

Instructions to Candidates – Aim for 8 minutes

You are a Foundation doctor working in A&E.

It is 7am, your next patient is Mrs Rebecca Gill, an 85-year-old lady who is complaining of pain in her groin.

Please take a history and formulate your differential diagnoses.

At 6 minutes, the examiner will ask you some questions.

Name: Rebecca Gill

Age: 85, *PC:* Pain in groin

HOPC:

You woke up around 6AM with pain in the left groin today. The pain is focused in the groin area and radiates a little to your knee. Moving makes it worse, you are unable to weight bear since this morning. Your partner called NHS 111 and the ambulance had brought you in. You had some paracetamol from the paramedics just now.

No other joints seem to be affected. Systemically well, no rash, no urination issue, no swelling noted around the area. Last meal was yesterday's dinner at 9pm. You have only had some water from the kind nurse just now.

Only if asked about trauma, you had a fall last night when you got up for a wee. Prior to the fall you had no chest pain / dizziness / light headedness. You remember falling. You believe you tripped on your slipper which is always misplaced by your dog and it was quite dark. You fell onto your left hip and woke your partner up. She helped you back into bed. Your fall was not witnessed as it was 4am at the time. You went back to bed right after and woke up with this pain.

PMH:

IHD, NSTEMI, AF, Hypothyroidism, Osteoporosis

DH: Furosemide, Candesartan, Levothyroxine.

Only if asked about "blood thinning medication" (anticoagulant) aspirin, warfarin, Adcal

Allergy: NKDA

FH: Nil

SH (LOST):

Living situation:

Lives in a flat, has an escalator. **Walks with a stick.** You consider yourself independent, able to do shopping on your own. Lives with wife and a dog.

Occupation:

Retired

Social: Smoking, Alcohol, Recreational drugs, Exercise

Ex-smoker (stopped in 1995). Drinks occasionally. No recreational drugs. Don't do much exercise.

Travels: N/A

I: You feel like you may have broken something but you are not sure.

C: Not worried, you think that you will maybe need some medication and be able to go home.

E: Expect to go home.

Questions:

1. What are your differential diagnosis?

Neck of femur fracture, femur dislocation, pelvic fracture

Which is your top diagnosis? NOF#

2. If you were to examine this patient, what will you see on general inspection of the affected leg?

Shortening, externally rotated.

3. What investigations would you like to request for this patient? And why?

Bloods: pre-op work up, group and save, **INR** (if on anticoags)

ECG: important for monitoring and pre-op

CXR: if on floor for long time, may get pneumonia, rhabdomyolysis and also pre-op

Imaging: **X-ray pelvic and Left hip joint. *AP and lateral view.** (confirms diagnosis)

4. How will you manage this patient?

Analgesia, fascia iliaca block, NBM + fluids, referral to orthopaedics asap.

Answer sheet:

Area	Clear Fail	Fail	Satisfactory	Good	Excellent
C/O & HOPC					
PMH					
DH - *anticoagulants					
SH					
FH					
ICE					
Differential dx					
Investigations					
Rapport/ Comm skill					
Overall					

Feedback

Neck of femur fracture needs to be acted on urgently because the mortality rate is high. Up to 10% of people die within 1 month and up to 30% within the year. However, it is important to note that most deaths are associated with the co-morbidities of the patient and not just directly the fracture itself. The fracture reflects the underlying ill health.¹

Establishing the patient's mobility baseline is important here. This info is useful for surgeons to decide on the type of surgery. Past medical and drug history is also essential to decide on fitness for surgery.

Classifying NOF – Garden’s classification (intracapsular fracture)

I – nondisplaced, incomplete fracture

II – nondisplaced, complete fracture

III – partially displaced, complete fracture

IV – completely displaced, complete fracture

Management:

Garden’s I & II – cannulated screw

Garden’s III & IV –

(a) hemiarthroplasty - commonest procedure

(b) total hip replacement – if patient has better functional status, mobilizing with one stick

(1, 2, put a screw. 3, 4, on the floor)

Complication:

Avascular necrosis, non-union } especially if delayed reduction, infection, DVT.

References (accessed July 2020):

1. <https://www.nice.org.uk/guidance/cg124/documents/hip-fracture-full-guideline2>

2. <https://www.orthobullets.com/trauma/1037/femoral-neck-fractures>