



Fellowship Examination OSCE Detailed Example 1

SUBJECT AND CURRICULUM REFERENCE

Difficult airway management

Medical Expertise

Teamwork and Collaboration

Prioritisation and Decision Making

CLINICAL SCENARIO STEM

A 50 year old man is brought in by ambulance with an IV in situ. The patient has been assaulted with a cricket bat. He has isolated head and face injuries. On arrival his vital signs are as follows:

HR	90	/min	
RR	8	/min	
BP	150/80	/mmHg	
O ₂ Saturation	90	%	15L oxygen via non rebreather mask.
GCS	4	with equal and reactive pupils	

On examination he has obvious extensive midface fractures bilaterally, with blood coming out of his mouth, and gurgling respirations.

INSTRUCTIONS

Candidate:

The scenario is in the Resuscitation Room. There is a high fidelity mannequin that will respond as a live patient. Your registrar has already prepared the appropriate drugs and difficult airway trolley. You have an assistant who is a competent nurse, but requires instruction. The registrar has been called away. You have been called by your registrar for an anticipated difficult airway and are required to manage the patient's airway.

Role player - nurse assistant:

You are an experienced airway nurse. You will follow the candidate's instructions promptly, efficiently and competently. You will not prompt him with regards to patient management. You will alert him to significant deterioration in the patient's condition (e.g. when the oxygen saturations deteriorate, or if the patient becomes bradycardic).

**Examiner:**

This scenario requires an advanced mannequin, difficult airway and resuscitation equipment and a competent nurse to assist the candidate.

The mannequin is impossible to intubate.

The candidate must first recognise the need to secure the airway and attempt intubation using RSI. Once intubation fails, the candidate must commence an appropriate difficult airway algorithm (e.g. reattempt intubation with some changes such as repositioning head, use of a bougie, etc., assistant providing laryngeal manipulation, etc.), then LMA insertion, BVM ventilation.

If the candidate inserts an oral airway and ventilates competently via bag-valve-mask, he is initially able to oxygenate and ventilate the person for approximately 30 seconds. However over that period of time, the patient's oxygen saturations deteriorate markedly. The candidate must now recognise a "can't intubate, can't oxygenate" scenario and proceed to a surgical airway.

NOTE: If by 5 minutes the candidate has not proceeded to a surgical airway, at that point the patient becomes peri-arrest: HR 20 /min, apnoeic, O₂ Saturation 60%.

Assessment criteria

- Recognition of need to secure airway and intubate patient.
- Attempt intubation with appropriate drugs, equipment and technique.
- Once first intubation attempt fails, commence difficult airway algorithm.
- Maximum of 3 attempts at intubation, and at each attempt must alter some factor to increase likelihood of intubation (e.g. Reposition patient, or use of a bougie, or having assistance provide external laryngeal manipulation)
- LMA insertion – must have competent technique and insert successfully, however is unable to ventilate patient adequately via LMA.
- Maintain oxygenation between attempts at intubation/LMA by competent ventilation with bag-valve-mask
- NOTE: After at least 3 attempts of establishing a definitive airway (ETT and/or LMA) candidate is able to ventilate and oxygenate patient via BVM (if performed competently). However after approx. 30 seconds, situation deteriorates into a "can't intubate can't oxygenate" scenario.
- Candidate must recognise and verbalise that this is a "can't intubate, can't oxygenate" scenario.
- Candidate must successfully establish a surgical airway.
- Candidate must successfully ventilate patient via the surgical airway, using an appropriate technique.

Fellowship Examination OSCE Detailed Example 3

SUBJECT AND CURRICULUM REFERENCE

Asthma management

Leadership and Management

Medical Expertise

CLINICAL SCENARIO STEM

You are working in a rural district hospital. You have immediately available an experienced emergency department nurse and emergency department registrar.

A 26 year old man is brought into your emergency department having a severe asthma attack. Initial arterial gas on high flow oxygen is as follows:

pH	7.10
pO ₂	54
pCO ₂	120
HCO ₃ ⁻	18
Base	21.0
Na	135
K	4.6
Cl	99
Gluc	6.4
Lactate	4

INSTRUCTIONS

Candidate:

You are required to describe the blood gas result to the staff and commence therapy for this patient with severe asthma. You may assume that all drugs and equipment usually available in a Resuscitation Room are available. You will need to provide detailed instructions to the nurse and registrar including drug dose and administration route.

You will have a high fidelity resuscitation mannequin and two staff members; an emergency department registrar and an emergency department nurse who will assist by carrying out your instructions but will not initiate any treatment unless requested. They may alert you to major changes in the patient's clinical status.

Role player – ED nurse:

You are an experienced ED nurse and will follow instructions as given by the candidate promptly and efficiently. You are able to note any significant changes to the clinical status of the patient. You are not to initiate therapy without being asked, nor prompt regarding patient management. You are able to seek clarification if any instruction is unclear. If asked to administer a drug you will need to be provided with the dose and route of administration. If asked to ventilate or connect to a ventilator you will expect to be provided with clear instruction, and can prompt the candidate if required.

Role player – ED registrar:

You will follow instructions as given by the candidate. You are able to note any significant changes to the clinical status of the patient. You are not to initiate therapy without being asked, nor prompt regarding management. You are able to seek clarification if any instruction is unclear. If asked to administer a drug you will need to be provided with the dose and route of administration. If asked to ventilate or connect to a ventilator you will expect to be provided with clear instruction, and can prompt the candidate if required.

Examiner:

The candidate should efficiently describe the blood gas result to the staff members and then immediately proceed with resuscitation.

The candidate should assume the team leader role, and communicate with and utilise team members appropriately.

The candidate should commence reasonable therapy for severe asthma including intravenous drugs with doses and prepare for immediate intubation and ventilation.

Once intubated, the candidate should aim for adequate oxygenation and accept hypercarbia, with prolonged expiratory time.

Assessment criteria

- Accurately identify severe acute respiratory failure.
- Manage drug therapy for severe asthma appropriately.
- Identify need for intubation and proceed to intubation using appropriate drugs for RSI.
- Intubation technique.
- Appropriate post intubation checks and ventilation goals in a patient with severe asthma.

Fellowship Examination OSCE Detailed Example 2

SUBJECT AND CURRICULUM REFERENCE

History taking - diarrhoea

Medical Expertise

Communication

CLINICAL SCENARIO STEM

A 25 year old previously healthy man presents to the emergency department complaining of 2 weeks of diarrhoea.

INSTRUCTIONS

Candidate:

A 25 year old previously healthy man presents to the emergency department complaining of 2 weeks of diarrhoea. Take a history. After 6 minutes you will be asked to summarize the findings and give a differential diagnosis.

You will not be required to examine the patient. Vital signs are normal. The abdomen is soft, non-tender with no distension.

Role player - patient:

You are 25 and called Michael Jones. You started to notice that your stools were more runny than normal two weeks ago, and since then you have been opening your bowels with increasing frequency up to 10 times per day. This is very unusual for you. For the last five days you have noticed blood in the stool, and this morning the toilet pan was filled with blood, which alarmed you and made you come to the emergency department. You have no other previous visits to doctors or the hospital. You are not short of breath. If asked, say that you have felt more tired than usual recently. No nausea or vomiting and no shortness of breath. If asked about pain, say that you have had one or two twinges of pain in your stomach during attacks of the diarrhoea but otherwise not. You drink 5 pints of beer most Saturday nights, do not smoke and have no allergies. You have two sisters who are both healthy and your parents are both healthy and in their 50s. Your appetite is usually good but you have been less hungry than normal for the past two weeks. Your jeans are looser than normal. You have had no recent overseas travel.

Examiner:

Observation only. After 6 minutes ask the candidate to give a differential diagnosis.

Assessment criteria

- Confirms that reason for attendance is diarrhoea.
- Duration of symptoms.
- Amount and frequency of stools.
- Any blood – alone or mixed with stool – bright red or dark.
- Nausea, vomiting, haematemesis (coffee grounds), abdominal pain.
- Weight loss? Fever? Lethargy? Dizziness.
- PMH? Meds (NSAIDS, anticoagulants, ASA) Family history? Diet. Travel history.
Joint problems, eye problems, skin problems?
- Candidate should include inflammatory bowel disease in his differential diagnosis.