Osce Express
Session 8

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In Today's Session...

01

Managing Uncertainty

02

Multimorbidity + Polypharmacy

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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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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01

Managing Uncertainty

Layout

Managing Uncertainty

01

- Simulated patient – 5 minutes history taking and 5 minutes to explain **differential** Dx and management plan

02

- Diagnostically relevant findings will be told at the end of the first 5 minutes by the examiner

03

- No questions from examiner – purely observing

Station Layout

Managing Uncertainty 10 mins

Anjana Patel
DOB: 02/03/1984

Setting: GP surgery

You are working as a Foundation Doctor in General Practice and you are about to see Anjana who has recently been experiencing dizzyness.

You will need to:
0-5 minutes:
•Take a focused history from the patient. You will then be told the examination findings.

5-10 minutes:
•Explain the differential diagnosis and your suggested management to the patient

Top Tips

1. Managing uncertainty – the diagnosis will be uncertain!

2. Have a logical system based approach when taking the history (eg cardiovascular, respiratory, GI, psych..)

3. Remember ICE! – and address these in your management plan

4. Management plans – start simple and then suggest more specialist investigations if known. You will mainly be assessed on having a logical approach to the case and suggesting valid investigations, management and safety netting advise.

Top Tips

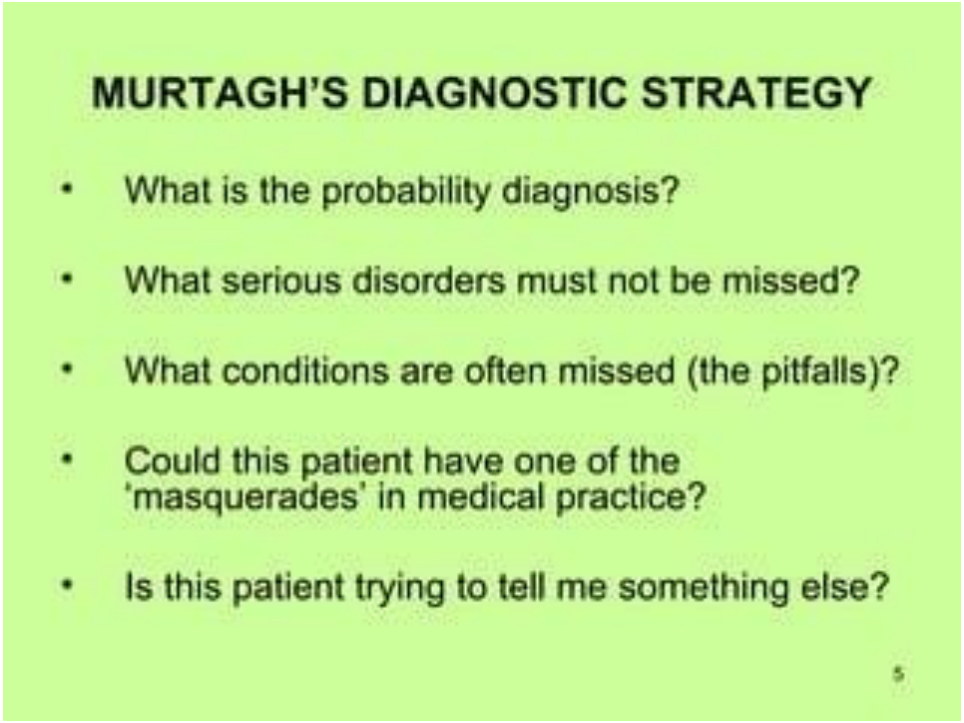
5. Pick up on patient cues – don't forget to have a biopsychosocial approach when questioning

6. Keep it succinct – you will need to ask some closed questions

7. Don't forget to safety net depending on the case – important in GP land!

8. Screen for **red flags - fever, drenching night sweats, weight loss (>10% in 6 months), fatigue..**

Murtagh's


MURTAGH'S DIAGNOSTIC STRATEGY
• What is the probability diagnosis?
• What serious disorders must not be missed?
• What conditions are often missed (the pitfalls)?
• Could this patient have one of the 'masquerades' in medical practice?
• Is this patient trying to tell me something else?
5

Managing Uncertainty – mark scheme

Communication and consultation skills Introduces self and puts patient at ease. Demonstrates sensitivity and empathy in questioning. Explains differential diagnosis clearly avoiding jargon. Explains management plan with empathy and sensitivity. Achieves a shared understanding of the nature of the problem.
Data-gathering Establishes focused presenting complaint and associated supporting history. Explores symptoms in adequate depth. Asks specifically about relevant 'red flag' symptoms. Is well-organised / systematic in approach to data-gathering
Management of patient Investigations to consider bloods (FBC, CRP, TFT), stool sample (calprotectin) Possibly also sigmoidoscopy/ colonoscopy Discusses appropriate treatment to include diet Discusses management of stress
Patient-centred care Effectively explores patient's ideas, concerns and expectations. Acknowledges the patients' agenda - demonstrates understanding of issues and challenges for patient. Effectively negotiates an acceptable and appropriate management plan with patient.
Professionalism Demonstrates professionalism during the consultation Demonstrates good time-management skills Identifies and advises for patient safety issue

Excellent	Skilled and fluent history and explanation Excellent interaction with patient – appears natural No or only minor omissions Uses clinical reasoning skills to confidently generate an appropriate list of differential diagnoses and most likely diagnosis Assured answers given to questions with full explanation, showing a deep level of understanding. Good level of empathy shown to patient.

What you will be assessed on..

1. Communication skills, data gathering, patient centred care, patient safety, duty of candour
2. Focused history taking
3. Communication skills
4. Diagnostic reasoning
5. Appropriately communicating uncertainty to the patient … this station is about NOT getting the correct diagnosis, rather appearing comfortable dealing with and managing uncertainty. You will most likely lose marks if you state one correct diagnosis you think it is!
6. Clinical reasoning skills including investigations and management
7. Time management skills

Approach

Example Layout

Managing Uncertainty 10 mins

Anjana Patel
DOB: 02/03/1984

Setting: GP surgery

You are working as a Foundation Doctor in General Practice and you are about to see Anjana who has recently been experiencing dizzyness.

You will need to:
0-5 minutes:
•Take a focused history from the patient. You will then be told the examination findings.

5-10 minutes:
•Explain the differential diagnosis and your suggested management to the patient

Practise With Us

You are working as a Foundation Doctor in a GP practice and you are about to see Mr Smith, who has come in with **breathlessness.**

You will need to:

Take a focused history from the patient (0-5 minutes). You will then be told the examination findings.

Explain the differential diagnosis and management plan to the patient (5-10 minutes)

Practise With Us.. Approach to history taking

HPC, PMHx, PSHx, Drug Hx, allergies, FHx, social Hx .... But keep it relevant and succinct

Onset – acute, subacute, chronic.. (to narrow down the differential).
Always screen for red flags (fever, nt sweats, wt loss)..

System based approach:

Cardiac: arrhythmias (?palpitations) acute pulmonary oedema, chronic heart failure, silent MI..
Pulmonary: asthma, COPD, pneumonia, PE, lung ca (?B symptoms), pleural effusion..
Other: anaemia, psychogenic breathlessness (social Hx), metabolic (DKA acutely, thyroid disorders), diaphragmatic splinting (ascites, obesity, pregnancy)

Examination findings..

HR 81 bpm

BP 139/80

Sats 99% O/A

Chest clear, HS I + II +0, abdo SNT

BM normal

Apyrexia

Investigations and management plan

Bedside, bloods, imaging, special tests

Cardiac: ECG, ?24 hour tape referral, if chest pain or exertional SOB consider referral to rapid access chest pain clinic where CTCA could be organised

Pulmonary: CXR, sputum cultures if applicable, peak flow, spirometry referral

Bloods: FBC (?anaemia), LFTs, U+E's, CRP, HbA1C, lipid profile..

Safety netting – worsening SOB, chest pain, dizziness etc – then seek medical attention

Patient information leaflets

Questions about this case?

2nd case ..

You are working as a Foundation Doctor in a GP practice and you are about to see Ms Rogers, who has come in with **fatigue.**

You will need to:

Take a focused history from the patient (0-5 minutes). You will then be told the examination findings.

Explain the differential diagnosis and management plan to the patient (5-10 minutes)

Approach to history taking..

System based approach

HPC, PMHx (?chronic conditions), PSHx, drug Hx, allergies, FHx, social hx (occupation, smoking and alcohol, exercise, ?psychosocial life events or stressors)

Cardiovascular, pulmonary, GP (red flags), neuro, psych..

Metabolic – DM (?polyuria, polydipsia, weight changes, family history..), hypothyroidism (?weight gain, hair loss, dry skin, cold intolerance, constipation, menorrhagia..)

Explore diet and lifestyle in social Hx

History taking..

- Assessment of a person presenting with tiredness/fatigue should include asking about:
  - What the person means by tiredness.
  - The onset, duration, severity, and precipitating factors.
  - The effect of sleep, rest, and exercise on symptoms, and the impact on daily activities.
  - Sleep pattern and quality.
  - Any psychosocial life events or stressors.
  - Any comorbid anxiety and/or depression.
  - Any comorbid chronic conditions.
  - Any contributory medications.
  - Possible symptoms of CFS, include persistent unexplained fatigue for at least 3 months, post-exertional fatigue or malaise, cognitive difficulties or memory problems, sleep disturbance, and chronic pain.
  - Any red flags suggesting a serious underlying condition, such as significant unintentional weight loss, fever, night sweats, persistent lymphadenopathy, and localizing or focal neurological signs.

Examination findings...

BP 124/70

HR 78 bpm, regular

Chest clear, HS I + II +O, abdo SNT

Apyrexial

No goitre palpable

Some conjunctival pallor present, hands cold to touch

Investigations and management plan..

Investigations:

Bloods – FBC, haematinics, LFTs, U+E's, CRP, bone profile (?hypercalcaemia, hypomagnesaemia..), HbA1C, lipids, thyroid function (?hypothyroidism)

Urine dip/ACR - ?haematuria, proteinuria

Pelvic USS – if symptoms of menorrhagia reported

Management plan suggestions:

Secondary care referral, manage underlying causes, patient information leaflets, sleep hygiene advice if applicable, lifestyle advice eg rest periods, relaxation techniques, healthy eating.. Managing stress, anxiety, depression

Questions about this case?

02

Multi-morbidity and Polypharmacy

Station guidance

Station 6: Multi-Morbidity and Polypharmacy

- 10 minutes
- You will be given the hospital discharge letter during the 2 minutes reading time and will have a copy to refer to throughout the station

You should:

- Explore the history with the patient (including history of presenting complaint, PMHx, Drug Hx, Social Hx)
- Discuss each of the patient's medications with them, including indications and relevant side effects
- Suggest any appropriate changes to the medication, explaining why these are indicated
- Negotiate and agree an acceptable plan with the patient

"Skilled and fluent history and explanation. No or only minor omissions.
Excellent interaction with patient – appears natural.
Assured answers given to questions with full explanation, showing a deep level of understanding.
Highly-appropriate rationale for any changes to medication, communicated to the patient with a high degree of skill.
Works in partnership with patient to develop and agree the plan."

Station Layout

Medication review

01

02

03

- **Discharge letter**
  Review the available notes during the 2 min reading time and start forming a plan

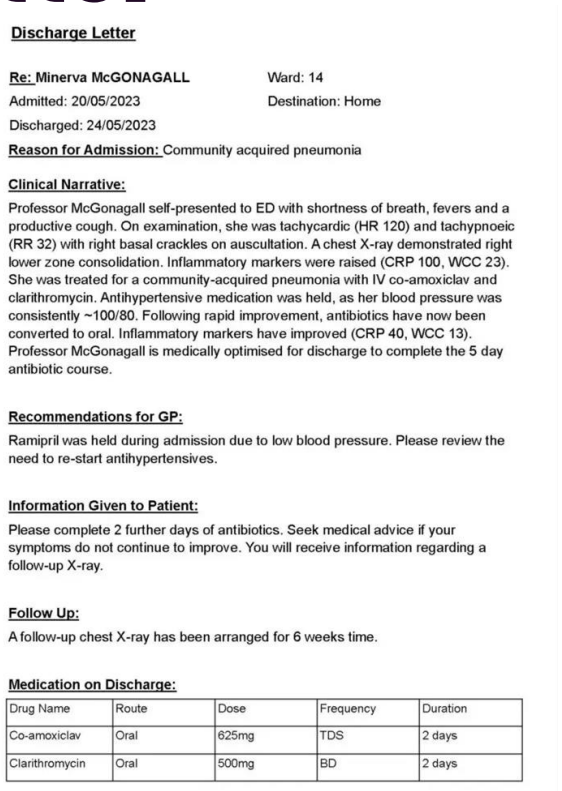
- **Brief history**
  Including the patient's agenda and ICE

- **Medication review**
  Personalised to patient's situation, condition and wishes

1. Discharge Letter

- Reason for admission
  - Indicates most current problem
  - Control of condition?
- Information on stay
  - Complications?
  - New diagnoses?
- Recommendations for GP
- Medication changes
  - Necessary?
  - Interactions
  - Side effects

MAKE NOTES



Discharge Letter

Re: Minerva McGONAGALL Ward: 14

Admitted: 20/05/2023 Destination: Home

Discharged: 24/05/2023

Reason for Admission: Community acquired pneumonia

Clinical Narrative:

Professor McGonagall self-presented to ED with shortness of breath, fevers and a productive cough. On examination, she was tachycardic (HR 120) and tachypnoeic (RR 32) with right basal crackles on auscultation. A chest X-ray demonstrated right lower zone consolidation. Inflammatory markers were raised (CRP 100, WCC 23). She was treated for a community-acquired pneumonia with IV co-amoxiclav and clarithromycin. Antihypertensive medication was held, as her blood pressure was consistently ~100/80. Following rapid improvement, antibiotics have now been converted to oral. Inflammatory markers have improved (CRP 40, WCC 13). Professor McGonagall is medically optimised for discharge to complete the 5 day antibiotic course.

Recommendations for GP:

Ramipril was held during admission due to low blood pressure. Please review the need to re-start antihypertensives.

Information Given to Patient:

Please complete 2 further days of antibiotics. Seek medical advice if your symptoms do not continue to improve. You will receive information regarding a follow-up X-ray.

Follow Up:

A follow-up chest X-ray has been arranged for 6 weeks time.

Medication on Discharge:

Drug Name	Route	Dose	Frequency	Duration
Co-amoxiclav	Oral	625mg	TDS	2 days
Clarithromycin	Oral	500mg	BD	2 days

2. Brief History

- HCP
- PMHx
- DH
- Social Hx
- ICE

→ Useful later when thinking of and negotiating medication changes

3. Medication Review

"Discuss each of the patient's medications with them, including indications and any relevant side effects"

- Start with what the patient is most concerned about (ICE) / highest yield
- ?Compliance

"Suggest any appropriate changes to medications, explaining why these are indicated"

- Dose changes, medication changes, stopping/ starting

"Negotiate and agree an acceptable plan with the patient"

- Patient-centred

Example Issues...

Interactions

- NSAID and ACEi
- Blood thinners/ NSAID / SSRIs
- Methotrexate and trimethoprim
- ACEi and potassium-sparing diuretics

Side effects

- Constipation, nausea with opiates
- Swelling, hypotension, headaches with CCBs
- Dry cough ACEi
- Corticosteroids in diabetes/ mood disorders

Contraindicated

- NSAID without PPI
- COCP rules
- Hepatic/ renal impairment?
- Medication rules e.g. bisphosphonate holiday
- Disease-specific guidelines e.g. clopidogrel for 12mth after MI
- Propranolol in asthma

Correct use/ compliance:

- Inhalers
- Bisphosphonates
- Sick-day rules

Examiner expectations

Exploration of history Asks relevant questions about presenting complaint Follows up and explores key symptoms in detail
Explores patients views / Communication Discusses each medication and actively involves the patient in discussion. Establishes patients views and willingness to continue Deals with discussion/challenge sensitively and respectfully
Discussion of medication Accurate discussion of relevant interactions / side effects Accurate assessment of need for each medication. Rationale for continuing / stopping medication fully explained.
Medication change Suggests appropriate changes to medication Successfully negotiates & agrees acceptable management plan with patient.

Excellent	Skilled and fluent history and explanation. No or only minor omissions. Excellent interaction with patient – appears natural Assured answers given to questions with full explanation, showing a deep level of understanding. Highly-appropriate rationale for any changes to medication, communicated to the patient with a high degree of skill. Works in partnership with patient to develop and agree the plan.

Use Beyond OSCEs?

- Even the basic interactions still cause issues in practice
- Over 70% of ADRs are avoidable
- Most common culprits are:
  - NSAIDs
  - Antiplatelets
  - Diuretics
  - Warfarin
  - ACEi and ARBs

STOPP-START v.2

Screening Tool Of Older People's Prescriptions (STOPP)
Screening Tool to Alert to Right Treatment (START)

Anticoagulants and antiplatelets

STOP:

Aspirin:

- Long-term aspirin at doses greater than 160 mg per day (*increased risk of bleeding, no evidence for increased efficacy*).
- with a past history of peptic ulcer disease without concomitant PPI (*risk of recurrent peptic ulcer*).
- in combination with warfarin or NOACs in patients with chronic atrial fibrillation (*no added benefit from aspirin*).
- as monotherapy for stroke prevention in atrial fibrillation.

Aspirin, clopidogrel, dipyridamole, warfarin or NOACs with concurrent significant bleeding risk, i.e. uncontrolled severe hypertension, bleeding diathesis, recent non-trivial spontaneous bleeding (*high risk of bleeding*).

Aspirin plus clopidogrel as secondary stroke prevention, unless the patient has a coronary stent(s) inserted in the previous 12 months or concurrent acute coronary syndrome or has a high grade symptomatic carotid arterial stenosis *(no evidence of added benefit over clopidogrel monotherapy)*.

Antiplatelet agents with warfarin or NOACs in patients with stable coronary, cerebrovascular or peripheral arterial disease *(No added benefit from dual therapy)*.

Warfarin or NOACs:

- for first deep vein thrombosis without continuing provoking risk factors (e.g. thrombophilia) for longer than 6 months *(no proven added benefit)*.
- for first pulmonary embolus without continuing provoking risk factors (e.g. thrombophilia) for longer than 12 months (*no proven added benefit*).

NSAID and warfarin or NOACs in combination (*risk of major gastro-intestinal bleeding*).

Cases

CASE 1: Angela Bard, 73 y/o F

Mrs Bard was admitted on 10/01/24 following an infective exacerbation of COPD. She received antibiotics and steroids, and remained in hospital for 3 days before being discharged home. Her BP was consistently low during admission.

eGFR 70. U+E NAD.

GP to please review medication.

PMH

- COPD
- HTN
- Hypercholesterolaemia
- Previous MI (2019)
- AF

Drugs on discharge

- Salbutamol 2 puffs PRN
- Fostair inhaler (beclometasone/formoterol) BD
- Amlodipine 10mg OD
- Ramipril 5mg OD
- Aspirin 75mg OD
- Clopidogrel 75mg OD
- Bisoprolol 10mg OD
- Simvastatin 20mg Nocte
- GTN spray 1 puff PRN
- Apixaban 5mg BD
- Alendronate 10mg OD

Potential Changes

- COPD control - how many exacerbations? Smoking? Limits on daily life? Spacer? Flu jab?
- Low BP - on three BP lowering drugs
  - ?SE - swelling, headaches / dry cough, electrolytes
- Blood thinners
  - Clopi > 12mth
  - Aspirin and apixaban - no added benefit in stable disease
- Bisphosphonate holiday?
  - 3-5 years consider break

Learning points

- Guided by patient
- Knowledge of guidelines where possible
- Consider referral to specialist clinics
- Consider lifestyle changes

CASE 2: David Yong, 68 yr/o M

Mr Yong was admitted on 08/01/23 for a fall with 3 rib fractures. He remained in hospital for 2 days for pain management. He was also struggling with shortness of breath and a chest X-Ray showed pulmonary oedema so his furosemide was increased and dapagliflozin was added.

GP to please review medication.

PMH	T2DM Heart failure
New medications	Ibuprofen 400mg TDS Paracetamol 1g QDS Codeine 30/500 2 tabs QDS Oromorph 15mg QDS
Medication changes	Furosemide 80mg BD INCREASED Dapagliflozin 10mg OD NEW
Existing medications	Ramipril 5mg OD Bisoprolol 10mg OD Gliclazide 80mg Tolterodine 4mg OD Amitriptyline 25mg NOCTE

Potential Changes

- Risk of going to toilet at night
  - Amitriptyline - drowsy, anticholinergic burden
  - Tolterodine - anticholinergic burden
  - Underlying prostate issue?
- New furosemide ?dose
- Gliclazide and dapagliflozin together - hypo
- Ibuprofen without stomach protection
- Opiate burden
  - Negotiate with patient, additional risk of pneumonia if inadequate ventilation
  - Codeine and oromorph
  - Reduce frequency?
  - Laxatives

Learning points

- Negotiate with patient taking their wishes into account
- Anticholinergic burden
- Reasons for medication

Drug with ACB 0	Drugs with ACB 1	Drugs with ACB 2	Drugs with ACB 3
Mirabegron	Tramadol	Cetirizine	Fesoterodine
Domperidone	Hydrocortisone	Sertraline	Tolterodine
	Prednisolone	Prochlorperazine	Darifenacin
	Codeine		Trospium
	Warfarin		Oxybutynin
	Nifidepine		Chorpheneramine
	Hydralazine		Promethazine
	Ranitidine		Amitryptiline
	Mirtazepine		Solifenacin

Questions?

Key Takeaways...

01 *Establish the patient's concerns and wishes early in the consultation*

02 *Use the reading time to its full potential*

03 *Review treatment pathways of common chronic conditions, and the STOPP START Tool*

Next Session...

Feedback

Thanks!

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