

Station Vignette

You are a resident working at the Emergency Department. Jimmy Gill, a 39-year-old man has presented with a sore right wrist and forearm.

Jimmy tripped down the stairs and fell on an outstretched right hand onto tiles. He has 8/10 pain in his right wrist and forearm and is hesitant to move his right upper limb due to the pain. There is no paraesthesia. There was no head injury and his primary survey is clear.

He is right-handed. He has no past medical or surgical history and no allergies.

VITALS:

• **HR**: 90 bpm

• **BP**: 135/90 mmHg

• **RR**: 16

O₂ Sats: 99% RA
 Temp: 37.5°C

TASK

You have a total of **6 minutes** to perform a relevant upper limb examination.

Do **NOT** perform a secondary survey.

At the end of the allotted time, you will have **3 minutes** to answer the examiner's questions.

Do **NOT** take a history.

<u>PATIENT</u> INFORMATION

You are Jimmy Gill, a 39-year-old male who has presented to the Emergency Department due to right wrist and forearm pain.

- On general inspection:
 - o You are sitting up in bed in obvious pain
 - o You are holding up your right arm with your left hand
 - You are hesitant to move your right arm due to the pain
- On palpation of the right upper limb:
 - No shoulder tenderness
 - No elbow tenderness
 - o Tenderness in distal 1/3 radius shaft
 - Tenderness all around right wrist, particularly around the radial + ulnar styloid
 - o No carpal or metacarpal or phalangeal or PIPJ or DIPJ tenderness
 - No anatomical snuffbox tenderness
- Movement of right upper limb:
 - All movements are restricted by pain → you are hesitant to move your right arm
- Gross sensation of right upper limb intact
- Left upper limb is all normal

EXAMINER QUESTIONS

1. Interpret the following **X-rays**

X-ray wrist (PA view)



X-ray wrist (lateral view)



2. What management would you like to do for this patient?

MARKING CRITERIA – CASE 4 03 02

Item	Criteria	Mark
Introduction	☐ Hand hygiene	/ 2
	□ Appropriate introduction	
General inspection	□ Name, age and sex of patient	/ 3
	□ Orientation	
	☐ Appropriate end-of-bedogram	
	 Mentions any of the following- looks well/unwell, diaphoresis, body habitus, colour 	
Vital signs	☐ Mentions that all vitals are within normal limits	/1
Inspection	Elbow:	/3
	☐ At least 3 of the following: symmetry, swelling,	
	deformity, scars, redness, bruising, rashes	
	Hand and wrist:	
	☐ At least 3 of the following: symmetry, swelling,	
	deformity, scars, redness, bruising, rashes	
	Shoulder:	
	☐ At least 3 of the following: symmetry, swelling,	
	deformity, scars, redness, bruising, rashes	
Palpation	- Elbow:	/9
	□ Temperature	
	☐ Lateral and medial epicondyles	
	□ Olecranon	
	☐ Radial head	
	- Forearm:	
	☐ Temperature	
	☐ Palpates along radius and ulnar bone	
	- Hand and wrist:	
	☐ Radial + ulnar styloid	
	☐ Anatomical snuffbox	
	☐ Examines carpals, metacarpals, phalanges and	
	relevant joints	
Movement	Note that movements are not necessary to perform when suspecting an acute fracture. Students may offer to perform the movements. If students ask the SP to perform movements, direct	/1
	the student to move on.	
	☐ Mentions that it is not necessary to perform shoulder / elbow / wrist / finger / thumb movements	
Neuro-	☐ Radial pulses	/3
vascular	☐ Capillary refill +/- temperature	
status of upper limb	☐ Gross sensation of upper limb- including radial, median and ulnar nerve distribution	
Contralateral ipper limb	☐ Examines contralateral upper limb appropriately	/1
Other tests	☐ Tinel's sign	/1

Questions	Xrays:	/9
	☐ 0.5 point- Confirms patient details including name and	
	sex	
	☐ 0.5 point- Confirms looking at X-rays of right wrist	
	□ 0.5 point- Confirms views (PA and lateral views) +/-	
	assesses quality of film e.g. exposure (cortex, medulla and soft tissues should be seen)	
	☐ 1 point- Identifies site of fracture- radius shaft # (likely distal third of radius)	
	□ 0.5 point- Extra-articular #	
	·	
	□ 0.5 point- Completeness- complete #	
	□ 0.5 point- Direction- transverse # (accept oblique)	
	□ 0.5 point- Unstable #	
	□ 0.5 point- Closed #	
	☐ 0.5 point- Volar displacement	
	☐ 0.5 point- Dorsal angulation	
	☐ 1 point- Identifies radioulnar dislocation (accept widening	
	of radioulnar joint)	
	☐ 1 point- Diagnoses Galeazzi fracture	
	Management :	
	☐ 0.5 point- Analgesia	
	☐ 0.5 point- Orthopaedic consult and/or surgery	
	 Student does not have to mention specific type of surgery 	
	■ NB: Galeazzi fractures are unstable → will	
	require ORIF and reduction +stabilisation of	
	distal radio-ulnar joint	
Olahat	https://www.orthobullets.com/trauma/1029/galeazzi-fractures	15
Global score	Overall impression of candidate based on warmth, structure	/5
	and competence: 1 = fail	
	2 = borderline	
	3 = pass/expected	
	4 = good	
	5 = excellent	
	Total	/38

CT reference:

https://radiopaedia.org/cases/97432/studies/117613?lang=gb&referrer=%2Fartic les%2Fgaleazzi-fracture-dislocation%3Flang%3Dgb%23image_list_item_57195315#findings