _____
4. _____

- Time from pain onset
- Haemodynamic stability
- Continuous pain post thrombolysis
- Non PCI centre and delayed transport: thrombolysis within 30 mins of making decision
- Time to reaching cath lab – optimal less than 90 mins if large area at risk but acceptable up to 120 mins
- Successful thrombolysis to angiography less than 24 hours

SAQ Example 8

A 40 year old man is brought to the emergency department after taking an overdose of prescribed medication.

- i. List seven (7) features on history that indicate a heightened risk for completed suicide.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

- S – Sex: 1 if male; 0 if female; (more females attempt, more males succeed)
- A – Age: 1 if < 20 or > 44
- D – Depression: 1 if depression is present
- P – Previous attempt: 1 if present
- E – Ethanol abuse: 1 if present
- R – Rational thinking loss: 1 if present
- S – Social Supports Lacking: 1 if present
- – Organized Plan: 1 if plan is made and lethal
- N – No Spouse: 1 if divorced, widowed, separated, or single
- S – Sickness: 1 if chronic, debilitating, and severe

- ii. Provide a list of investigations which would be completed prior to referral to the psychiatric services including three (3) mandatory tests and four (4) optional tests determined by the details on assessment. Include detail on how the investigations will aid assessment.

	Test	How test will aid assessment
Mandatory test 1	Glucometer	?oral hypoglycaemic ingestion
Mandatory test 2	ECG	Features of sodium channel blockade, TCA ingestion, Beta blocker/CCB ingestion, K high or low
Mandatory test 3	Serum paracetamol	'Silent' toxicity
Optional test 1	LFT's	If unknown time of ingestion, ALT can guide risk of delayed presentation of paracetamol ingestion,
Optional test 2	Other serum drug level	Anti-epileptics, digoxin, lithium
Optional test 3	CXR	Features of aspiration pneumonitis
Optional test 4	Renal function	Baseline for risk of poor clearance (cf Lithium), monitoring for drugs causing ARF
	Breath/blood alcohol level	Impact on conscious level, time before 'medically cleared'
	INR/coags	Warfarin overdose, NOAC ingestion
	ABG/VBG	Monitor pH when treating sodium channel blockers

- iii. List two (2) absolute and two (2) relative indications for admission.

Absolute indications

1. _____

2. _____

- Score of > 7 on sad persons scale or similar scoring system
- Requiring ongoing treatment for ingestion i.e. NAC, dialysis, ICU monitoring/care

Relative indications

1. _____

2. _____

- Poor social situation
- Potential for delayed onset toxicity
- Stabilisation of underlying medical condition

SAQ Example 9

A 34 year old G7P6 30/40 pregnant woman arrives in your emergency department in labour.

- i. Complete the following table indicating the likely need for neonatal resuscitation if she delivers. Give four (4) features in each column.

	Maternal	Foetal	Intrapartum
1	PROM	Multiple gestation	Foetal distress
2	Antepartum haemorrhage	Post-term	Abnormal presentation
3	Hypertension/eclampsia	Pre-term	Precipitate labour
4	Diabetes mellitus	Intra-uterine growth retardation	Prolonged labour
	Substance abuse	Polyhydramnios	Thick staining of amniotic fluid
	Maternal infection or chronic illness	Congenital abnormalities	Instrumental delivery
	Absence of antenatal care		LSCS

ii. List the features that would be used to determine the Apgar score.

- Colour
- Tone
- Heart rate
- Respiratory effort
- Reflex irritability

iii. List five (5) specific treatments (with doses as appropriate) that may be required within the first ten minutes of delivery.

1.

2.

3.

4.

5.

- Cpap ventilation/intubation
- Warming (drying, cling film wrap, beanie, radiant heater). Aim for normothermia
- Vascular access (IO insertion, umbilical catheter with 5F catheter)
- Adrenaline (0.1ml/kg 1:10000 via IO or umbilical catheter, 0.1ml/kg via ETT)
- Naloxone (0.1mg/kg IV or IO)
- Dextrose (5mg/kg 10% dextrose IV)