Osce Express
Session 6

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In Today's Session...

01

Specialties within the ED

02

Deteriorating Patients

03

Q&A + Cases

Disclaimer

This course has been designed to help final year students with practical OSCE exams and is an unofficial resource that covers themes present in the University of Leicester Final OSCEs. We have nonetheless made this course as applicable to other final year OSCEs as possible, but there may be discrepancies in your University's expectations.

OSCE Express sessions are peer-reviewed by junior doctors, but we take no responsibility in the accuracy of the content, and additionally our sessions do not represent medical advice. Please use our sessions as a learning aid, and if you note any errors, do not hesitate to message us at osce.express@gmail.com

Kind regards,

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OSCE Express co-creators

Course Overview

Osce Express

1. 11 session guide to common OSCE finals stations
2. Delivered by Foundation Year 1 Doctors
3. Peer-Reviewed Cases + Video Guides provided to all participants (published on MedAll, osceace.com)
4. Preparation for OSCEs...
5. ...And also preparation to be a safe FY1

Meet the Team

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Core Committee

01

Specialities within the ED

Layout

10 Min Specialities station

01

- Any speciality with emergency presentations

02

- History + physical examination or higher-level communication skills
- Real patients or models

03

- Expected to diagnose, with appropriate investigations + reason a management plan

Examiner expectations

Excellent	• Skilled and fluent history with no significant omissions • Excellent interaction with patient* – appears natural • Confident and accurate diagnosis and explanation • Comprehensive and appropriate management • Assured answers given to questions with full explanation, showing a deep level of understanding. * Parent, if child health

*Mark scheme variable as per Specialty

Top Tips

1. Chance for examiners to evaluate your diagnostic and reasoning skills

2. Focus on differentials early: most likely, not-to-be missed. Remember red flags!

3. Revise your emergency presentations from: O&G, paeds, psych, ophthal, neuro, ENT, derm, oncology

4. Keep an ear out for safety concerns - ?safeguarding, ?driving

Potential cases

1. Obstetrics: placental abruption, praevia, (pre) eclampsia, PROM
2. Gynaecology: torsion, ectopic, HMB, miscarriage
3. Paeds: respiratory infections, foreign body, appendicitis, jaundice, epilepsy, meningitis, Non-accidental injury, DKA, asthma attack
4. Psych: psychosis, overdose, suicidal ideation, NMS, dystonic reaction
5. Ophthal: sudden visual loss, GCA, red eye, acute glaucoma
6. Neuro: stroke, seizures, syncope, MS, cauda equina
7. ENT: epistaxis, hearing loss, OM/OE, epiglottitis, anaphylaxis,
8. Derm
9. Oncology: MSCC, neutropenic sepsis, SVCO, TLS, SIADH

Tips: Screen for conditions through the surgical sieve: VITAMIN C
Differentiating features: onset or patterns, triggers, pain, fever, dizziness, vomiting, appetite

Case 1

You are the FY1 in the Emergency Department

Audrey Edwards is a 78-year-old presenting to the ED with vision loss.

You have 10 minutes to:

- Take a history from the patient
- Explain the likely diagnosis, any investigations that may be required, and your management plan
- Answer any questions the patient has

Ideas for approach

History	Differentials	Investigations	Management
Onset Pain Discharge Visual acuity Associated sx PMH + risk factors	GCA CRAO CRVO Retinal detachment Vitreous haemorrhage Stroke	Ophthalmic exam Slit lamp ECG Bloods TAB/USG	Medical Surgical Lifestyle - Driving - Charities - ?register as blind

Case 2

You are the FY1 in the Emergency Department

Mary Howard is a 32-year-old primigravida presenting with PV bleeding at 34 weeks

You have 10 minutes to:

- Take a history from the patient
- Explain the likely diagnosis, any investigations that may be required, and your management plan
- Answer any questions the patient has

Ideas for approach

History	Differentials	Investigations	Management
Onset + pattern Volume Pain Discharge Associated sx Examine for tenderness - Hard woody uterus	Placenta praevia Placental abruption ?PROM	CTG Bloods inc. Hb, clotting, G&S, Kleihauer USG Swabs fFN – pre-term PAMG-1/GFBP-1	Medical Surgical Lifestyle - Smoking - Trauma - ?safeguarding

Case 3

You are the FY1 in the Emergency Department

Jasmine Brown is a 13-year-old presenting to the ED with Susan their mother. Please take a history from her mother for abdominal pain

You have 10 minutes to:

- Take a history from the mother
- Explain the likely diagnosis, any investigations that may be required, and your management plan
- Answer any questions her mother has


ABDOMINAL REGIONS + PAIN
EPIGASTRIC PAIN
GERD, Gastritis,
Perforated Ulcer, Peptic Ulcer,
Pancreatitis
RUQ PAIN
Hepatitis
Gallstones
Liver abscess
Cholangitis
Pancreatitis
Cholecystitis
LUQ PAIN
Spleen Rupture
Acute Splenomegaly
Spleen Abscess
RUQ
EPIGASTRIC
LUQ
RIGHT LUMBAR
Renal colic
Renal Calculi
Crohn's
Ulcerative Colitis
LEFT LUMBAR
Renal Colic
Pyelonephritis
Renal Calculi
Crohn's
Ulcerative Colitis
RIGHT LUMBAR
UMBILICAL
LEFT LUMBAR
UMBILICAL
Appendicitis (early)
SBO
Umbilical Hernia
Constipation
RLQ
SUPRAPUBIC
LLQ
RLQ PAIN
Appendicitis
Crohn's Disease
Ulcerative Colitis
Ovarian Cysts/torsion
Ectopic Pregnancy
Hernia
SUPRAPUBIC
Cystitis
PID
Endometriosis
Uterine Fibroids
LLQ PAIN
Diverticulitis
Ulcerative Colitis
Crohn's Disease
Ovarian Cysts/torsion
Ectopic Pregnancy
Hernia

Ideas for approach

History	Differentials	Investigations	Management
SQITARS Pattern Associated sx : Vomiting Eating/drinking Bladder + Bowels Fever PMH Recent illnesses	Appendicitis DKA Constipation UTI Repro: cysts/torsion Splenic rupture IBD Gastroenteritis	Abdo exam Urine dip Stool culture Bloods Imaging - US/CT Consider pregnancy test	Medical Surgical Lifestyle - ?diabetic counselling - ?MH

Case 5

You are the FY1 in the Emergency Department

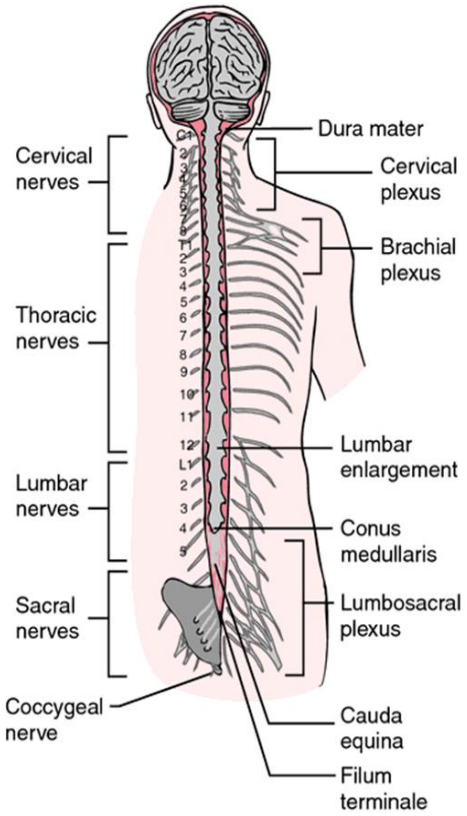
Victor Webb is a 78-year-old presenting to the ED with weakness in his legs.

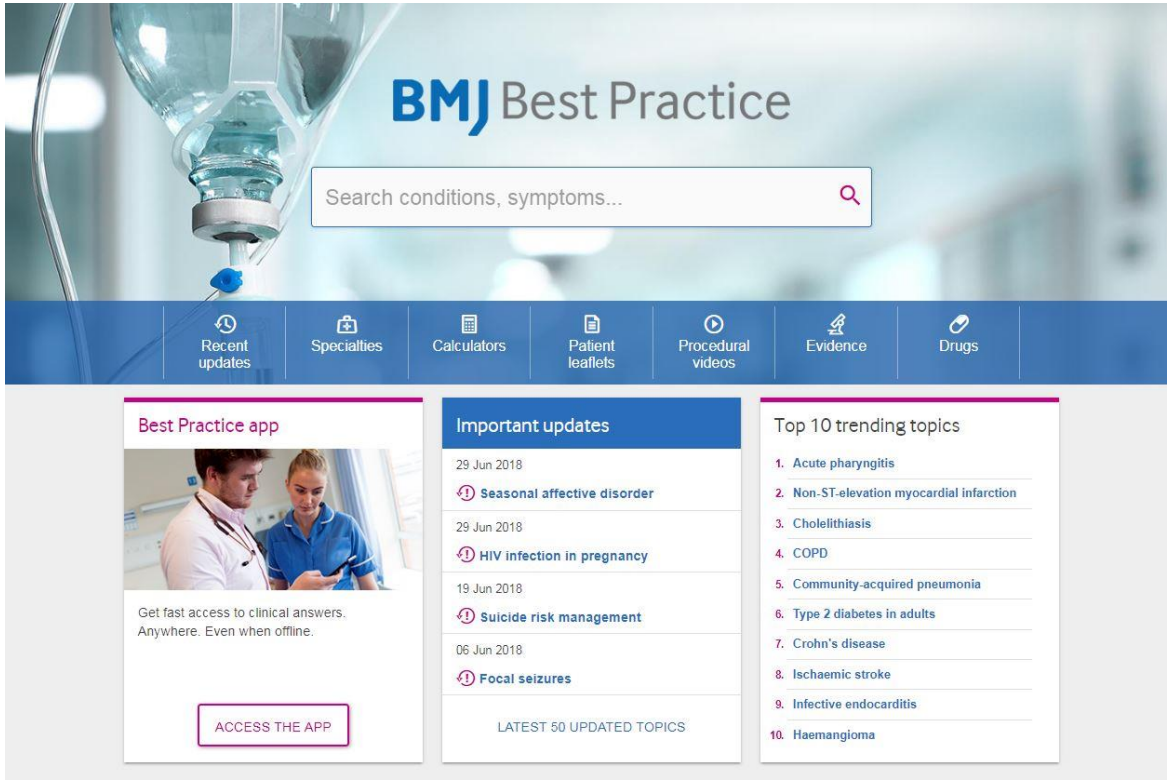
You have 10 minutes to:

- Take a history from the patient
- Explain the likely diagnosis, any investigations that may be required, and your management plan
- Answer any questions he has

Ideas for approach

History	Differentials	Investigations	Management
Onset Pain Paraesthesia Falls/syncope PMH	Cauda equina MSCC Sciatica MS Spinal abscess	Neuro exam - UMN vs LMN lesion Bloods MRI	Medical Surgical Lifestyle - Driving - Work


Cervical nerves
Thoracic nerves
Lumbar nerves
Sacral nerves
Coccygeal nerve
Dura mater
Cervical plexus
Brachial plexus
Lumbar enlargement
Conus medullaris
Lumbosacral plexus
Cauda equina
Filum terminale


BMJ Best Practice
Search conditions, symptoms...
Recent updates
Specialties
Calculators
Patient leaflets
Procedural videos
Evidence
Drugs
Best Practice app
Get fast access to clinical answers. Anywhere. Even when offline.
ACCESS THE APP
Important updates
29 Jun 2018
Seasonal affective disorder
29 Jun 2018
HIV infection in pregnancy
19 Jun 2018
Suicide risk management
06 Jun 2018
Focal seizures
LATEST 50 UPDATED TOPICS
Top 10 trending topics
1. Acute pharyngitis
2. Non-ST-elevation myocardial infarction
3. Cholelithiasis
4. COPD
5. Community-acquired pneumonia
6. Type 2 diabetes in adults
7. Crohn's disease
8. Ischaemic stroke
9. Infective endocarditis
10. Haemangioma

Questions about Specialities in the ED?

02

How to assess the deteriorating Patient

Layout

Deteriorating patient

01

02

03

Assess a mannequin CSF/CTF roleplaying as nurse

0-8 Mins

- Perform an A-E assessment, asking for observations and clinical signs through your examination
- Perform a clinical skill relevant to the A-E assessment

8-10 mins:

- Interpret the investigation findings and appropriate SBAR to a senior
case summary NOT required)

Clinical skills

- Airway insertion; nasopharyngeal, oropharyngeal
- Administering oxygen/ nebulisers inc. venturi
- ABG
- Venepuncture
- Cannulation
- Subcut/Intramuscular injection
- Intravenous fluid administration
- Blood glucose
- BLS/ Choking

Investigations to interpret

- CXR, AXR
- ABG/VBG interpretation
- Blood results
- ECG

Station 5: Deteriorating Patient

Next 2 minutes:

- Review the investigations explaining your clinical reasoning
- You will not be required to give a detailed summary of the case to the examiner.

Potential A-E scenarios

- Anaphylaxis
- Asthma
- Opioid/ drug overdose
- Vomiting
- Stridor
- Choking/ foreign body
- Asthma/ COPD acute
- Pneumonia
- Pulmonary embolism
- Pneumothorax
- Hypovolaemia
- Sepsis
- Atrial fibrillation/ Tachyarrhythmia
- Bradyarrthymia
- MI/ ACS
- Hyperglycaemia; DKA and HHS
- Head injury (criteria for CT head)
- Seizure
- Stroke
- Hypothermia
- Hypo/Hyperkalaemia
- Hypoxia
- Cardiac tamponade
- Haemorrhage/ Bleed
- Urinary retention
- Pericarditis
- Acute heart failure
- Sepsis
- Hypovolaemia

Top Tips

1. Keep calm: Go through the steps
2. Ask someone to gather the arrest trolley, the notes (documentation), an ipad (for prescribing), and start a set of observations
3. Pull the curtains (privacy)
4. Delegate tasks to team members. Ask someone to call for help
5. Introduce yourself to the patient (and the rest of the team)
6. Treat abnormal findings as you come across them
7. UHL guidelines are always available. Nervecentre prescribing
8. A good SBAR is really important when calling a senior for further management
9. Documentation

Station 5: Deteriorating Patient - marking

Assesses ABCDE individually

- Checks for response, breathing and circulation
- Asks for observations when needed
- Interacts with clinical skills staff appropriately
- Demonstrates team working skills

Performs a procedural skill

- Recognises the need to perform the investigation/life saving skill
- Performs the skill competently
- Confident approach

Management

- Identifies and describes all of the positive findings
- Demonstrates a systematic approach to scenario
- Demonstrates clarity of thought and ability to prioritise information
- Demonstrates knowledge to appropriately manage condition

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Station 5: Deteriorating patient

Excellent	Calm, logical, skilled and fluent assessment of the patient. ABCDE assessment completed confidently and competently. Problems with ABCDE identified promptly and action to resolve them is decisive and appropriate. Performs skill decisively, safely and confidently. Gives a concise, well-structured case summary to the senior doctor, accurately explaining the diagnosis, the management already carried out and response, and outlining the continuing needs of the patient.

3

Cases

Layout

Cases

01 - The Unconscious Patient

02 - The Hypoxic Patient

03 - The Unresponsive patient

Case 1: The Unconscious Patient

You are the FY1 on-call and the nurse informs you that her patient is unconscious in his chair.

What are your next steps?

Before the A-E

1. AVPU: Unconscious and unresponsive to sternal rub. Patient breathing
2. Get patient in bed and start set of observations
3. Peri-arrest call, crash trolley, and call for help
4. Ask someone to get an IPad/prescription chart, patient's notes and start documenting. No respect form in place
5. Pull the curtains
6. Check 3 points of ID

Patient background sBar

Patient is a 63 year old man
Had a laparoscopic right hemicolectomy for bowel cancer 3 days ago

Checked operation notes, no complications during surgery

No Respect form in place

PMH: COPD, HTN, Bowel cancer, Diverticular disease, Hypercholesterolaemia

Dx: Atorvastatin, Salmeterol, Tiotropium, Amlodipine, Dalteparin 5000Units,

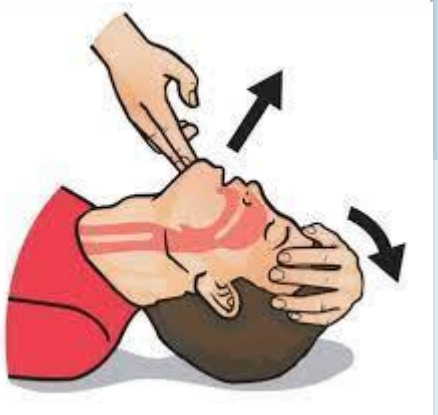
Ondansetron PRN, Oramorph PRN
No allergies

Airway assessment

Patient still unresponsive. No response to sternal rub

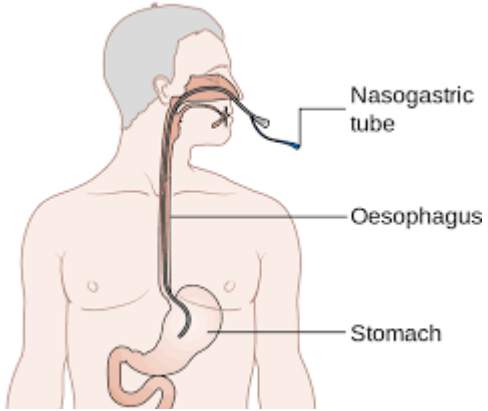
Head-tilt chin-lift and look inside mouth

Patient starts vomiting coffee-ground vomitus



Airway management

1. Naso-gastric tube
2. Nasopharyngeal airway
3. Lie on left lateral position
4. Suction vomit contents



Breathing assessment

- RR 20
- Oxygen saturations 85% on air
- Trachea central and chest expansion equal bilaterally
- Percussion resonant equally. Air entry equal bilaterally with expiratory wheeze bilaterally

Breathing management

1. ABG
2. Portable CXR
3. Oxygen 15L non-rebreathe mask
4. Back-to-back nebulisers salbutamol

Circulation assessment

- HR 104 and BP 70/40
- CRT 4s, Patient peripheries cool, pale and clammy
- Heart sounds normal, no raised JVP or peripheral oedema
- Dry mucous membranes
- One cannula in-situ pink 20G cannula
- Bloods: VBG, G&S, FBC, U&E, Coagulation profile
- ECG

Circulation management

1. Insert 2 wide-bore cannulas orange or grey
2. Fluid bolus 500ml Hartmans over 15 minutes
3. Strict fluid balance assessment

Disability assessment

- Patient rousable, GCS 11
- Verbally responsive, not fully alert
- Blood glucose 5
- Pupils equal and bilateral
- Temperature 36.3

TABLE 38-2

Glasgow Coma Scale

BEHAVIOR	RESPONSE	SCORE
Eye opening response	Spontaneously	4
	To speech	3
	To pain	2
	No response	1
Best verbal response	Oriented to time, place, and person	5
	Confused	4
	Inappropriate words	3
	Incomprehensible sounds	2
	No response	1
Best motor response	Obeys commands	6
	Moves to localized pain	5
	Flexion withdrawal from pain	4
	Abnormal flexion (decorticate)	3
	Abnormal extension (decerebrate)	2
	No response	1
Total score:	*Best response*	15
	Comatose client	8 or less
	Totally unresponsive	3

Disability management

1. Analgesia - Oramorph 10-20MG

Exposure assessment

- Head to toe assessment
- Catheter in-situ
- Abdomen hard, distended, bowel sounds absent
- Calves SNT

Reassessment

Airway: NG tube in-situ, Patient speaking, Airway patent, Sit patient up

Breathing: RR 19. Oxygen saturations 98%- can switch to venturi mask, air entry equal bilaterally, no added breath sounds

Circulation: BP 90/60, another fluid bolus, HS normal, CRT 3s, patient looks more pink

Disability: Blood glucose normal, pupils equal and bilateral, temperature 36.3

Exposure: abdomen hard and distended, bowel sounds absent. Calves SNT

Recommendation/ Next steps

The patient is now stable
Please review the investigation results of
The VBG:

pH	7.30
pO2	10
pCO2	Normal
HCO3	20
Lactate	9.0

SBAR handover

SBAR Communication Tool

S

Situation

- Introduce yourself & clarify **who** you are speaking to
- Provide **basic details** of the patient and their location
- Briefly explain the situation and **why** you are calling

B

Background

- Give a **brief overview** of the patient, including relevant clinical details (avoid overloading the person receiving the handover with too much information)

A

Assessment

- Communicate **relevant clinical findings**
- Include vital signs, examination findings, relevant investigation results and your overall impression

R

Recommendations

- State what you would like to happen
- Ask if you should take any **further action**
- Clarify expectation of response

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Next steps

Call the surgical registrar, SBAR

Plan from surgical registrar: CTAP immediate for ?bowel obstruction/ileus, NG tube,

Analgesia, Start antibiotics, IV omeprazole 40MG

Learning points

- Make sure you know how to **contact your senior**
- If you don't feel confident managing a patient alone, call for senior help.
- If a **patient is deteriorating**, you need to **call the family**
- Surgical patients deteriorate quickly and suddenly, make sure you remind a senior the next day to put in a **Respect form**
- **Document clearly** your A-E findings and **handover to the next team**
- Check in on team members and debrief with them and your senior for further reflection and learning

The A-E assessment

Aiway

- Introduce yourself to patient; check 3 forms of ID. If they’re responding to you airway is patent and move on to breathing
- Compromised airway due to inhaled foreign body, secretions or blood in airway, laryngospasm, soft tissue swelling: look inside mouth, nasopharyngeal airway
- Anaphylaxis: adrenaline
- Vomit /secretions: suction, left lateral position
- Unconscious: head-tilt chin-lift, oropharyngeal airway
- Reassess

Breathing

- Respiratory rate 12-20
- Oxygen saturations 94-98%, COPD 88-92%. ABG and administer oxygen if low 15L non-rebreathe mask. Sit patient upright
- General inspection
- Tracheal position
- Chest expansion
- Percussion
- Auscultation; CXR
- Reassess

Circulation

- HR 60-99
- Blood pressure 90/60mmHg- 140/90mmHg. Fluid bolus if low. After 2L if not responding ITU/Senior input
- Fluid balance assessment
- General inspection
- Peripheral temperature, CRT <2s
- JVP
- Heart sounds
- Peripheral oedema
- Reassess

Circulation

- 14G/16G 2 wide-bore cannulas
- Blood tests: VBG, Blood cultures, G&S samples, FBC, U&Es, Coagulation, Troponin, D-dimer, Toxicology screen, serial mast cell tryptase
- 12-lead ECG, continuous cardiac monitoring
- Bladder scan; urinary retention/obstruction
- Urine pregnancy test, urine dip, MC&S
- Catheterisation/ strict fluid balance
- Blood transfusion/ major haemorrhage procotol
- Reassess

Disability

- Consciousness: Alert, confusion, verbal, pain, unresponsive
- Pupils
- Drug chart review
- Blood glucose 4-5.8 and ketones if high
- GCS<8-> Anaesthetist (part of the arrest team)
- CT head
- Analgesia
- Reassess

Exposure

- Head-to-toe assessment
- Abdominal examination
- Calves
- Examine any lines/drains/catheters
- Temperature 36-37.9. Think SEPSIS
- Cultures/swabs
- Reassess

Questions?

Top Tips

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9. Documentation

How would you feel assessing a deteriorating patient?

How would you feel assessing a deteriorating patient?

Call for help! (There's always plenty of staff around who have dealt with this before)

Ask a member of staff to put out an arrest/peri-arrest call if needed. Check for respect form!

For unwell patients make sure you do the A-E and get a background before calling a senior

A-E assessment is also the initial measures to stabilise a patient.

SBAR to senior for further management: surgical reg, med reg, LRI coordinator, DART, arrest team, ITU

Questions?

Next Session...

Feedback

https://app.medall.org/feedback/feedback-flow?keyword=0849e69ff3b0fbe9b0b3e168&organisation=osceexpress

Thanks!

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