



# 021 FAMILY MEDICINE MINI-OSCE



لَقَدْ جَاءَكُمْ رَسُولٌ مِّنْ أَنْفُسِكُمْ عَزِيزٌ عَلَيْهِ مَا عَنِتُّمْ حَرِيصٌ عَلَيْكُمْ  
بِالْمُؤْمِنِينَ رَءُوفٌ رَّحِيمٌ

# SPECIAL THANKS

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صدقة جارية عن المغفور لهما بإذن الله

عمر عطية من دفعة 023 ، روضة ضياء من دفعة 020

اللهم ارحمهما واغفر لهما، وأنزلهما منازلًا مباركةً، ووسّع مداخلهما. إنا لله وإنا إليه راجعون.

# **1<sup>st</sup> Rotation**

## **Q1:**

### **A. What is Homeostenosis?**

Narrowing of the reserve capacity that underlies the decreased ability to maintain homeostasis under stress.

### **B. Mention two consequences / complications?**

- 1- Decreased maximum cardiac output.
- 2- Loss of homeostasis and development of disease

## **Q2: Mention the 3 levels of prevention and an example on each:**

### **ANS:**

1. **Primary prevention:** DASH Diet and weight loss to prevent Dm
2. **Secondary prevention:** Colon Ca screening
3. **Tertiary prevention:** Rehabilitation for stroke patients

## **Q3: Mention the two MOST likely diagnosis in the two following situations:**

### **A. 46-year-old man with UPPER abdominal pain for 2 days:**

PUD / acute chole

### **B. 46-year-old man with UPPER abdominal pain for 2 months:**

GERD and biliary colic

## **Q4: Low TSH low T4:**

### **A. What's your diagnosis?**

Central hypothyroidism

### **B. What is the best next test to do?**

Pituitary MRI

**Q5:**

**A. Mention the findings in the picture:**

Xanthelasma



**B. Mention the first question you will ask this patient when taking Hx:**

Hx of ASCVD /DM

**C. Mention one blood test**

Full lipid profile

**Q6: Man in his 50s with productive cough, fever, and dyspnea:**

**A. Mention 2 DDx:**

- 1- Pneumonia (middle lobe)
- 2- Tb / Abscess



**B. If this patient were stable, in patient-centered medicine, what three patient-centered questions would you ask this patient:**

- 1- Ask about ideas
- 2- Ask about concerns
- 3- Ask about expectations

## **2<sup>nd</sup> Rotation**

### **Q1:**

#### **A. Define Counseling?**

The therapeutic process of helping a patient to explore the nature of their problem in such a way that they determine their decisions about what to do, without direct advice or reassurance from the counsellor

#### **B. What makes family physicians good counselors (mention 2)?**

- 1- They can observe and understand patients and their environment.
- 2- They are ideally placed to treat the whole patient.

### **Q2: Mention 2 physiological changes happen in geriatric on each:**

#### **A. CNS:**

- 1- Small decrease in brain mass
- 2- Proliferation of astrocytes

#### **B. PNS:**

- 1- Loss of spinal motor neurons
- 2- Decreased size of large myelinated fibers

### **Q3: 41 years old woman afraid because her 84-year-old mother died of colon cancer, what 4 screening test would u do to her?**

#### **ANS:**

- 1- Hypertension
- 2- Diabetes mellites
- 3- Depression
- 4- Cervical cancer

### **Q4: Give 2 DDX to each of the following in case of lower back pain:**

#### **A. 23-year-old male for 4 months:**

Ankylosing spondylitis, Disc herniation

#### **B. 48-year-old female for 2 days:**

Muscle strain, Renal colic

**Q5: Elderly women with Asymmetrical facial features, what is spot diagnosis?**

**ANS:**

Bells palsy.



**Q6: 36 year old women with this urinalysis test:**

**A. What 2 questions would you ask the patient?**

- 1- Do you have any urinary symptoms
- 2- Do you have any history of kidney disease

**B. 2 DDx?**

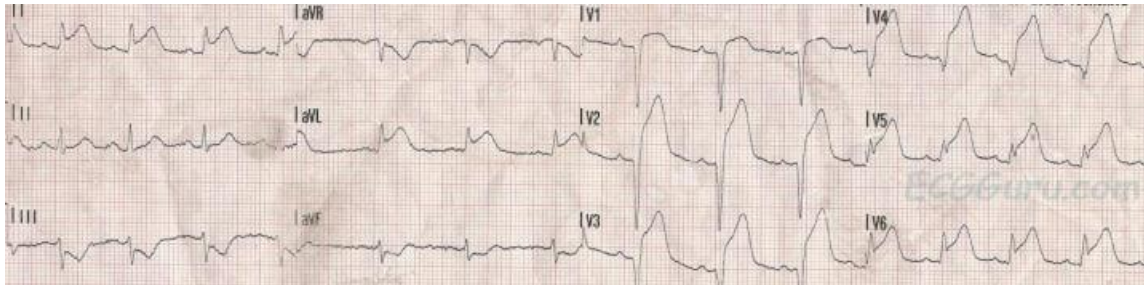
Pyelonephritis, Glomerulonephritis

**C. What is the best next step?**

Urine culture, Antibiotics

Element	Result
Color	Amber
Transparency	Translucent
Reaction	Acidic
Protein	+1
Glucose	Negative
RBC	+1 - +2
WBC	2-3
Epithelial cells	1-2
Bacteria:	Found
Others:	Mucous

**Q7: 65 years with retrosternal chest pain of 3 hours duration, ECG:**



**A. 2 Abnormal findings:**

- 1- ST elevation in anterior and lateral leads
- 2- Reciprocal depression in inferior leads

**B. DDx (MCQ)**

- A. Acute Anterolateral infarction
- B. Acute Anterior infarction
- C. Acute Inferior infarction
- D. Severe Pericarditis
- E. Pleural Effusion

**ANS: A**

Note: The ECG in the exam was so unclear & confusing between choices A,B,D, So we put this ECG just to get benefit from the question

**Q8:**

**A. What is the surgery?**

Hernia repair

**B. 2 DDx**

Inguinal hernia & trauma

**C. What would u tell him to prevent...?**

Decrease anything that affects abdominal pressure

Don't carry heavy things



## **3<sup>rd</sup> Rotation**

**Q1: 75-year-old female asked to do screening for breast and colorectal cancer:**

**A. What are the things you will ask about to do the referral or not?**

Ask if there is any family history, and if there any constitutional symptoms like weight loss or fever.

**B. Geriatric assessment item to assess for the fitness of the patient?**

Life expectancy and function state.

**Q2: Angry patient. 3 things to do and 3 things to avoid?**

**ANS:**

**To do:** Be calm, listen carefully and give explanations to your choices

**To avoid:** don't raise your voice or being angry, don't interrupt him, and don't laugh at his choices

**Q3: 56-year-old male patient with uncontrolled hypertension and DM and KFT shows that he developed CKD, his treatment for hypertension is Amlodipine:**

**A. What will you do with his medication?**

Add another anti-hypertensive drug like ACEI and ARB

**B. Two evidence-based lifestyle modifications?**

DASH diet and doing exercise

**Q4: Give 3 DDx to each of the following in case of:**

**A. 20-year-old female with lower abdominal pain for 2 days**

UTI, cyclic pain, appendicitis

**B. 45-year-old female with lower abdominal pain for 4 months**

Ovarian cyst, muscle strain or hernia, diverticulitis

**Q5: Patient with Gravis disease:**

**A. Give two physical signs:**

- 1) Exophthalmos
- 2) Tremor

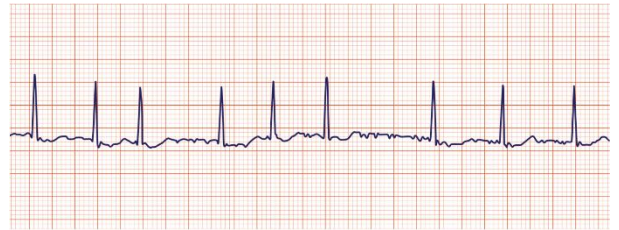
**B. Give two long-term complications:**

- 1) Heart failure / Atrial fibrillation
- 2) Osteoporosis

**Q6: ECG.**

**A. Diagnoses?**

Atrial fibrillation



**B. Three Clinical presentations?**

Chest pain, dizziness, palpitation.

**C. Management?**

If stable, give beta blocker, Ca channel blocker, digoxin and anticoagulant

If not stable, give DC shock

## 4<sup>th</sup> Rotation

### **Q1:**

#### **A. Define whole person medicine:**

Treating the patient as a whole person — considering their biological, psychological, social, cultural, and spiritual aspects — rather than just focusing on a single disease or organ system.

#### **B. Patient with uncontrolled DM, what would you tell him as part of whole person medicine? (MCQ)**

- A. Giving the same standard 1,800-kcal diabetic diet
- B. Decrease intake takes into consideration his culture
- C. The patient must stop bread completely

**ANS: B**

### **Q2:**

#### **A. Define Frailty?**

Clinical syndrome characterized by increased vulnerability to stressors due to a decline in physiological reserve and function across multiple organ systems, leading to a higher risk of adverse health outcomes (e.g., falls, disability, hospitalization, or death).

#### **B. Main cause of frailty (MCQ)**

- A. Aging
- B. Decrease in homeostasis
- C. multi-morbidity

**ANS: A**

### **Q3: 2-3 months vaccines (mention 6):**

**ANS:**

1. DTaP – Diphtheria, Tetanus, and acellular Pertussis
2. IPV – Inactivated Poliovirus Vaccine
3. Hib – Haemophilus influenzae type b
4. Hepatitis B
5. PCV – Pneumococcal Conjugate Vaccine
6. Rotavirus vaccine

**Q4: Give 2 causes to each of the following in case of anorexia:**

**A. 21-year-old female for 1 week:**

1. Viral infection (e.g. influenza, gastroenteritis)
2. Psychological stress or depression.

**B. 68-year-old male for 3 months:**

1. Malignancy (e.g. gastric or pancreatic cancer)
2. Chronic systemic disease (e.g. chronic kidney disease, heart failure)

**Q5: DVT case, Mention 4 clinical features/risk factors:**

**ANS:**

1. Swelling of the affected leg (usually unilateral)
2. Pain or tenderness, especially in the calf
3. Prolonged immobilization (e.g. post-surgery, long flights, bed rest)
4. Recent surgery or trauma
5. Previous DVT or family history of thrombosis

**Q6: A female patient came to you with these findings:**

**A. What are the findings?**

Raynaud (blue discoloration)



**B. What do you want to tell the patient:**

“You have Raynaud’s phenomenon; it’s due to temporary vessel narrowing. We’ll do some tests to check if it’s primary or secondary, and you should keep your hands warm and avoid cold, stress, smoking, and caffeine.”

**Q7: A couple came to the clinic, can’t conceive for 14 months with normal labs of the female.**

**A. Their fertility situation?**

We need further history and investigations before deciding.

**B. What are the causes of their failure?**

Male factor, tubal/uterine factor, ovulatory dysfunction, unexplained infertility

## 5<sup>th</sup> Rotation

**Q1: In the family clinic you face a patient with recurrent visitation and multiple complaints demanding multiple investigations and imaging, he is rude and asks you in a commanding manner to write a prescription.**

**A. What is this type of patient?**

Entitled demander

**B. How do you manage them 3 points**

Appropriate use of power, remain in control, set clear boundaries, stay calm and respectful non-confrontational.

**Q2: A 79 year old female with controlled hypertension got a UTI which led to dehydration then delirium and multiple falls and the patient was Hospitalized, in the hospital she was managed with fluid administration and electrolyte balancing, her cognitive and functional states went back to baseline after 48 hours.**

**A. What is the reason for this response to a simple UTI ?**

- A. Homeostenosis
- B. Delirium
- C. Multimorbidity

**ANS: A**

**B. Explain your answer:**

Homeostenosis reduces the body's ability to maintain or restore homeostasis after or during a stressor (the UTI) the loss of homeostasis leads to the development of the vicious cycle of giants.

**Q3: Write 3 differences between the "Stott and Davis" model of consultation and the typical consultation:**

**ANS:**

1. "Stott and Davis" is patient centered **while** the typical consultation is doctor centered
2. "Stott and Davis" treats the patient as a whole **while** the typical consultation focuses on the current disease
3. "Stott and Davis" associate the patient in the decision-making process **while** the typical consultation keeps the decisions mainly to the doctor

**Q4: A table with cognitive function/ADL/ Instrumental ADL questions:**

**A. What is this tool?**

Comprehensive geriatric assessment tool

**B. What is it used for?**

The assessment of cognitive and functional abilities of a geriatric patient

**Q5: Give one likely and one less likely differential diagnosis for each of the following:**

**A. 24 years old female with headache for two weeks:**

- Migraine / tension headache
- Idiopathic intercranial hypertension

**B. 70 years old man with headache for two weeks:**

- Uncontrolled hypertension
- Brain tumor

**Q6: A 25 years old lady complains of fatigue and tiredness and occipital and bitemporal headache she also has mandibular joint tenderness and says that the pain prevents her from sleeping she denies any fever weight loss or loss of appetite she has 2 children (six months and 3 years) she works at a bank, when you ask about her social support she says that her husband is a uni professor currently in Qatar for a business thing and will stay for a while, when you ask about ICE she says that she thinks it's due to lack of sleep and she is afraid that her children will be spoiled if she holds back she is also overwhelmed by the responsibility and feels that it's hard to keep the balance between her kids and job She vapes since 5 years.**

**A. What is your diagnosis?**

Tension headache/anxiety

**B. Write an assessment regarding the case**

The patient is a 25 year old married lady mother of two and a smoker, medically free surgically free, suffers from fatigue and bitemporal and occipital headache, she is under significant psychological stress

**Q7: A 67-year-old diabetic patient comes to your clinic complaining of weight loss and fatigue he looks dehydrated and he is in delirium you order the following tests Glucose 900 Blood ph 7.35 Bicarbonate 24 Serum osmolality 325 Ketone bodies negative:**

**A. What is your diagnosis?**

Hyperglycemic hyperosmolar state

**B. What is your top ddx?**

Diabetic ketoacidosis

**C. How do you differentiate between them**

Ketone bodies in blood / urine

**Q8: A 65-year-old woman complaining of hip pain after a fall You have the following X-ray:**

**A. Describe what you see?**

Discontinuation of bone in the femoral neck

**B. What is the most important risk factor?**

Osteoporosis

**C. Persistent pain after one month, what do you think the reason?**

Femoral nerve injury / AVN



## 6<sup>th</sup> Rotation

**Q1: Patient has headache & hypertension. He wants to do a CT scan because his mother died of brain cancer.**

**Using Stott & Davies model of consultation:**

**A. Write 2 strategies and advice related to this case?**

1. Management of presenting problems
2. Management of continuing problems

**B. How would you do these?**

1. **Presenting problem:** History & physical examination, exclude red flags, Provide reassurance and simple analgesia.
2. **Continuing problem:** Assess blood pressure control, check adherence to antihypertensive medications, Review lifestyle factors and adjust treatment if needed.

**Q2: Mention 1 physiological change in:**

**A. Renal:**

Decreased GFR

**B. Musculoskeletal system:**

Sarcopenia

**Q3: You want to make a referral of a patient to a cardiologist. Mention 2 things you say to the doctor and 2 things you say to the patient.**

**ANS:**

**Doctor:** Reason for referral + Relevant history, examination findings, and investigations done

**Patient:** Explain why referral is needed + Reassure the patient and address concerns

**Q4: Patient diagnosed with hypertension. He is using his medications, but his BP is still high. Mention 2 causes:**

**ANS:**

1. Poor adherence / incorrect use of medications
2. Lifestyle factors (high salt intake, obesity, lack of exercise)

**Q5: The scan is shown:**

**A. What is this scan?**

DEXA scan

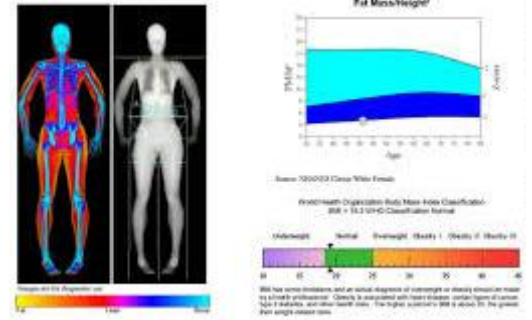
**B. What is it used for?**

Measurement of bone density

**C. When do you start screening?**

Females:  $\geq 65$  years

Males:  $\geq 70$  years



**Q6: Mention 2 differential diagnoses for difficulty swallowing in each case:**

**A. 22-year-old female for 3 days:**

- Acute pharyngitis, Globus sensation (psychological / anxiety-related  $\pm$  GERD)

**B. 70-year-old male for 3 months**

- Oropharyngeal dysphagia (e.g. post-stroke), Esophageal carcinoma

**Q7: Patient with GFR = 42**

**A. What stage?**

3-B

**B. Mention ONE implication (examples):**

Hyperkalemia, Metabolic acidosis, Anemia, Vitamin D deficiency / renal bone disease

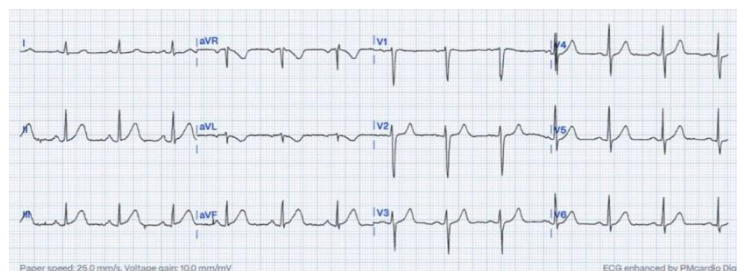
**C. Counseling?**

Patient may need dialysis later

**Q8: Patient has signs of heart failure (e.g. displaced apex beat, basal crackles):**

**A. Describe what you see?**

Acute T-wave leads V1 to V6



**B. How would you approach this patient using patient-centred medicine?**

RAPRIOP approach

## 7<sup>th</sup> Rotation

### **Q1: Differentiate between Multimorbidity and Comorbidity.**

**ANS:**

**Comorbidity:** A group of morbidities in a single patient with one morbidity being the dominant (Conditions coexisting with an index disease)

**Multimorbidity:** A group of morbidities in a single patient without a dominant morbidity (co-occurrence  $\geq 2$  conditions that may not directly interact).

### **Q2: A 20-year-old guy with free medical & surgical history.**

#### **A. What screenings should he do?**

HTN, Depression

#### **B. What Vaccines he must take?**

TB, Covid-19

### **Q3: A female patient got the doctor's phone number and keeps calling her and sending her private details and complaints.**

#### **A. What is the name of this doctor-patient relationship?**

Dependent clinger (a type of patient transference).

#### **B. What are the consequences?**

- Loss of professional objectivity
- Patient emotional dependence
- Doctor stress and burnout
- Ethical and medico-legal risk
- Miscommunication and informal, undocumented medical advice

### **Q4: Mention 2 differential diagnoses for each case:**

#### **A. 22 years old heavy uterine bleeding for 7 days:**

Dysfunctional uterine bleeding, Pregnancy-related bleeding, Miscarriage

#### **B. 52 years old irregular uterine bleeding:**

Endometrial carcinoma, Cervical cancer

**Q5: A 50-year-old diabetic on Metformin with image of ALT and AST levels only, ALT was elevated, AST normal.**

**A. Give 2 Ddx.**

NAFLD, Chronic viral hepatitis

**B. Give 2 risk factors.**

Obesity, DM.

**Q6: A 82-year-old patient has mild dyspnea on exertion, he is non-smoker and doesn't drink alcohol PFT shows reduced FEV1, FVC and increased Residual volume, PFT shows decreased FEV1 and normal DLCO:**

**A. Diagnosis?**

Age related Obstructive lung (physiological aging lung)

**B. Management?**

RAPRIOP

- Reassurance (physiological change with aging)
- Pulmonary rehabilitation / exercise training
- Breathing exercises
- Vaccination (influenza, pneumococcal)
- Short-acting bronchodilator if symptomatic (trial if dyspnea limits activity)
- Referral: to pulmonology clinics
- Investigations: PFT, DLCO, x-ray, ABGs, CBC
- Observation: monitoring symptoms, arrange appointments for follow up, check inhaler adherence



**Q7: A patient presents with suprapubic pain. Urinalysis shows; Turbid urine, Bacteriuria, Leukocyte esterase: +3, WBC: 3-5/hpf.**

**A. What are the abnormalities?**

Turbid urine, bacteriuria, Leukocyte esterase: +3, WBC: 3-5/hpf

**B. Diagnosis:**

Acute cystitis (UTI)

**Q8: According to this x-ray.**

**A. What is the diagnosis?**

Intestinal obstruction, Adhesions ,Colorectal cancer.

**B. Mention 2 findings.**

Dilation of the bowel loops, multiple air fluid levels.



## **8<sup>th</sup> Rotation**

**Q1: Physiological changes in immunity with aging (give 2).**

**ANS:**

1. Decreased T-cell function due to thymic involution
2. Reduced B-cell response and antibody production

**Q2: Delivering bad news: metastatic lung cancer & the patient came alone.**

**A. 1 thing you will ensure before starting the encounter?**

Ensure privacy and a comfortable setting for the discussion.

**B. 2 questions you'll ask to assess understanding?**

1. "What have the doctors told you so far about your condition?"
2. "What is your understanding of the tests or results done recently?"

**Q3: 48 y.o woman Lower abdominal pain for 3 months and her mother had cancer newly diagnosed and she has work stress and load. How to be a safe doctor what to ask**

**A. 2 Ddx?**

1. Ovarian cancer
2. Irritable bowel syndrome (IBS)

**B. 3 Other areas to explore to be a safe doctor?**

- 1.
- 2.
- 3.

**Q4: Mention 2 differential diagnoses for each case:**

**A. 25 years old male complaining of knee pain for 7 days:**

Traumatic ligament/meniscal injury, Septic arthritis

**B. 75 years old female complaining of knee pain for 3 months:**

Osteoarthritis, Rheumatoid arthritis

**Q5: Patient with DM2, her last A1C check was 3 years ago, she's non-compliant on 3x850mg metformin and her current A1C is 8.5, BMI is 33.**

**A. 2 reasons for her non-compliance.**

1. Poor understanding or low motivation/forgetfulness
2. Medication side effects (e.g., gastrointestinal upset from metformin).

**B. How will you manage from here?**

- Assess barriers to adherence and counsel the patient.
- Lifestyle modification: weight loss, diet control, and exercise.
- Optimize pharmacologic therapy: ensure adherence to metformin and consider adding another antidiabetic agent (e.g., GLP-1 agonist or SGLT2 inhibitor, especially with obesity).
- Regular follow-up and HbA1c monitoring (every ~3 months).

**Q6:**

**A. Diagnosis (mention side)?**

Left Bell's palsy

**B. Important initial step in management?**

1. Start oral corticosteroids (Prednisolone) within 72 hours.
2. Eye protection (artificial tears + eye patch) to prevent corneal drying.



**Q7: TSH 18, T4 low, Case with symptoms of hypothyroidism.**

**A. 2 questions to counseling?**

1. "Are you currently taking any medications such as lithium or amiodarone?"
2. "Have you ever had thyroid surgery or received radiation to the neck?"

**B. Two physical signs:**

1. Bradycardia
2. Dry, coarse skin

## 9<sup>th</sup> Rotation

### **Q1: Doctor–Patient Relationship, True or False:**

**1. Accepting a valuable gift from a patient to enhance trust.**

→ False

**2. Allowing the patient to speak freely, even if the topic is serious.**

→ True

**3. I can decline a patient's request even if they get upset temporarily about it.**

→ True

**4. The patient can deny treatment if he is in full capacitance.**

→ True

**5. I can withhold information that I think may be harmful or distressing to the patient.**

→ False

**Q2: A 76-year-old patient with a history of diabetes mellitus, hypertension, and chronic kidney disease presents for follow-up. He also complains of knee pain due to osteoarthritis, which has led to limited mobility and depression. Is this an example of comorbidity or multimorbidity? Explain.**

**ANS:**

Multimorbidity

**Explanation:** Multimorbidity is the presence of two or more chronic conditions without a single index disease, while comorbidity refers to diseases occurring around a primary condition. Here, there is no single dominant disease, so it is multimorbidity.

### **Q3: eGFR**

**A. What variables are needed to calculate eGFR? (Mention 3):**

Age // Sex // Serum creatinine

**B. Indications for calculating eGFR:**

Assessment of kidney function // Diagnosis and staging of (CKD) // Monitoring progression of kidney disease.

**C. Mention TWO situations where eGFR is not reliable:**

Pregnancy // Extremes of muscle mass (e.g., bodybuilders)

(also acceptable: Dialysis patients, Pediatrics)

**Q4:**

**A. Name ONE theory of aging:**

Free radical theory (also acceptable: telomere theory, programmed aging)

**B. Difference between aging and senescence:**

**Aging:** Gradual physiological changes over time

**Senescence:** Cellular-level irreversible loss of cell division and function

**Q5: Mention 2 differential diagnoses for each case:**

**A. 27-year-old female with headache for 4 days:**

Tension headache, Cluster headache, Migraine, URTI / sinusitis

**B. 22-year-old male with headache for 3 months:**

Medication overuse headache (Rebound Headache), Brain tumor

**Q6: A patient has right shoulder pain for 4 months and is worried because his brother had cancer.**

**A. Mention TWO differential diagnoses:**

Rotator cuff injury // Shoulder osteoarthritis

**B. Mention TWO questions you should ask as a safe doctor for this patient.**

Weight loss, night sweats, fever

**C. Mention THREE areas to cover and give an example for each:**

**1. Ideas:** “What do you think is causing the pain?”

**2. Concerns:** “Are you worried this could be cancer like your brother?”

**3. Expectations:** “What were you hoping we could do for you today?”

**Q7: A picture shows a man with a rash at the site of a basketball tattoo.**

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

Allergic Contact Dermatitis

**B. What is the management?**

Avoid the stimulus, Topical corticosteroids

