



# 021

## SUB-MIDICINE

## MINI-OSCE



الَّذِي أَخْسَنَ كُلَّ شَيْءٍ خَلْقَهُ وَبَدَا خَلْقَ الْإِنْسَانِ مِنْ طِينٍ  
• ثُمَّ جَعَلَ نَسْلَهُ مِنْ سُلَالَةٍ مِنْ مَاءٍ مَهِينٍ • ثُمَّ سَوَّاهُ  
وَنَفَخَ فِيهِ مِنْ رُوْجِهِ وَجَعَلَ لَكُمُ السَّمْعَ وَالْأَبْصَارَ وَالْأُفْنَدَةَ  
قَلِيلًا مَا تَشْكُرُونَ

# 1ST ROTATION

## Special Thanks

Leen Abdulqader

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صدقة جارية عن المغفور له بإذن الله، عمر عطيه من دفعة 2023 – كلية الطب، الجامعة الأردنية

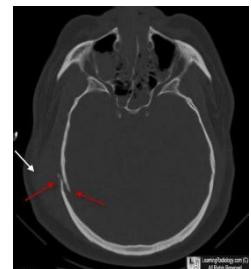
اللهم ارحمه واغفر له، وأنزله منزلًا مباركًا، ووسع مدخله. إنا لله وإنا إليه راجعون. لا تنسوه من دعائكم

# **RADIOLOGY**

**Q1: What is the type of fracture?**

**Ans:**

Depressed skull fracture



**Q2: What is the pathology?**

**Ans:**

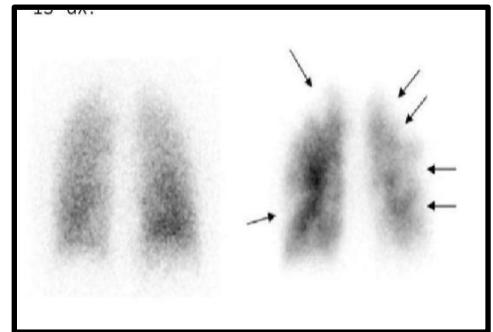
Left ACA infarct



**Q3: Spot the diagnosis:**

**Ans:**

PE (left lower lobe PE)



**Q4: What is the pathology?**

**Ans:**

Osteosarcoma (Codman triangle and sunburst)



**Q5: What is the pathology?**

**Ans:**

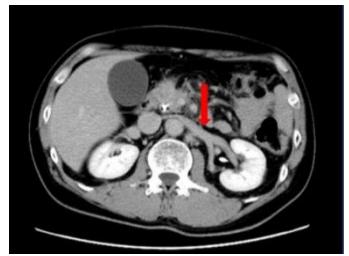
Gout



**Q6: What is the labeled structure?**

**Ans:**

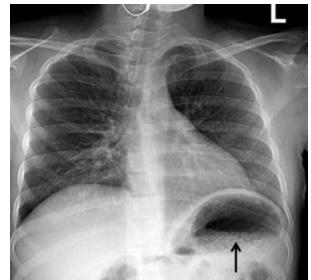
Left renal vein



**Q7: What is the structure?**

**Ans:**

Gastric Bubble (Stomach)



**Q8: What is the pathology?**

**Ans:**

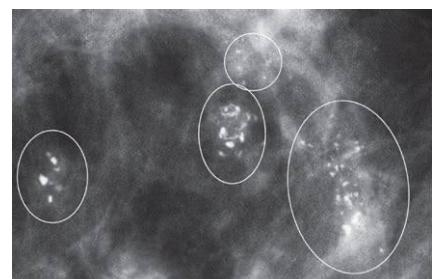
Lipoma



**Q9: Mammogram, what is the best next step?**

**Ans:**

Biopsy (Pleomorphic clustered clarifications)



**RTA Patient came to you with the following:**

**Q10: What is the mostly applied Position of these patients?**

Anterior Posterior (AP)

**Q11: Describe all pathologies you see?**

Radio.... Etc, Pneumothorax in right lung with rib fracture



**Q12: What is part pointed with the arrow?**

Stomach

**Q13:**

**A. Imaging Modality?**

Double contrast barium enema.



**B. Diagnosis?**

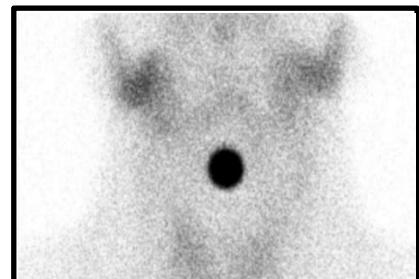
Colonic diverticulosis.

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**Q14: A nuclear image of thyroid:**

**A. What is the most probable Diagnosis?**

Subacute thyroiditis



**B. What is the expected RAIU?**

Low (less than 5%)

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**Q15: A 5-year-old kid with hip pain.**

**A. Imaging modality?**

Ultrasound



**B. Diagnosis?**

Septic arthritis

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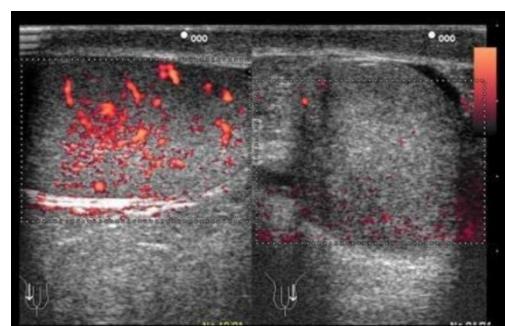
**Q16: Boy with testicular pain**

**A. What is imaging modality?**

Power doppler Ultrasound.

**A. Diagnosis?**

Testicular torsion

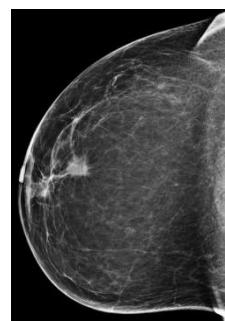


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**Q17: What is BI-RADS score in this case?**

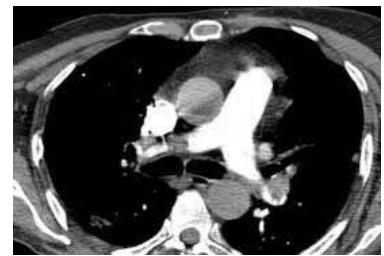
**Ans:**

5 (Speculated mass)



## Q18: What is the imaging modality and cut level?

Chest CT



## Q19: Describe what you see:

Filling defects in both the left and right pulmonary arteries

## Q20: What is Dx?

PE

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## Q21: Abnormal MRA of circle of Willis and asked for Dx.

**Ans:**

Left PCA was completely occluded and Anterior left with anterior communicating artery was partially occluded

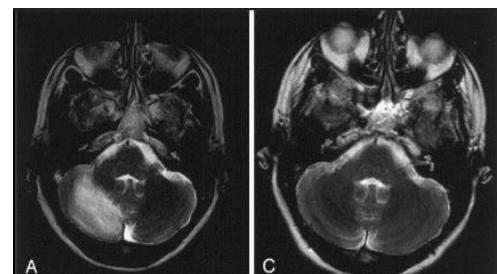


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## Q22:

### A. Description

MRI of the cerebellum sequence was DWI and ADC (diffusion restriction)



### B. Diagnosis?

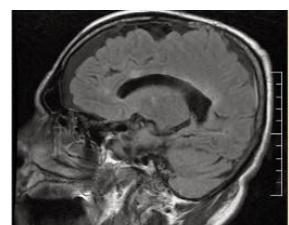
Left cerebellar infarction (PICA)

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## Q23: What is the sequence and the cut level?

**Ans:**

Sagittal T flair

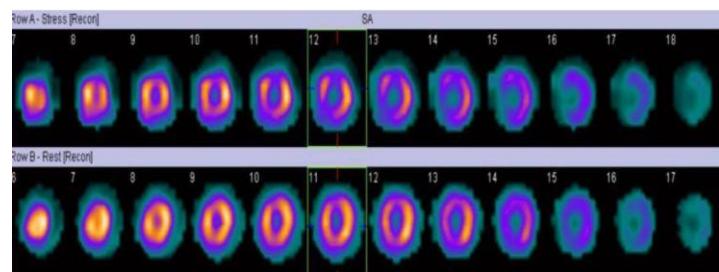


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## Q24: Spot Diagnosis

**Ans:**

Stress induced ischemia in the anterior and septal wall of the heart



## **Q25: Most common cause of hemorrhage?**

**Ans:**

HTN



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## **Q26:**

**A. What is the name of the following sign?**

Double bubble sign

**B. What is the diagnosis:**

Duodenal atresia



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## **Q27: Diagnosis?**

**Ans:**

Subchondral sclerosis

Osteoarthritis



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## **Q28: Stochastic effect as the dose increase, ..... of cancer?**

**Ans:**

Increases probability

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## **Q29: The 3 things about safety of radiology: Optimization, justifications, and?**

**Ans:**

Dose limitation

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## **Q30: What is the material used in protective wearing**

**Ans:**

Lead

# **DERMATOLOGY**

**Q1: What is the most common bacterium involved in the pathophysiology of this condition?**

**Ans:**

Propionibacterium acnes



**Q2: What is the most common infectious agent responsible for this lesion?**

**Ans:**

Herpes simplex virus (HSV)



**Q3: What is the name of the secondary lesion observed (one word only)?**

**Ans:**

Crust



**Q4: Man in 30s presented to ER with skin and oral lesions, Immunofluorescence test was done, shows IgG and C3 depositions intercellular /intraepidermal, which protein is targeted by circulating autoantibodies?**

**Ans:**

Desmosomal cadherin desmoglein 3 (Dsg3).



**Q5: A patient presents with pruritus, and his siblings in the same household have similar symptoms. What is the next appropriate management?**

**Ans:**

First-line treatment for scabies: 5% permethrin cream for all affected household members.



**Q6: What is the diagnosis, and which virus is responsible for this condition?**

**Ans:**

Shingles, Varicella-zoster virus (VZV)



**Q7: What is the name of the primary lesion observed?**

**Ans:**

Nodule



**Q8: A patient presented to the clinic with this circular erythematous plaque with adherent scales and scarring alopecia ,What is the most likely diagnosis?**

**Ans:**

Discoid lupus erythematosus (DLE)



**Q9: A patient came with this lesion ,she has history of RA ,-ve bacterial culture, What is mostly the name of this ulcer?**

**Ans:**

Pyoderma gangrenosum



**Q10: What is the abnormality observed in these nails?**

**Ans:**

Nail pitting



# **FORENSIC & TOXICOLOGY**

**Q1: A 38-year-old male farmer was brought to the emergency department after inhaling diesel fumes due to a malfunctioning diesel water pump. He presented with severe dyspnea, chest pain, and persistent cough.**

**1. What is the most likely cause of death?**

Carbon monoxide (CO) poisoning

**2. What is the antidote for this condition?**

100% O<sub>2</sub>

**3. True or False: Immediate treatment at the scene is recommended.**

False

**4. True or False: Administration of amphetamines is indicated in this case.**

False

**5. True or False: Bicarbonate therapy should be given to correct acidosis in this patient.**

False

**Q2: A child presented to ER after taking 9 pills of her brother medication, he's diagnosed with ADHD, she has agitation, hyperpyrexia, tachycardia.**

**1. In this poisoning case, which substance accumulates and is responsible for the clinical effects?**

Dopamine

**2. What effect is expected on the patient's blood pressure?**

Elevated blood pressure

**3. Which drug should be administered to manage agitation?**

Benzodiazepines

**4. What procedure can be performed for gastric decontamination?**

AC

**5. Is there a specific antidote available for this poisoning?**

None

**Q3: A young man was rushed to the emergency department with central nervous system depression, respiratory depression, and pinpoint constricted pupils.**

**1. What is the most likely diagnosis in this case?**

Heroin intoxication

**2. What is the antidote for this condition?**

Naloxone

**3. Which medications can be used to treat withdrawal symptoms?**

Methadone or Buprenorphine

**4. Which toxicology screen confirms this diagnosis?**

6-Monoacetylmorphine (6-MAM)

**5. True or False: Amphetamines are beneficial in managing this case.**

False

**Q4: A patient presents with accidental acid ingestion.**

**1. Which protective demulcents or emulsants can be given?**

Milk

**2. Is gastric lavage recommended in this case? Why or why not?**

Contraindicated, as it can cause re-exposure, esophageal perforation, or aspiration pneumonia

**3. Is emesis recommended in this case? Why or why not?**

Contraindicated, as it can cause re-exposure, esophageal perforation, or aspiration pneumonia

**4. What is the risk associated with attempts to neutralize the ingested acid?**

Produce heat that can worsen tissue injury

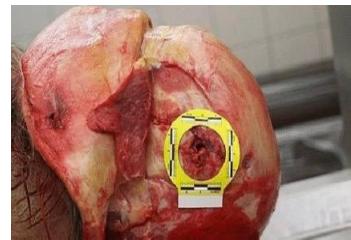
**5. What is the role of activated charcoal in this scenario?**

Ineffective and may impede wound healing

**Q5: A patient sustained a gunshot wound to the brain.**

**1. What is the estimated distance from which the shot was fired?**

Can't determine



**2. Is the beveling observed in the inner or outer table of the skull?**

Inner table

**3. True or False: This is a perforating wound.**

Can't be determined

**4. What is the cause of death?**

Brain laceration

**Q6: A patient was brought to the emergency department following a road traffic accident. On examination, the Glasgow Coma Scale was 14/15, vital signs were stable, and there was no evidence of skull fracture or hematoma.**



**1. Is the wound caused by blunt force trauma?**

Yes

**2. What is the expected incapacity period for this type of wound?**

Up to one week

**3. What is the general condition of the patient (الحالة العامة)?**

Intermediate

**4. What is the status of the blood vessels at the base of the wound?**

They remain intact at the base of the wound, represented as "tissue/structure bridging."

**Q7: Look at this picture carefully then, answer the following questions.**

**1. What is the type of this wound?**

Imprint abrasion



**2. True or False: Hypostasis appears in the dependent areas of the body in this patient.**

True

**3. What is the pathognomonic fracture associated with this case?**

Outward fracture of the hyoid bone

**4. What is the typical cause of a circular wound observed on the body?**

Knob

**5. Is it complete?**

Can't be determined without seeing his initial position

**Q8: Look at this picture carefully then answer the following questions.**

**1. What is the mechanism behind this postmortem change?**

Lack of ATP along with the loss of muscle softness and elasticity



**2. Mention two factors that affect this postmortem change.**

Electrocution, high temperature, physical activity before death

**3. When does this change typically start after death, and in which muscles?**

1–2 hours after death, affecting all muscles

**4. True or False: This happens due to loss of muscle tone.**

False

**5. If the body is cold and the muscles are stiff, what can be inferred about the time of death?**

12–24 hours ago

# EMERGENCY

## Q1: Regarding this ECG, knowing that he had no palpable pulse.



### 1. What is the diagnosis?

Pulseless electrical activity (PEA)

### 2. Is this rhythm shockable or non-shockable?

Non-shockable

### 3. During CPR, what is the maximum pause allowed to check pulse or place an airway?

≤ 10 seconds

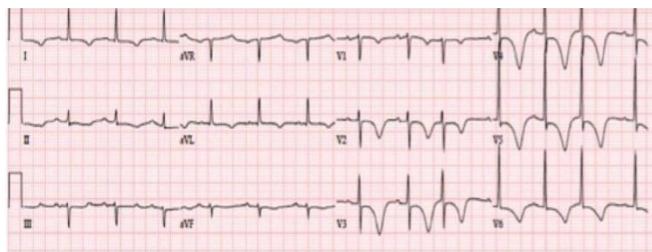
### 4. How often should rhythm checks be performed during resuscitation?

Every 2 minutes

### 5. Which drug is indicated in this case?

Epinephrine

## Q2: Regarding this ECG, answer the questions.



This ECG is not the exact one from the exam. The correct ECG shows T-wave inversion in Leads I, aVL, and V2-V5.

### 1. What is your diagnosis?

NSTEMI

### 2. Which myocardial territory is affected?

Anterolateral wall

### 3. Which artery is affected?

Left anterior descending (LAD) artery

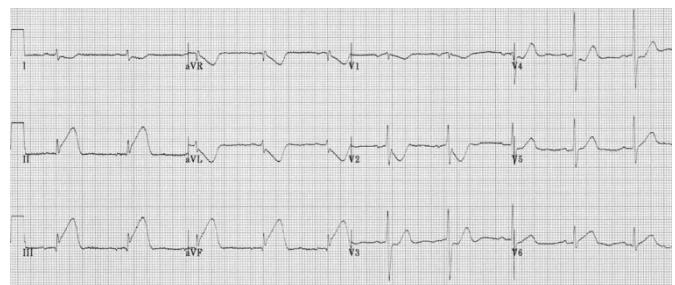
### 4. Which leads show changes, and what is the change?

Lead I, aVL, V2-V5 – T-wave inversion

### Q3: Regarding this ECG, answer the questions.

#### 1. What is the diagnosis?

Inferior ST-elevation myocardial infarction (STEMI)



#### 2. Which myocardial territory is affected?

Inferior wall of the heart

#### 3. Which is the culprit artery?

Right coronary artery (RCA)

#### 4. What is the triage?

High priority / Emergency - immediate reperfusion therapy indicated

(National triage scale 1/ immediate)

#### 5. What are the changes seen in V2?

Reciprocal changes

#### 6. During activation of the Cath lab, which drugs should be given?

Morphine, Oxygen, and Aspirin

### Q4: Regarding this ECG, answer the questions if you know the patient is not stable (Bp 70/30).

#### 1. What is the diagnosis?

Atrial fibrillation (A-fib)

#### 2. What is the next step?

Cardioversion

#### 3. Do you want to sedate the patient, yes or no?

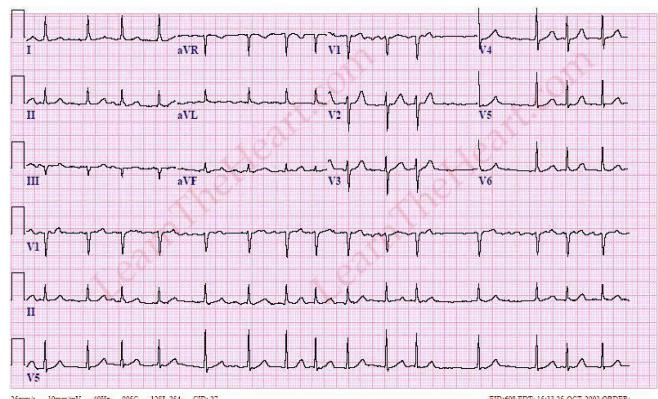
Yes

#### 4. If stable, what is first-line treatment for rate control?

CCBs (Diltiazem) or Beta blockers

#### 5. What medication should be given to prevent stroke and depending on what score?

Oral anticoagulation (e.g., warfarin, apixaban, rivaroxaban) depending on CHA<sub>2</sub>DS<sub>2</sub>-VASc score



**Q5: How do you check a patient in 10 seconds during resuscitation/what indicate that patient is responsive?**

**ANS:**

Ask the patient for his name and what happened

Answering fully to these 2 questions?

**Q6: What measures are taken to reduce missed injuries in a patient after a road traffic accident (RTA)?**

**ANS:**

Perform a thorough primary and secondary survey, complete physical examination with full exposure, indicated imaging, and re-assessment after stabilization.

**Q7: How can perfusion be assessed in a patient rather than blood pressure?**

**Mention 2.**

**ANS:**

- Capillary refill time
- Heart rate

(Other options: urine output, peripheral color)

**Q8: In a patient after a road traffic accident (RTA), which fractures require special attention and why?**

**ANS:**

- Cervical spine fractures (risk of spinal cord injury)
- Pelvic fractures (risk of massive bleeding)

**Q9: Name three major risk factors for myocardial infarction (MI).**

**ANS:**

1. Hypertension
2. Diabetes mellitus
3. Hyperlipidemia / High cholesterol

## **Q10: How can hypothermia be prevented in a stripped or exposed patient?**

**ANS:**

Warm resuscitation room. Expose only as needed, cover quickly.

Warm blankets / thermal blankets. Warm IV fluids and blood.

## **Q11: In neurological assessment, what does FAST indicate?**

**ANS:**

F: Face drooping

A: Arm weakness

S: Speech difficulty

T: Time to call 911

## **Q12: After giving a patient thrombolysis for myocardial infarction, what are two signs that indicate failure of thrombolysis?**

**ANS:**

1. ST-segment elevation does not resolve (no significant change on ECG).

2. Persistent chest pain or ongoing ischemic symptoms.

## **Q13: What 5 symptoms raise the likelihood of the diagnosis of ischemic chest pain?**

**ANS:**

Retrosternal crushing chest pain, radiating to the left shoulder. The pain is not relieved by rest or nitrates, and it worsens with physical exertion and emotional stress.

## **Q14: What is the goal for full exposure during assessment of the patient?**

**ANS:**

To know if there is any hidden injury or trauma

# 2<sup>ND</sup> ROTATION

## Special Thanks

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Mohamad Al-Saed

Zaid Al-Absi

صدقة جارية عن المغفور له بإذن الله، عمر عطيه من دفعة 2023 – كلية الطب، الجامعة الأردنية

اللهم ارحمه واغفر له، وأنزله منزلًا مباركاً، ووسع مدخله. إنا لله وإنا إليه راجعون. لا تنسوه من دعائكم

# RADIOLOGY

**Q1: What is the type of fracture?**

**Ans:**

Linear Fracture



**Q2: What is the pathology?**

**Ans:**

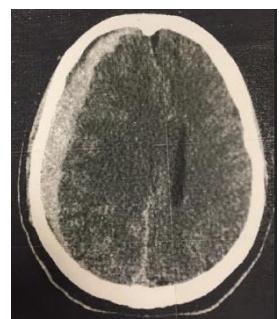
Bilateral subdural acute on top of chronic hematoma



**Q3: Spot the diagnosis:**

**Ans:**

Right subdural hematoma with midline shift



**Q4: What is the type of arthritis?**

**Ans:**

Inflammatory (RA)



**Q5: What is the type of fracture?**

**Ans:**

Supracondylar fracture



## Q6: What is the labeled structure?

Ans:

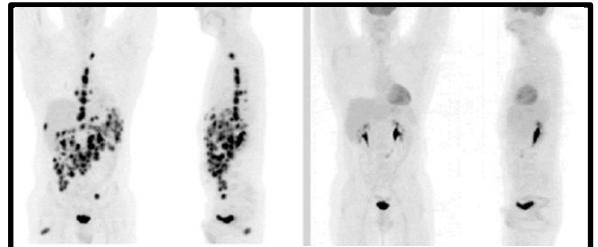
Portal vein



## Q7: What is the name of the response shown?

Ans:

Complete Metabolic Response



## Q8: What is the pathology?

Ans:

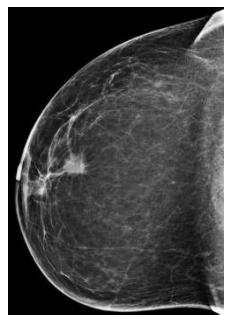
Involuting fibroadenoma



## Q9: Mammogram, what is the best next step?

Ans:

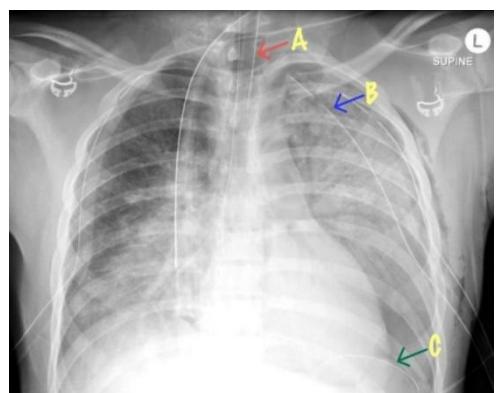
Biopsy (Spiculated mass)



X-ray:

## Q10: What is A?

Endotracheal tube



## Q11: What is B, what is the complication seen with its insertion?

Chest tube, subcutaneous emphysema

## Q12: What is C?

Nasogastric tube

**Q13:**

**A. Imaging Modality?**

Single contrast barium enema.

**B. Describe what do you see?**

Apple core sign

**C. Diagnosis?**

Adenocarcinoma



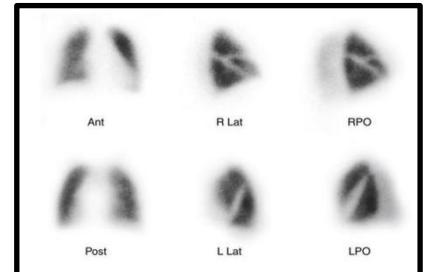
**Q14: A nuclear image of Lung:**

**A. What is the most probable Diagnosis?**

Pleural effusion

**B. Is it positive or negative for PE?**

Negative (Fissure sign)



**Q15:**

**A. Imaging Modality?**

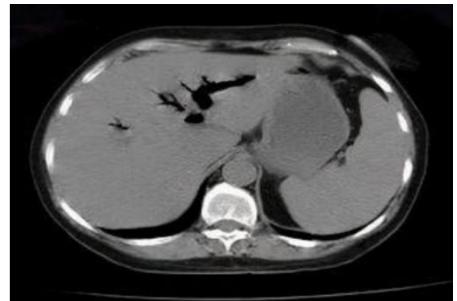
Axial abdominal CT without contrast

**B. Diagnosis?**

Pneuombilia

**C. Does it happen after ERCP?**

Yes



**Q16: What is the imaging modality and cut level?**

Abdominal axial CT without contrast

**Q17: What is Dx?**

Abdominal aortic aneurysm

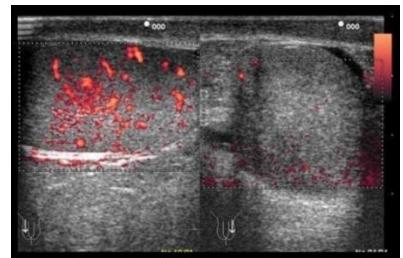
**Q18: One complication:**

Rupture



**Q19: A 15-year-old boy with testicular pain, what side is the affected and what is the modality?**

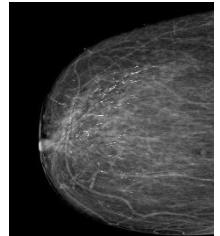
Left. Power Doppler ultrasound



**Q20: What is BI-RADS score in this case?**

**Ans:**

2



**Q21: What is the type of edema in the picture?**

**Ans:**

Vasogenic edema



**Q22: A picture of CT of 20 y/o female of choroid plexus calcification, Is it normal??**

**Ans:**

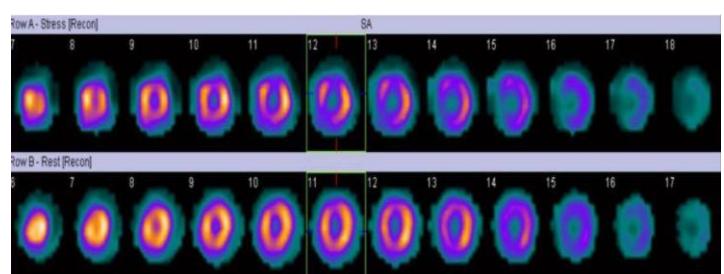
No



**Q23: Spot Diagnosis**

**Ans:**

Stress induced ischemia in the anterior and septal wall of the heart



**Q24: What is the name of the following sign?**

Rachitic rosary



**Q25: What is Dx?**

Rickets

**Q26:**

**A. What level?**

C6-C7



**B. What is the diagnosis:**

C6-C7 disc herniation on the left side with thecal compression

**Q27: Sequence?**

**Ans:**

Sagittal T1



**Q28: Deterministic effect related to, .....?**

**Ans:**

Severity

**Q29: What is the US mode that show tissue in 2d section, and it appears gray in color?**

**Ans:**

B-mode

**Q30: What is the most specific US sign of acute cholecystitis?**

**Ans:**

Murphy's

# **DERMATOLOGY**

**Q1: A patient came to you having these, with a known Hashimoto thyroiditis, 2 indications of poor prognosis.**

**Ans:**

- 1- Childhood onset
- 2- Alopecia ophiasis variant



**Q2: What is the most common infectious agent responsible for this?**

**Ans:**

Streptococcus pyogenes



**Q3: What is the secondary lesion in a case of acne?**

**Ans:**

Crust



**Q4: Patients with eruptions:**

**A. What is Region name (one word)?**

Intertrigous

**B. Differential diagnosis:**

Inverse psoriasis, Candidal infection (intertrigo),  
Seborrheic dermatitis....



**Q5: A patient presents with pruritus, and his siblings in the same household have similar symptoms. What is the next most appropriate step?**

**Ans:**

First-line treatment for scabies: 5% permethrin cream for all affected household members.



**Q6: A child presented to the clinic with this lesion, he had used topical steroids with no improvement. What is the diagnosis?**

**Ans:**

Tinea capitis



**Q7: a pregnant woman presented with the lesions in the picture, she also complained of itching?**

**A. What is the diagnosis?**

Pemphigoid Gestationis

**B. Does the fetus get affected. If yes mention?**

Yes, babies may be born prematurely or small for dates and can have a transient blistering eruption that rapidly resolves.



**Q8: after starting a new drug (I think it was an antiepileptic), this patient complained of fever and pain and then developed these skin lesions. What is the diagnosis?**

**Ans:**

Stevens–Johnson syndrome (SJS) & toxic epidermal necrolysis (TEN)



**Q9: A man had an atopic dermatitis; he recently developed a painful vesiculopapular eruption, what is the diagnosis?**

**Ans:**

Eczema herpeticum



**Q10: History in question was strongly suggestive of excoriations, image very similar to excoriations also. What is the finding?**

**Ans:**

Dermatographism



# **FORENSIC & TOXICOLOGY**

**Q1: A woman was found dead in her bathroom, the doors and windows were locked and there was a propane heater turned on in the bathroom, answer the following questions**

**1. PH of the blood will become?**

Low

**2. What is the antidote for this condition?**

100% O<sub>2</sub>

**3. True or False: Immediate treatment at the scene is recommended.**

False

**4. True or False: She died due to suffocation from propane gas.**

False

**5. The levels of deoxyhemoglobin will be?**

Low

**Q2: A child presented to ER after taking 9 pills of her brother medication, he's diagnosed with ADHD, she has agitation, hyperpyrexia, tachycardia.**

**1. In this poisoning case, which substance accumulates and is responsible for the clinical effects?**

Dopamine

**2. Her blood pressure would be?**

Elevated

**3. Which drug should be administered to manage agitation?**

Benzodiazepines

**4. What procedure can be performed for gastric decontamination?**

Activated charcoal (AC)

**5. Is there a specific antidote available for this poisoning?**

None

**Q3: A young man was rushed to the emergency department with, respiratory depression, and pinpoint constricted pupils.**

**1. What is the most likely diagnosis in this case?**

Heroin intoxication

**2. What is the antidote for this condition?**

Naloxone

**3. Which medications can be used to treat withdrawal symptoms?**

Methadone or Buprenorphine

**4. Which toxicology screen confirms this diagnosis?**

6-Monoacetylmorphine (6-MAM)

**5. What is the mechanism?**

Activation of mu opioid receptors

**Q4: A 42-year-old man is brought to the emergency department by his wife after she found him unresponsive in the garage next to an open container of antifreeze.**

**1. Most likely diagnosis?**

Ethylene glycol (antifreeze) poisoning

**2. Why do we do urine analysis test?**

Ca++ oxalate

**3. What is the antidote for this condition?**

Ethanol & fomepizole

**4. What medication would you give to control convulsions??**

Benzodiazepines

**5. What would happen if we give the patient disulfiram?**

It leads to accumulation of formaldehyde & glycolaldehyde (toxicity symptoms)

## Q5:

### 1. What is the type of this wound?

It is an incised wound. (you have to mention that they are defense wounds)



### 2. Give two differences between lacerated wounds and contusions.

Lacerations involve loss of epithelium/skin, while in contusions there is no loss of epithelium. Laceration will heal by scar while contusion won't leave any scar.

### 3. True or False: This wound leaves a scar.

True

### 4. Give two differences between self-inflicted wounds and defense wounds.

Self-inflicted are on accessible parts of the body while defense wounds are usually on the palm and ulnar aspect of the hand. Self-inflicted wounds are usually grouped together, parallel and in the same direction while defense are not so.

### 5. What is the incapacity period?

Up to one week

## Q6:

### 1. What is the cause of the postmortem change in the picture?

Gravity-dependent pooling of blood in the hypotonic vessels



### 2. True or False: It begins after 2 hours of death.

False

### 3. Mention two indications (what can it tell you).

1. It helps estimate the time since death.
2. It shows the position of the body after death (and whether it was moved).

### 4. Mention two factors that affect.

1. Cause of death
2. Environmental temperature, body position, or blood loss (any two accepted).

### 5. What is the differential diagnosis?

Contusions (bruises).

## Q7: Look at this picture carefully then, answer the following questions.

Picture of a woman with pallor around nose and mouth, (I couldn't find anything similar, but it is very identical to the picture in "Revision" Lecture).

### 1. What is the mode of death?

Asphyxia

### 2. What is the manner of death?

Homicidal

### 3. What is the type of anoxia?

Anoxic anoxia

### 4. Mention two findings while examining the body.

1. Congested, reddish-cyanosed face (bluish or red discolored).
2. Petechial hemorrhages on the conjunctiva, face, and under the tongue

### 5. Mention one non-suspicious finding.

Gas mask appearance

## Q8: Look at this picture carefully then answer the following questions.

### 1. True or False: The appearance is due to muscle dehydration and coagulation of proteins in the muscle.

True.



### 2. True or False: This sign is definitely antemortem.

False.

### 3. If a person got a minimal burn injury in the work field (to his arm I think), would you consider this a legal case (something with that meaning) **حالة قضائية**?

Yes.

### 4. What type of report should be written at the time the person in the previous question visited the ER?

Primary

### 5. Give two differences between antemortem and postmortem burns.

Differentiation 14.4: Antemortem and postmortem burns			
S.No.	Feature	Antemortem burns	Postmortem burns
1.	Line of redness	Present	Absent
2.	Vesicles	Contain serous fluid, rich in albumin, chloride and some polymorphs	Contain air; if fluid is present, it contain little albumin and no chloride
3.	Base of vesicles	Red and inflamed	Dull, dry, hard and yellow
4.	Soot in upper respiratory tract	May be present	Absent
5.	Inflammation and repair	Present along with pus and slough	Absent
6.	Healing	Granulation tissue seen in old cases	Absent
7.	Carboxyhemoglobin	Present	Absent
8.	Enzyme reaction	Increase in enzymes in the periphery of burns	No such increase

soot in the  
LOWER  
airway

# **EMERGENCY**

**Q1: 75-year-old woman with recent surgery for left knee displacement, DM & HTN. Chest and SOB with respiration.**

**1. What is the most likely diagnosis?**

Pulmonary embolism

**2. What is the name of the score to assess the risk?**

Wells score for PE

**3. Lab test for medium risk patient?**

D-Dimer

**4. Most definitive diagnostic imaging?**

CT Pulmonary Angiography (CTPA)

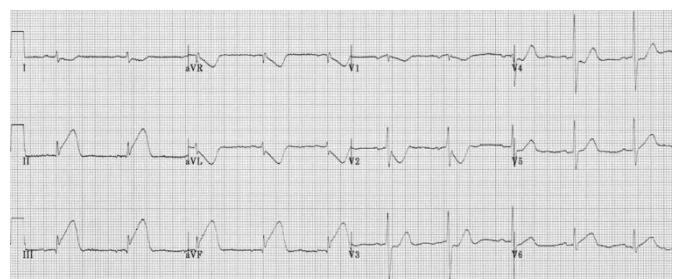
**5. You did an x-ray and it showed a wedge-shaped opacity on the lateral side of the right lung explain this finding?**

Lodged emboli → block blood flow → pulmonary infarction → wedge-shaped opacity on CXR

**Q2: Regarding this ECG, answer the questions.**

**1. What is the diagnosis?**

Inferior ST-elevation myocardial infarction (STEMI)



**2. Which is the culprit artery?**

Right coronary artery (RCA)

**3. What is the triage?**

High priority / Emergency – immediate reperfusion therapy indicated  
(National triage scale 1/ immediate)

**4. What are the changes seen in V2?**

Reciprocal changes

**5. After giving a patient thrombolysis for myocardial infarction, what are two signs that indicate failure of thrombolysis?**

1. ST-segment elevation does not resolve (no significant change on ECG).
2. Persistent chest pain or ongoing ischemic symptoms.

**Q3: 60-year-old man, DM + HTN, Chest pain 3 hours, hypotension (BP 80/40), tachycardia HR 155, hypoxia (SpO<sub>2</sub> 84%, improved to 96% with ventilation).**



**1. Is the patient stable or not?**

Unstable

**2. What is the next step management?**

Cardioversion

**3. Do you want to sedate the patient, yes or no?**

Yes

**4. After giving the appropriate management, now the patient is stable. What are you worried that will happen to the patient (complication), and what medication should be given to prevent stroke and depending on what score?**

I would be worried about her developing another atrial fibrillation and stroke.

Oral anticoagulation (e.g., warfarin, apixaban, rivaroxaban) depending on CHA<sub>2</sub>DS<sub>2</sub>-VASc score

**Q4: How do you check a patient in 10 seconds during resuscitation/what indicate that patient is responsive?**

**ANS:**

Ask the patient for his name and what happened

Answering fully to these 2 questions?

**Q5: What measures are taken to reduce missed injuries in a patient after a road traffic accident (RTA)?**

**ANS:**

Perform a thorough primary and secondary survey, complete physical examination with full exposure, indicated imaging, and re-assessment after stabilization.

## **Q6: How can circulation be assessed in a patient? Mention 2.**

**ANS:**

- Capillary refill time
- Heart rate

(Other options: urine output, peripheral color)

## **Q7: Name 2 adjuncts for primary survey.**

**ANS:**

1. ECG
2. Chest X-ray
3. Pelvic X-ray

-Any 2-

# 3<sup>RD</sup> ROTATION

## Special Thanks

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Ayham Alhmaid

Mohammad Rababa'h

صدقة جارية عن المغفور له بإذن الله، عمر عطيه من دفعة 2023 – كلية الطب، الجامعة الأردنية

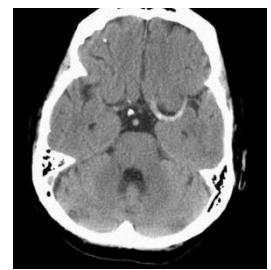
اللهم ارحه واغفر له، وأنزله منزلاً مباركاً، ووسع مدخله. إنا لله وإنا إليه راجعون. لا تنسوه من دعائكم

# **RADIOLOGY**

## **Q1: What is the sign?**

**Ans:**

Hyperdense MCA sign



## **Q2: What is diagnosis?**

**Ans:**

Bilateral Intraventricular hemorrhage



## **Q3: Description:**

**Ans:**

Herniated disc L5/S1 right - MRI T2 sagittal



## **Q4: What is the sign?**

**Ans:**

Bird peak sign



## **Q5: What is the sign?**

**Ans:**

Double bubble

## **Q6: What is the diagnosis?**

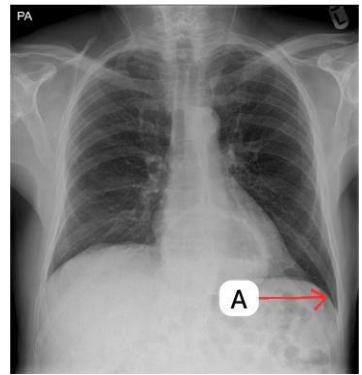
**Ans:**

Duodenal atresia



## Q7: What is type of study and direction & position?

Chest X-Ray - PA - Erect



## Q8: Define (A)?

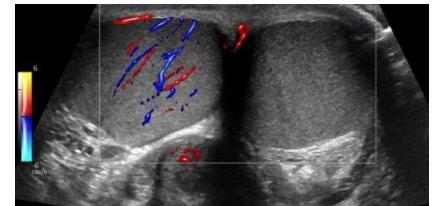
Costophrenic Angle

## Q9: What is the diagnosis?

Hiatal Hernia

## Q10: A 15-year-old boy with testicular pain, what is the modality?

Color Doppler ultrasound



## Q11: What is the sign?

Ans:

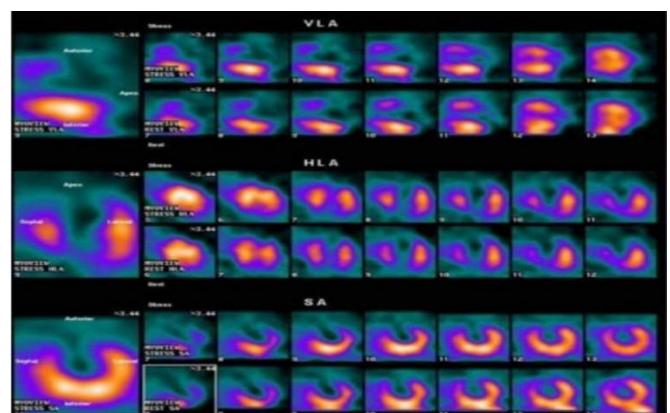
Lead pipe / feature less colon



## Q12: Spot Diagnosis?

Ans:

Irreversible ischemia of Apex and Anterior portion



## Q13: What is Dx?

Descending thoracic aorta aneurysm



## Q14: One complication:

Dissection

## Q15: What is Dx?

Ans:

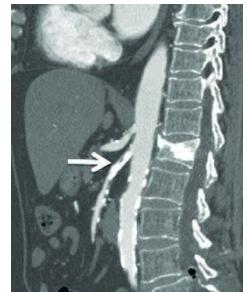
Rheumatoid Arthritis



## Q16: What is the labeled structure?

Ans:

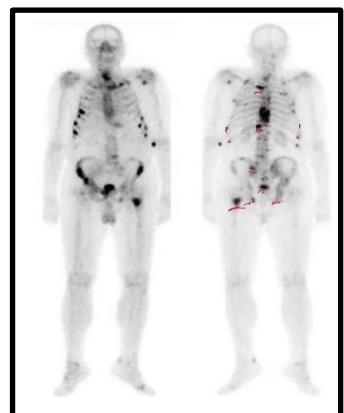
SMA



## Q17:

### A. Name of the scan?

Bone scan



### B. What type of metastasis it detects ?

Detect osteoblastic metastasis

## Q18: Description: Pathological fracture cause of osteomyelitis?

Ans:

Hypolucency under the nondisplaced tibial fracture



## Q19: What is BI-RADS score in this case?

Ans:

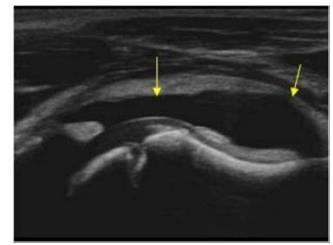
BI-RADS 2



**Q20: A 5-year-old kid with hip pain.**

**A. Imaging modality?**

Ultrasound, B-Mode



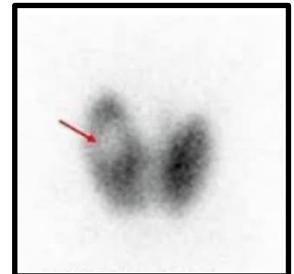
**B. Diagnosis?**

Septic arthritis

**Q21:**

**A. Diagnosis?**

Thyroid cancer (Cold Nodule)



**B. How to confirm?**

FNA

**Q22: What is the pathology?**

**Ans:**

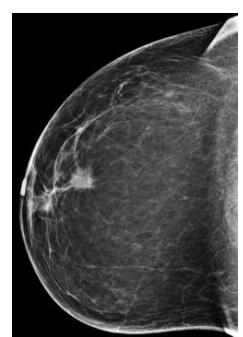
Osteoid osteoma



**Q23: Mammogram, what is the best next step?**

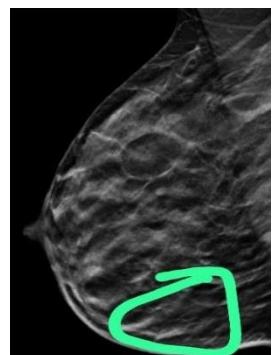
**Ans:**

Biopsy (Spiculated mass)



**Q24: What is Dx?**

Right breast lipoma in lower area



**Q25: 1-day old child, what is the diagnosis?**

**Ans:**

Hydrocephalus

(Specifically, it is Hydrocephalus and periventricular dilation Mostly torch infection but hydrocephalus is enough as an answer)



---

**Q26: ??**

.....

---

**Q27: ??**

.....

---

**Q28: Stochastic effect relay on, .....?**

**Ans:**

Probability

**Q29: ..... displays blood flow using Doppler effect superimposed on a B-mode image:**

**Ans:**

Color Doppler

**Q30: What is the most specific US sign of acute cholecystitis?**

**Ans:**

Murphy's

# **DERMATOLOGY**

## **Q1: What is the diagnosis**

**Ans:**

Erythema multiform



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## **Q2: Which vitamin deficiency**

**Ans:**

Vit. C deficiency



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## **Q3: Associated with which food allergy?**

**Ans:**

Gluten



---

## **Q4:**

### **A. Diagnosis?**

Herpes simplex virus infection

### **B. Name a primary lesion (only one):**

Vesicles



---

## **Q5: Which virus causes it?**

**Ans:**

VZV



## Q6: What is the diagnosis?

Ans:

Systemic Sclerosis



---

## Q7: A child with asthma history...

A. What is the diagnosis?

Atopic dermatitis



B. The secondary finding that causes skin thickening is?

Lichenification

---

## Q8: Pathology behind the lesion:

Ans:

Auspitz sign in psoriasis



---

## Q9: The question said something about satellite lesions

A. The causative agent is?

Candida albicans



B. One risk factor?

DM

---

## Q10:

A. Nail change is?

Subungual hyperkeratosis



B. One disease causes it?

Onychomycosis (dermatophyte infection)

# FORENSIC & TOXICOLOGY

## **Q1: Fill in the blanks:**

**1. The use of \_\_\_\_ to make an athlete calm and less anxious before competition.**

Beta blockers

**2. The use of \_\_\_\_ to decrease body weight rapidly.**

Diuretics

**3. The use of \_\_\_\_ to decrease the washout (excretion) time of amphetamines.**

Acidifying agents (acid)

**4. The use of \_\_\_\_ to increase red blood cell production and hematocrit concentration.**

Erythropoietin (EPO)

**5. True or False: The use of an athlete's own blood products before competition is justified.**

False

## **Q2: A child presented to ER after taking 9 pills of her brother medication, he's diagnosed with ADHD, she has agitation, hyperpyrexia, tachycardia.**

**1. In this poisoning case, which substance accumulates and is responsible for the clinical effects?**

Dopamine

**2. Her blood pressure would be?**

Elevated

**3. Which drug should be administered to manage agitation?**

Benzodiazepines

**4. What procedure can be performed for gastric decontamination?**

Activated charcoal (AC)

**5. Is there a specific antidote available for this poisoning?**

None

**Q3: A young man was rushed to the emergency department with central nervous system depression, respiratory depression, and pinpoint constricted pupils.**

**1. True or False: This is probably due to methanol toxicity?**

False

**2. What is the most likely diagnosis in this case?**

Heroin intoxication

**3. What is the antidote for this condition?**

Naloxone

**4. Which medications can be used to treat withdrawal symptoms?**

Methadone or Buprenorphine

**5. True or False: Use of cocaine to make the patient more awake, increase awareness.**

False

**Q4: A patient presents with accidental acid ingestion.**

**1. Which protective demulcents or emulsants can be given?**

Milk

**2. Is gastric lavage recommended in this case? Why or why not?**

Contraindicated, as it can cause re-exposure, esophageal perforation, or aspiration pneumonia

**3. Is emesis recommended in this case? Why or why not?**

Contraindicated, as it can cause re-exposure, esophageal perforation, or aspiration pneumonia

**4. What is the risk associated with attempts to neutralize the ingested acid?**

Produce heat that can worsen tissue injury

**5. What is the role of activated charcoal in this scenario?**

Ineffective and may impede wound healing

**Q5:**

**1. True or False: This injury is caused by a non-rifle firearm.**

False



**2. The type of beveling seen in this injury is?**

Internal beveling

**3. The marks (tattooing) around the gunshot wound are caused by?**

Partial burning of gunpowder

**4. The firing distance is most likely?**

Intermediate (near) range

**5. The cause of death is?**

Brain laceration due to gunshot

**Q6: RTA patient comes to the ER. The patient's vital signs are stable, and non-displaced fracture of the lower leg.**



**1. The injury is caused by?**

Blunt / friction trauma

**2. The patient's condition is?**

Intermediate

**3. The expected period of disability is?**

12–16 weeks

**4. The type of wound present is?**

Graze abrasion

**5. How to know the direction of the wound?**

By heaping of the tissue

**Q7:**

**1. This lesion is called?**

Joule burn



**2. It is caused by?**

Electrocution

**3. True or False: Rigor mortis will develop faster in this patient.**

True

**4. The most likely cause of death is?**

Cardiac cause (ventricular fibrillation)

**5. 2 Factors affect the degree of the injury?**

Current strength and voltage.

Surface area & site of contact.

**Q8: A photograph shows a case of hanging. The victim is suspended by a rope, the feet are touching the ground, and a scarf is placed between the rope and the neck posteriorly.**

**1. True or False: This is a case of complete, atypical hanging.**

False



**2. The surest sign of antemortem hanging is?**

Salivary dribbling

**3. The wound found under the scarf is?**

Imprint abrasion

**4. The fracture pattern that is pathognomonic in this case is?**

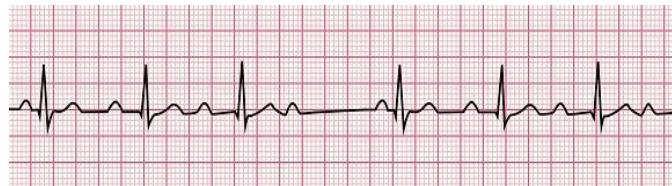
Outward displacement of the hyoid bone

**5. The pattern of postmortem hypostasis is?**

Glove-and-stockings hypostasis

# **EMERGENCY**

**Q1: Regarding this ECG, answer the questions.**



**1. What is the rhythm?**

Second-degree AV block – Mobitz type I (Wenckebach)

**2. What should be done next if the patient is unstable?**

Immediate transcutaneous pacing

**Q2: Regarding this ECG, answer the questions.**



**1. What is immediate management?**

Synchronized electrical cardioversion (synchronized shock)

**2. What medications can be used?**

- Amiodarone
- Epinephrine

**3. If there was an increase of CO<sub>2</sub> from 20 to 40 in CPR what does it mean?**

Retain of spontaneous circulation (ROSC)

**Q3: Mention 3 risk factors for myocardial infarction**

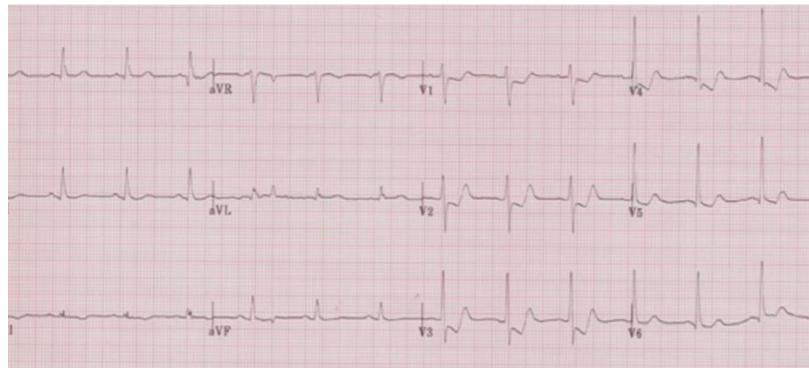
**ANS:**

HTN

DM

Hyperlipidemia

#### **Q4: Regarding this ECG, answer the questions.**



##### **1. What type of myocardial infarction is this?**

NSTEMI

##### **2. Which ECG leads are involved?**

V1–V6

##### **3. Which wall of the heart is affected?**

Anterolateral wall

##### **4. Which coronary artery is most likely involved?**

Left anterior descending (LAD) artery

#### **Q5: Trauma case**

##### **1. 2 Things to check patient's response in 10 seconds?**

Ask the patient for his name & what happened

Answering fully to these 2 questions

##### **2. 4 Precautions in trauma patients?**

1- Cervical spine immobilization

2- Full spinal immobilization

3- Log-roll technique for movement

4- Control external hemorrhage / avoid unnecessary movement

##### **3. Which patient do you transfer?**

Complex multisystemic injury, Extremities of ages

##### **4. At which time do you transfer?**

As soon as possible, stabilizing measures are completed (airway & ventilatory control) and hemorrhage control

**Q6: Mention 5 conditions cause angina symptoms without atherosclerosis in the coronary arteries:**

**ANS:**

1. Aortic stenosis
2. Pulmonary hypertension
3. Hypertrophic cardiomyopathy
4. Aortic regurgitation
5. Drug induced (cocaine)

**Q7: Mention 5 angina equivalent presentations.**

**ANS:**

1. Dyspnea
2. Faintness
3. Fatigue
4. Diaphoresis
5. Nausea