

Station Number ONE: SCBD

Candidate instructions

This is a 7 minute *standardised case based discussion*.

You will be interacting directly with an examiner. You will be asked to outline your assessment and management to the following clinical situation. Further information will be provided as the case evolves. The examiner will be assessing your medical knowledge, as well as the reasoning and rationale to your approach and decisions.

Case information

You are the duty consultant working in a regional hospital Emergency department. It is 1800 on a weekday evening.

You have had a pre-notification from the ambulance service of a patient who is coming in with Haematemesis. The patient has been unable to give a full history but the paramedics have ascertained that he has alcoholic liver disease. His current vitals are:

HR: 95 bpm

BP: 100/70

Sats: 95% on room air

GCS: 14

Temp: 36.0

Your tasks are to:

- Outline key historical factors you will use to risk stratify this patient
 - Discuss your ED management and answer any questions the examiner may have
-

This SCBD will assess the following domains:

- Medical Expertise
 - Assessment and diagnosis 20%
 - Management 40%
- Prioritisation and decision making 40%

Examiner Instructions

This is a 7 minute ***standardised case based discussion***.

This is an SCBD involving a significant upper GI bleed in a patient with Oesophageal varices.

The Candidates tasks are to:

- Prepare the team for the arrival of this patient
- Outline the assessment and management of this patient

This OSCE will assess the candidates ability to:

- Identify the historical features which make a patient more likely to be severely unwell with a GI bleed
- Prepare their team for the resuscitation of an unwell patient with a GI bleed
- Discuss the initial management of a patient who is unstable with a significant upper GI haemorrhage
- Describe the procedure of placing a sengstaken-blakemore or Minnesota tube

This SCBD will assess the following domains:

- Medical Expertise
 - Assessment and diagnosis 20%
 - Management 40%
 - Prioritisation and decision making 40%
-

LEAD EXAMINER SCRIPT**Section 1: _____ (Minute 0-1)**

“Which historical factors will you consider in order to risk stratify this patient presenting with an upper GI bleed?”

Patient factors

- Advanced liver disease
- Known Varices
- Previous variceal bleed (each episode increases mortality)
- Other significant comorbidities eg significant cardiac disease
- History of aortic aneurysm or graft - potential for aorta-enteric fistula
- Current anticoagulation
- Taking eg a B-blocker which may make haemodynamic compromise more significant

Historical factors

- Haemodynamic instability
- Presence of malaena
- Bright red PR bleeding (in upper GI bleed suggests brisk bleeding)
- Frankly bloody emesis (as opposed to coffee grounds)
- Syncope or postural symptoms
- Recent symptoms suggestive of GI malignancy

Prompt: “What factors would increase your concern that this patient will become critically unwell from this illness?”

Section 2: (Minute 1-2)

“The patient has deteriorated en route with further haematemesis. BP is now 70 systolic and HR is 130 bpm. They are 5 minutes away.

Please outline how you will prepare your team for the arrival of this patient.”

People

- ED resus team medical and nursing, briefed and roles assigned
- **Appropriate PPE for all staff**
- **Endoscopy**/Gastro team
- ICU/anaesthetics potentially

Area

- resus room

Equipment

- Airway equipment ready with large bore suction and plan for soiled airway management
- Sengstaken/minnesota tube
- iv access - large bore/RIC or other resuscitation lines prepared

Drugs

- Warmed **Blood products**, massive transfusion anticipated
 - Specific treatments - pantoprazole, octreotide, terlipressin
 - Antibiotics
 - Intubation drugs
-

Section 3: (Minutes 2-5)

“The patient arrives with a BP of 70 systolic and he appears drowsy. The paramedics have secured a 20g IV in the right antecubital fossa.

Please outline your initial management of this patient.”

Vascular access

- **needs larger bore IV access**
- Plan may include RIC, central access, ultrasound guided larger bore peripheral IV

Haemodynamic resuscitation

- haemodynamic instability + ongoing bleeding - massive transfusion should be activated regardless of initial Hb
- Permissive hypotension
- No early vasopressors - primarily should be resus with blood at least in the early stage
- normothermia, warmed fluids and blood
- Blood products PRBC, platelets, FFP appropriate ratio
- Minimal crystalloid use (only whilst waiting for blood might be appropriate)
- Consider use of factors/cryoprecipitate
- No Txa (Halt-it)

Airway

- likely to need early airway management
- Appropriate plan with large bore suction, recognition that video laryngoscope use may be hindered by secretions - direct preferable. Haemodynamically stable induction agent/dose

Stomach

- Pantoprazole 80mg then 8 mg/hr
 - Octreotide 50 mcg then infusion
 - Terlipressin 2 mg
-

Section 3 cont'**Housekeeping/General**

- Antibiotics - Ceftriaxone 1 G IV
- Treat encephalopathy - lactulose, thiamine

Definitive

- Urgent Gastrosocopy
- TIPS or angiography if that fails

Section 4: _____ (Minutes 5-7)

“The patient requires transfer for definitive care to another facility which is one hour away by road and the receiving Endoscopist has requested that a Sengstaken-blakemore tube or equivalent be placed prior to transfer.

What are the considerations regarding placement of this device and how would you proceed in this case?”

Significant potential complications associated with procedure including:

- rebleeding on removal of device
- Pressure necrosis and oesophageal perforation
- Cardiac arrhythmia

However in this case the candidate should recognise that the risks of transfer without placement are greater than the device risks and they should proceed with insertion. **If needed prompt them to describe the procedure**

Sengstaken-blakemore/minnesota tube insertion

- Patient is supine with 45 degrees head up
 - estimate length by bridge of nose to xiphoid process
 - lubricate balloons
 - insert orally into the oesophagus (using laryngoscope may help)
 - Insert a small amount of air (50mls)
 - **confirm position on CXR (gastric balloon in stomach) prior to full inflation**
 - inflate gastric balloon using 50mL increments up to 250 -300ml for SBT or 450-500ml for Minnesota tube
 - pull balloon back until against gastric fundus
 - note measurement at lips and fix securely with traction and rope pulley system with 1L bag of fluid
 - Check for evidence of ongoing bleeding via aspiration port ie effectiveness of gastric balloon alone. Separate Ngt/ogt can also be used (pre-marking depth is helpful)
 - inflation of oesophageal balloon usually is not required (if required inflate to 20-40mmHg)
 - never use on its own
 - use only if continuing bleeding despite an adequately inflated gastric balloon correctly placed and with appropriate tension
-



OSCE Station:

COMPONENT ASSESSMENT

For each domain below select the **ONE** option which best represents this candidates performance. The option '**Minimum level of competency displayed**' represents the minimum level of safe independent practice as a junior FACEM in Australasia.

A horizontal bar chart with seven bars of increasing length and decreasing height, colored in a gradient from light blue to dark blue. Each bar contains a text label representing a response category. The bars are arranged from left to right, with the shortest bar on the left and the longest bar on the right.

Response Category	Percentage
Very poor	1%
Well below minimum standard	1%
Below minimum standard	1%
At minimum standard	1%
Above minimum standard	1%
High standard	1%
Very High standard	1%

Please rate all the following domains:

[illegible]

GLOBAL ASSESSMENT RATING

Please rate this candidate's OVERALL performance in this OSCE:

In terms of a **safely practising junior emergency physician** please select the ONE option which best reflects this candidate's performance in this station

**Well
Below
Standard**

☐

**Below
Standard**

☐

**Just at
Standard**

☐

**Above
Standard**

☐

**Well
Above
Standard**

☐
