ACUTE MEDICINE

OSCE 1.1

# AKI

HISTORY X MANAGEMENT

OSCE

# 01

## TOPIC - HISTORY TAKING

MEDIC

PATIENT

MARKER

# PLEASE REFER TO YOUR SCRIPTS

OSCE

# 01

## PROMPT

63-year-old male patient, known case of type 2 diabetes and hypertension, presented to the emergency department with severe lethargy, decreased urine output and generalized weakness for the past 2 days.

OSCE

02

# LET'S DISCUSS

# INTRODUCTION AND RAPPORT BUILDING

- Confirm patient's identity and consent
- Assess the onset, duration, and progression of symptoms
- Explore the patient's understanding of their condition

# OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- Ask about any recent symptoms such as fatigue, reduced urine output, shortness of breath, and confusion.
- Ask about recent illnesses or infections, any history of kidney disease or conditions such as diabetes or hypertension.

# OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- "Hello [Patient's Name], I am Dr. [Doctor's Name], and I will be looking after you today. I understand that you have been experiencing some discomfort. Can you please explain what has been happening?"

- "Let's start from the beginning. When did you first notice these symptoms? Do you remember feeling unwell before this started? Have you ever had any issues with your kidneys in the past? I also need to know about any chronic diseases you might have, such as diabetes or high blood pressure."

# FURTHER EXPLORATION...

- Assess for oliguria (urine output <400 mL/day) or anuria (<100 mL/day).
- Ask about edema, nausea, vomiting, fatigue, and shortness of breath.

- **Detailed History of Presenting Complaint & Collateral History (3 points):**
- Ask about the onset and progression of symptoms. Did they start suddenly or gradually?
- Use collateral history to determine whether there might be unrecognized symptoms or changes in behavior.

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# OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- "It sounds like you've been quite uncomfortable. Have you noticed a change in how often you urinate? Or the amount? Have you been feeling more tired than usual or experiencing nausea or vomiting? Any swelling around your ankles or puffiness around your eyes?"
- "Could you give me more details about when and how these symptoms started? Were there any specific triggers you noticed? Also, has anyone close to you noticed any changes in your behavior or health that you might not be aware of?"

# RED FLAGS/COMPLICATIONS

- **Red Flags**
  - Reduced or absent urine output
  - Rapidly rising serum creatinine
- **Common Complications:**
  - Increased risk of chronic kidney disease and cardiovascular disease
  - Electrolyte imbalances leading to arrhythmias
- **RISK FACTORS:**
  - Recent use of nephrotoxic medications, severe illness, sepsis, recent surgery, or conditions causing low blood flow to the kidneys.

# OTHER KEY PHRASES

- "It's important that you let us know immediately if your urine output stops entirely or if you find that your symptoms are rapidly getting worse."
- "If left untreated, AKI can lead to chronic kidney disease and increased risk for heart disease. It can also lead to imbalances in your body's electrolytes, which can cause heart rhythm problems."
- "It's also important for us to understand if you've recently taken any medications, specifically painkillers like NSAIDs, ACE inhibitors or ARBs, or antibiotics like aminoglycosides? Have you been hospitalized recently, or have you been diagnosed with a serious illness like sepsis?"

# PAST MEDICAL HISTORY

- Check for pre-existing conditions like diabetes, hypertension, heart disease, or previous kidney disease

**DRUG HISTORY**

- Ask about prescription drugs, over-the-counter medications, and herbal remedies. In particular, check for recent use of NSAIDs, ACE inhibitors, ARBs, or aminoglycosides.

**FAMILY HISTORY**

- Any family history of kidney disease?

**SOCIAL HISTORY:**

- Alcohol, tobacco use, or use of illicit substances, occupational hazards?

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# PAST MEDICAL HISTORY

- "We'll need to take a thorough medical history to ensure we don't miss anything that could contribute to your current condition. Have you been diagnosed with any other medical conditions in the past, particularly those involving your heart, kidneys or blood vessels?"
- "Can we discuss your current and recent medications? This includes any over-the-counter drugs or herbal remedies you may be taking. Are you allergic to any medications?"
- "Do any of your close family members have kidney disease or any other medical conditions?"
- "Your lifestyle can also impact your health. Do you smoke, drink alcohol, or use any illicit substances? What do you do for a living?"

# IDEAS, CONCERNS AND EXPECTATIONS

- ICE
  - "I'd like to take a moment to understand your perspective on your illness. It's important for me to know your ideas, concerns, and expectations regarding your condition and this consultation. Please feel free to express any fears, worries, or questions you may have. We're here to address them together."

# EXAMINATION

- **Examination Findings:**
  - General: Signs of volume overload (e.g., pitting edema, pulmonary crepitations)
  - Cardiovascular: Hypertension, signs of fluid overload
  - Abdominal: Flank pain, enlarged kidneys
  - Neurological: Signs of uremic encephalopathy (e.g., confusion, twitching)

# EXAMINATION

- "We'll perform a physical exam to check for any signs of fluid overload, such as swelling around your ankles or puffiness around your eyes. We'll also be checking your blood pressure and listen to your heart and lungs. Can you please lift up your shirt so I can examine your abdomen?"

# DIFFERENTIAL DIAGNOSIS

- Chronic kidney disease (CKD): Differentiated by a gradual and steady decline in renal function over months or years, rather than the sudden change seen in AKI.
- Prerenal azotemia: Low blood flow to the kidneys can cause AKI, but if the cause is quickly corrected, renal function often returns to normal.

# DIFFERENTIAL DIAGNOSIS

- "While your symptoms and history suggest acute kidney injury, it's also important for us to consider other possible causes for your symptoms. These can include chronic kidney disease, which tends to develop over time rather than suddenly."

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# INVESTIGATION

- Blood tests: Rising serum creatinine, hyperkalemia, metabolic acidosis
- Urinalysis: Hematuria, proteinuria, or casts
- Imaging: Ultrasound to rule out obstruction as the cause of AKI

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# INVESTIGATION

"We'll also need to run some tests, including blood tests to check your kidney function, electrolyte levels, and acid-base balance. We may also need to perform a urinalysis, which involves testing a sample of your urine."

# MANAGEMENT PLAN

- First Line: Treat underlying cause, ensure adequate hydration, avoid nephrotoxic drugs.
- Second Line: May require treatment for hyperkalemia or acidosis.
- Third Line: Dialysis may be needed in severe cases or if there is a life-threatening complication such as hyperkalemia.

- **COMMUNITY MANAGEMENT**
  - Education about hydration and avoiding nephrotoxic medications
  - Arrange follow-up to monitor renal function

# MANAGEMENT PLAN

- "Our primary focus will be to treat the underlying cause of your kidney injury, ensure you are adequately hydrated, and avoid any medications that might be harmful to your kidneys."
- "It's very important to maintain adequate hydration at home, and to avoid any medications that might harm your kidneys. We'll arrange for regular monitoring of your kidney function and electrolyte levels."

# ADVICE TO GUARDIANS/RELATIVES

- Importance of staying hydrated
- Recognizing symptoms of worsening kidney function

# ADVICE TO GUARDIANS/RELATIVES

- "It's very important that [Patient's Name] stays well hydrated and avoids medications that can harm the kidneys. If you notice any worsening of symptoms, please seek medical attention promptly."

# COMPLICATIONS OF TREATMENT

**Complications of Medication and Surgical Therapy:**

1. Dialysis complications: Infection, low blood pressure, muscle cramps
2. Nephrotoxic medications: Worsening kidney function

# COMPLICATIONS OF TREATMENT

- "In severe cases, we may need to consider dialysis, which is a procedure that removes waste products and excess fluid from the blood."
- "Although dialysis can be life-saving, it can also cause complications such as low blood pressure, muscle cramps, and infections."

# FOLLOW UP

- Patients should have regular monitoring of kidney function and electrolytes. Frequency depends on severity.

# FOLLOW UP

- "We will need to monitor [Patient's Name] regularly to ensure that the treatment is working and that kidney function is being restored. Can we arrange a follow-up appointment for [Patient's Name]?"

# SEVERITY SYSTEMS

AKI is classified into three stages based on changes in serum creatinine or urine output.

# NEVER MISS

- AKI is a medical emergency and requires immediate investigation and management.
- AKI can cause serious complications, including CKD and increased risk of death.
- Careful history and examination are essential to identify the cause of AKI.
- Management of AKI involves treating the underlying cause, maintaining adequate hydration, and avoiding nephrotoxic drugs.
- Patients with AKI require close monitoring of renal function and electrolytes during treatment and in the long term.

# TOP 1% QUESTIONS

1. Explain the pathophysiology of acute kidney injury in the context of sepsis.
2. What are the mechanisms of drug-induced nephrotoxicity?
3. How do different types of dialysis work and when might each type be used?
4. Discuss the long-term consequences of an episode of AKI.
5. How does the management of AKI change in special populations such as the elderly or those with pre-existing renal disease?

# SOFT SKILLS

- Demonstrating empathy and effective communication throughout the consultation.
- "Thank you for sharing all this information with me, it's been really helpful in understanding your situation. Do you have any questions or concerns about anything we've discussed today?"

# KEY LEARNING POINTS

- TO BE DONE TOGETHER

DATA

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03

# MANAGEMENT

- What went well?
- What went poorly?
- What will you do next time?

OSCE

02

# LET'S DISCUSS

OSCE

03

# WHY DON'T YOU TRY?

- Test your history taking skills?
- Try examination/investigation/dx formulation?
- Try a Mock exam?

# QUESTIONS?

MDT

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# DIABETIC KETOACIDOSIS

HISTORY X MANAGEMENT

OSCE

# 01

## TOPIC - HISTORY TAKING

MEDIC

PATIENT

MARKER

# PLEASE REFER TO YOUR SCRIPTS

OSCE

# 01

## PROMPT

A 52-year-old woman presents to the Emergency Department with nausea, vomiting, abdominal pain, and altered mental status.

OSCE

02

# LET'S DISCUSS

# INTRODUCTION AND RAPPORT BUILDING

- Confirm patient's identity and consent
- Assess the onset, duration, and progression of symptoms
- Explore the patient's understanding of their condition

# OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- Identify the classic symptoms of DKA: Polyuria, polydipsia, nausea/vomiting, abdominal pain, dyspnea, altered mental status.
- Detail the onset, progression, and any exacerbating or relieving factors.

# OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- "Hello [Patient's Name], I am Dr. [Doctor's Name], and I will be looking after you today. I understand that you have been experiencing some discomfort. Can you please explain what has been happening?"

- "Let's start from the beginning. When did you first notice these symptoms? Do you remember feeling unwell before this started? Have you ever had any issues with your kidneys in the past? I also need to know about any chronic diseases you might have, such as diabetes or high blood pressure."

# FURTHER EXPLORATION...

- Establish the timeline and identify potential precipitating factors.
- Collateral history, if available, can provide valuable information, especially if the patient's mental status is altered.

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# OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- "It sounds like you've been quite uncomfortable. Have you noticed a change in how often you urinate? Or the amount? Have you been feeling more tired than usual or experiencing nausea or vomiting? Any swelling around your ankles or puffiness around your eyes?"
- "Could you give me more details about when and how these symptoms started? Were there any specific triggers you noticed? Also, has anyone close to you noticed any changes in your behavior or health that you might not be aware of?"

# RED FLAGS/COMPLICATIONS

- **Red Flags**
  - Rapidly deteriorating level of consciousness, severe abdominal pain, hypotension, severe tachycardia.
- **Common Complications:**
  - Discuss potential complications: Cerebral edema, acute kidney injury, electrolyte abnormalities, etc.
- **RISK FACTORS:**
  - Infection, non-compliance to medication, new diagnosis of diabetes, acute illness, etc.

# OTHER KEY PHRASES

- "It's important that you let us know immediately if your urine output stops entirely or if you find that your symptoms are rapidly getting worse."
- "If left untreated, AKI can lead to chronic kidney disease and increased risk for heart disease. It can also lead to imbalances in your body's electrolytes, which can cause heart rhythm problems."
- "It's also important for us to understand if you've recently taken any medications, specifically painkillers like NSAIDs, ACE inhibitors or ARBs, or antibiotics like aminoglycosides? Have you been hospitalized recently, or have you been diagnosed with a serious illness like sepsis?"

# PAST MEDICAL HISTORY

- Specifically, assess for known diabetes, previous DKA episodes, other chronic diseases. Evaluate past surgeries, specifically recent ones that could have induced DKA.

**DRUG HISTORY**

- Assess adherence to insulin or other diabetes medications and any recent changes.
- Document allergies and nature of the reaction.

**FAMILY HISTORY**

- Document family history of diabetes or other endocrine disorders.

**SOCIAL HISTORY:**

- Identify potential social contributors: Alcohol/drug use, stress, etc.

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# PAST MEDICAL HISTORY

- "We'll need to take a thorough medical history to ensure we don't miss anything that could contribute to your current condition. Have you been diagnosed with any other medical conditions in the past, particularly those involving your heart, kidneys or blood vessels?"
- "Can we discuss your current and recent medications? This includes any over-the-counter drugs or herbal remedies you may be taking. Are you allergic to any medications?"
- "Do any of your close family members have kidney disease or any other medical conditions?"
- "Your lifestyle can also impact your health. Do you smoke, drink alcohol, or use any illicit substances? What do you do for a living?"

# IDEAS, CONCERNS AND EXPECTATIONS

- ICE
  - "I'd like to take a moment to understand your perspective on your illness. It's important for me to know your ideas, concerns, and expectations regarding your condition and this consultation. Please feel free to express any fears, worries, or questions you may have. We're here to address them together."

# EXAMINATION

- **Examination Findings:**
  - Vital signs: Look for tachycardia, hypotension, tachypnea.
  - Weight
  - Airway: Assess patency
  - Breathing: Kussmaul respiration
  - Cardiovascular: Hydration status, peripheral perfusion
  - Respiratory: Lung auscultation
  - Abdominal: Presence of tenderness or guarding
  - Neurological: Glasgow Coma Scale, presence of focal neurological deficits
  - Cranial nerves: Standard examination, particularly for altered mental status

# EXAMINATION

- "We'll perform a physical exam to check for any signs of fluid overload, such as swelling around your ankles or puffiness around your eyes. We'll also be checking your blood pressure and listen to your heart and lungs. Can you please lift up your shirt so I can examine your abdomen?"

# DIFFERENTIAL DIAGNOSIS

- Hyperosmolar hyperglycemic state (HHS), lactic acidosis, sepsis, acute pancreatitis: Differentiate based on lab findings and clinical presentation.

# DIFFERENTIAL DIAGNOSIS

- "While your symptoms and history suggest acute kidney injury, it's also important for us to consider other possible causes for your symptoms. These can include chronic kidney disease, which tends to develop over time rather than suddenly."

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# INVESTIGATION

- Bloods: Elevated blood glucose, raised ketones, metabolic acidosis (low bicarbonate, low pH)
- Urine: Positive ketones
- Other: Chest X-Ray, ECG, etc. based on the clinical scenario

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01

# INVESTIGATION

"We'll also need to run some tests, including blood tests to check your kidney function, electrolyte levels, and acid-base balance. We may also need to perform a urinalysis, which involves testing a sample of your urine."

# MANAGEMENT PLAN

- First line: Fluid resuscitation, insulin administration, correction of electrolytes.
- Second line: Close monitoring in ICU, treating the precipitating cause.
- Third line: Dealing with complications (e.g., cerebral edema, renal replacement therapy)

- **COMMUNITY MANAGEMENT**
  - Ensure patient understands their medication regimen, importance of adherence.
  - Emphasize follow-up and regular monitoring.

# MANAGEMENT PLAN

- "Our primary focus will be to treat the underlying cause of your kidney injury, ensure you are adequately hydrated, and avoid any medications that might be harmful to your kidneys."
- "It's very important to maintain adequate hydration at home, and to avoid any medications that might harm your kidneys. We'll arrange for regular monitoring of your kidney function and electrolyte levels."

# ADVICE TO GUARDIANS/RELATIVES

- Discuss the seriousness of DKA, signs to look for, and the importance of early medical attention.

# ADVICE TO GUARDIANS/RELATIVES

- "It's very important that [Patient's Name] stays well hydrated and avoids medications that can harm the kidneys. If you notice any worsening of symptoms, please seek medical attention promptly."

# COMPLICATIONS OF TREATMENT

**Complications of Medication and Surgical Therapy:**

- Discuss possible hypoglycemia, electrolyte imbalance.

# COMPLICATIONS OF TREATMENT

- "In severe cases, we may need to consider dialysis, which is a procedure that removes waste products and excess fluid from the blood."
- "Although dialysis can be life-saving, it can also cause complications such as low blood pressure, muscle cramps, and infections."

# FOLLOW UP

- Regular follow-up with an endocrinologist/diabetologist.
- Regular blood glucose monitoring and HbA1c checks.

# FOLLOW UP

- "We will need to monitor [Patient's Name] regularly to ensure that the treatment is working and that kidney function is being restored. Can we arrange a follow-up appointment for [Patient's Name]?"

# SEVERITY SYSTEMS

AKI is classified into three stages based on changes in serum creatinine or urine output.

# NEVER MISS

- Importance of fluid resuscitation, continuous insulin therapy, frequent monitoring of glucose and electrolytes.
- Importance of identifying and treating precipitating cause, monitoring for complications.

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# TOP 1% QUESTIONS

1. Distinguishing DKA from other causes of metabolic acidosis.
2. Importance of potassium replacement even when levels seem normal.
3. Underlying precipitants of DKA.
4. Use of bicarbonate therapy in DKA.
5. Understanding of cerebral edema as a complication of DKA.

# SOFT SKILLS

- Demonstrating empathy and effective communication throughout the consultation.
- "Thank you for sharing all this information with me, it's been really helpful in understanding your situation. Do you have any questions or concerns about anything we've discussed today?"

# KEY LEARNING POINTS

- TO BE DONE TOGETHER

DATA

OSCE

03

# MANAGEMENT

- What went well?
- What went poorly?
- What will you do next time?

OSCE

02

# LET'S DISCUSS

OSCE

03

# WHY DON'T YOU TRY?

- Test your history taking skills?
- Try examination/investigation/dx formulation?
- Try a Mock exam?

# QUESTIONS?

MDT

ACUTE MEDICINE

# PARACETAMOL OVERDOSE

HISTORY X MANAGEMENT

OSCE

# 01

## TOPIC - HISTORY TAKING

MEDIC

PATIENT

MARKER

# PLEASE REFER TO YOUR SCRIPTS

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# 01

## PROMPT

Name: Mr. James Wright
Age: 43
Gender: Male
Accidental ingestion of 30 g of paracetamol (60 tablets of 500 mg each) 8 hours ago.

OSCE

02

# LET'S DISCUSS

# INTRODUCTION AND RAPPORT BUILDING

- Confirm patient's identity and consent
- Assess the onset, duration, and progression of symptoms
- Explore the patient's understanding of their condition

# INTRODUCTION AND RAPPORT BUILDING

- "Hello, my name is Dr. [Name], and I'm here to help you today. May I confirm your name and date of birth, please? I understand that you may be feeling anxious, and I want to assure you that you are in good hands. I'd like to talk to you about what brought you here, examine you, and discuss our plan of care. Is that alright with you? Please know that your comfort is my priority."

# OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- Clarifies the main symptoms, amount, and type of paracetamol ingested, including the timing of ingestion. [2 points]
- Identifies the onset, duration, changes, and associated symptoms such as nausea, vomiting, abdominal pain, etc. [2 points]
- Explores the reason behind the overdose, whether accidental or intentional, including any triggering events or underlying mental health issues. [2 points]

COLLATERAL

- Seeks information from family, friends, or previous medical records if the patient is unable to communicate effectively or if additional context is needed. [2 points]
- Asks for pharmacy records or over-the-counter purchase history if available. [2 points]

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# OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- "Could you please tell me what led to taking the paracetamol? How much did you take, and when did you take it?" [2 points]
- "I'd like to understand how you've been feeling since taking the paracetamol. Have you experienced nausea, vomiting, or any pain in your stomach?" [2 points]
- "It's important for me to know why this happened. Was it accidental or something else? Have there been any recent events that might have contributed to this situation? Your mental well-being is as important as your physical health." [2 points]

# FURTHER EXPLORATION...

- Asks about any attempted interventions at home, like induction of vomiting, activated charcoal, etc. [2 points]
- Inquires about previous episodes or patterns of self-harm or substance abuse, if applicable. [2 points]

# FURTHER EXPLORATION

- "Did you or anyone else try to do anything at home to help with the situation, like inducing vomiting or giving activated charcoal?" [2 points]
- "Have you ever faced a similar situation before, or have there been patterns of self-harm or substance abuse that we should know about? Your safety and wellbeing are our main concerns." [2 points]
- "If you're not feeling well enough to talk, may I speak with a family member or friend to gather more information? Alternatively, I can review your previous medical records." [2 points]
- "To get a complete picture, I might need to check your pharmacy records or information on any over-the-counter purchases if that's available. Is that alright with you?" [2 points]

# RED FLAGS/COMPLICATIONS

- **Red Flags**
  - Identifies and responds to signs of immediate danger, such as altered mental status, severe abdominal pain, respiratory distress, signs of liver failure, etc. [4 points]

- **Common Complications:**
  - Hepatic encephalopathy, renal failure. [1 point]

- **Risk factors**
  - Investigates potential predisposing factors, such as chronic pain, mental health disorders, addiction, etc. [2 points]
  - Reviews social stressors that might have contributed, like relationship problems, financial stress, academic pressure, etc. [2 points]

# RED FLAGS...

- "I need to monitor you for some serious symptoms, like changes in mental status, severe pain, breathing difficulties, or signs of liver failure. Please let me know if you're feeling any of these, as they require immediate attention." [4 points]

COMPLICATIONS

- "It's also important to understand if you've faced any complications like electrolyte imbalance, high sodium levels, or low fluid volume in your body?"

RISK FACTORS

- "We need to understand any underlying issues that may have contributed to this situation, such as chronic pain, mental health challenges, addiction, or social pressures like relationship problems or financial stress. Can you shed light on these aspects?" [4 points]

# PAST MEDICAL HISTORY

- Reviews any previous conditions like liver disease, alcoholism, psychiatric conditions, or chronic diseases that might influence the patient's status. [2 points]
- Examines previous surgical history, particularly hepatic or psychiatric surgeries. [2 points]
- Inquires about developmental history, including significant childhood illnesses or traumas if relevant. [2 points]

**DRUG HISTORY**

- Lists current medications, over-the-counter drugs, and supplements, with a focus on other hepatotoxic medications. [2 points]
- Explores allergies and the nature of reactions. [2 points]
- Assesses patient's compliance with current medications, especially psychiatric ones, if applicable. [2 points]

**FAMILY HISTORY**

- Inquires about family history of liver disease, psychiatric conditions, or addiction, which might influence risk assessment or management. [3 points]

**SOCIAL HISTORY:**

- Investigates occupation, lifestyle, travel history, smoking, alcohol, illicit drugs, school performance, parental dynamics, and household circumstances. [5 points]

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# PAST MEDICAL HISTORY

- "Have you ever had any liver-related diseases, alcohol-related issues, mental health conditions, or surgeries, particularly on the liver? Any significant childhood illnesses or traumas? Your past medical history helps us plan your care." [6 points]

DH

- "Could you please list any medications, over-the-counter drugs, or supplements you're currently taking? It's especially important to know about any medications that could affect your liver." [2 points]
- "Do you have any allergies, and if so, how do they usually affect you?" [2 points]
- "Are you currently taking any psychiatric medications, and if so, how consistent have you been with them? This information helps us ensure your overall well-being." [2 points]

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- "Is there any family history of liver diseases, psychiatric conditions, or addiction that we should be aware of? This can help us in assessing your risk factors and planning your care." [3 points]

SH

- "I'd like to know more about your daily life, work, lifestyle choices like smoking or alcohol consumption, and any recent travel. Understanding your social context helps us provide personalized care." [5 points]

# IDEAS, CONCERNS AND EXPECTATIONS

- ICE
  - "I'd like to take a moment to understand your perspective on your illness. It's important for me to know your ideas, concerns, and expectations regarding your condition and this consultation. Please feel free to express any fears, worries, or questions you may have. We're here to address them together."

# EXAMINATION

- **Examination Findings:**
  - Vital signs including weight. [1 point]
  - Airway, breathing, cardiovascular findings: Normal breath sounds, heart rate. [1 point]
  - Respiratory examination. [1 point]
  - Abdominal findings: Right upper quadrant tenderness. [1 point]
  - Neurological findings, including cranial nerves: Potential confusion, agitation. [1 point]
  - Psychiatric findings & MMSE: Assessing for suicidal ideation or depression. [1 point]
  - Risk assessment for self-harm or further ingestion. [1 point]
  - Specific examinations relevant to specialty: Detailed hepatic and renal examination. [1 point]

# 01

# EXAMINATION

- "I'm now going to check your vital signs, including weight, and examine your airways, breathing, heart, abdomen, and nervous system. This includes assessing for potential confusion or agitation. I'll also do a specific examination of your liver and kidneys. Please let me know if anything feels uncomfortable." [8 points]

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# DIFFERENTIAL DIAGNOSIS

- Elaborate why differentials such as gastroenteritis, peptic ulcer, hepatitis are incorrect. [4 points]

HISTORY

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# DIFFERENTIAL DIAGNOSIS

- "We consider other conditions like gastroenteritis or hepatitis, but given your symptoms and the history of paracetamol ingestion, these are less likely. I can explain more about why we've ruled these out if you'd like." [4 points]

HISTORY

OSCE

01

# INVESTIGATION

- Laboratory values for bloods (AST, ALT, INR, Bilirubin, Creatinine, Paracetamol level). [3 points]
- Imaging and other relevant tests: Ultrasound of the liver. [2 points]

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01

# INVESTIGATION

- "We'll be taking some blood tests to check on your liver function and the level of paracetamol. This will give us a clearer idea of the best way to treat you."
- "We may also do an ultrasound of your liver, which is a simple scan to get more details about its state."

# MANAGEMENT PLAN

- First line: Activated charcoal, NAC, fluid resuscitation. [2 points]
- Second and third line: Supportive care, monitoring, psychiatric assessment. [2 points]
- Management in the community: Regular follow-up, counseling. [1 point]

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COMMUNITY MANAGEMENT

- Coordination with primary care, mental health services, and substance abuse programs. [2 points]

# MANAGEMENT PLAN

- "Our immediate plan includes giving you some medications like activated charcoal and NAC to help counter the effects of the paracetamol. We'll also ensure you're well-hydrated."
- "If necessary, we'll keep monitoring you and provide any additional care or support you might need, including speaking to a mental health specialist."

- Management in the Community (1 point)
  - "Once you're feeling better, we recommend some counseling and regular check-ups to ensure you continue to feel well."
  - "Before you leave, we'll provide you with clear instructions on what to watch out for and who to contact if you have any concerns."

# KEY PRINCIPLES BEFORE DISCHARGE AND SAFETY NETTING (5 POINTS)

- Providing clear instructions about signs of deterioration, such as jaundice, bleeding, confusion, etc., and what steps to take if they occur. [1 point]
- Giving emergency contact information and explaining when to seek immediate medical assistance. [1 point]
- Offering reassurance and encouraging open communication, making sure patients and families know they can reach out with questions or concerns. [1 point]

# KEY PRINCIPLES BEFORE DISCHARGE AND SAFETY NETTING (3 POINTS)

- "Paracetamol, when taken in high amounts, can damage the liver. We're doing all the necessary treatments to prevent or limit this damage. It's crucial to follow our guidance for the best recovery."
- "One of the primary treatments is N-acetylcysteine or NAC, which helps protect the liver. If there's significant damage, we might need to discuss more involved treatments, but we'll cross that bridge when we come to it."
- "I understand this is a challenging time. Please let me know any concerns or questions, and I'll do my best to address them."
- “Before you leave, we’ll provide clear instructions on what to watch for and whom to contact in case of an emergency. Your safety and understanding of the next steps are our priority.”

# ADVICE TO GUARDIANS/RELATIVES

- **Explanation of the Condition to Patients and Their Relatives (1 points):**
  - Explanation of paracetamol overdose, including the mechanism and potential liver damage. [1 point]
  - Clarifying what treatments will be used, including N-acetylcysteine (NAC) or potential liver transplantation, and their mechanisms of action. [1 point]
  - Reassuring the patient and relatives, addressing their concerns and anxieties. [1 point]
- **Advice to Guardians (2 points):**
  - Providing guardians with information on support groups, educational websites, and helplines related to overdose prevention and mental health. [1 point]
  - Advising on monitoring signs of depression, self-harm, or suicidal ideation, and steps to take if these signs are present. [1 point]
  - Offering available community resources for mental health, addiction, and support services. [1 point]

# ADVICE TO GUARDIANS/RELATIVES

- Here are some resources and support groups that might help you understand and manage what's going on."
- "Please keep an eye on any signs of depression or self-harm, and don't hesitate to reach out to us or other professionals if you're concerned."
- "There are community resources available that can provide support and care during this time. Let's discuss what might be most helpful for you."

# COMPLICATIONS OF TREATMENT

MOA

- N-Acetylcysteine (NAC) in Paracetamol Overdose (3 points):
  - Explains how NAC replenishes glutathione stores, neutralizing the toxic metabolite NAPQI produced in paracetamol metabolism, thereby preventing liver injury. [3 points]
- Activated Charcoal (2 points):
  - Describes how activated charcoal absorbs paracetamol in the stomach, reducing systemic absorption if administered within 1-2 hours post-ingestion. [2 points]

COMPLICATIONS

- NAC: Identifies and explains potential side effects such as allergic reactions, nausea, vomiting, and rarely, anaphylaxis. Discusses the need for close monitoring and potential adjustments in dosing. [2 points]
- CHARCOAL: Explains potential complications including aspiration, constipation, and bowel obstruction. Addresses the contraindications, such as an unprotected airway or concurrent ingestion of substances not absorbed by charcoal. [2 points]

# COMPLICATIONS OF TREATMENT

## Mx of Therapies

- "NAC is an antidote that helps your liver deal with the paracetamol. Think of it like giving your liver extra tools to clean up a spill. Normally, your liver can handle paracetamol, but in large amounts, it needs some extra help, and NAC provides that help."
- "We might also use activated charcoal, especially if you've recently taken the tablets. It's like a sponge in your stomach that soaks up the paracetamol, preventing it from reaching your liver."

## Cx of Therapies

- "While NAC is beneficial, it might cause some side effects like nausea. We'll be closely watching for any signs of that."
- "If a liver transplant becomes necessary, we'll discuss the risks and benefits in detail, including what life would be like afterward."
- "It's vital to follow our treatment plan and attend all follow-ups to ensure the best outcome."

# FOLLOW UP

- Scheduling a detailed plan for surveillance, including follow-up appointments, lab work, and potential referrals to specialists like hepatologists or mental health professionals, following UK guidelines. [2 points]

# FOLLOW UP

- "We'll need to keep an eye on your recovery through regular appointments and lab work. We'll follow the guidelines to ensure you get the best possible care, including referrals to specialists if needed."

# NEVER MISS

1. Accurate assessment of amount and timing of paracetamol ingestion.
2. Administration of N-acetylcysteine within appropriate time window.
3. Risk assessment for self-harm.
4. Comprehensive explanation to patients and guardians.
5. Clear follow-up plan and safety netting.

# TOP 1% QUESTIONS

1. What is the precise biochemical pathway of paracetamol-induced hepatotoxicity?
2. Explain the mechanism by which N-acetylcysteine acts as an antidote.
3. How does the Kings College Criteria apply in assessing liver transplant necessity in paracetamol overdose?
4. Elaborate on the pharmacogenomics affecting paracetamol metabolism.
5. How would you tailor management in a pregnant woman with paracetamol overdose?

# SOFT SKILLS

- Demonstrating empathy and effective communication throughout the consultation.
- "Thank you for sharing all this information with me, it's been really helpful in understanding your situation. Do you have any questions or concerns about anything we've discussed today?"
- Closing the consultation: "Thank you for your time today. I know this can be a lot to take in, but it's important to remember that we're here to support you every step of the way. If you have any further questions or concerns, please don't hesitate to ask."

# KEY LEARNING POINTS

- TO BE DONE TOGETHER

DATA

OSCE

03

# MANAGEMENT

- What went well?
- What went poorly?
- What will you do next time?

OSCE

02

# LET'S DISCUSS

OSCE

03

# WHY DON'T YOU TRY?

- Test your history taking skills?
- Try examination/investigation/dx formulation?
- Try a Mock exam?

# QUESTIONS?

MDT

ACUTE MEDICINE

# ATRIAL FIBRILLATION

OSCE 1.4

HISTORY X MANAGEMENT

OSCE

# 01

## TOPIC - HISTORY TAKING

MEDIC

PATIENT

MARKER

# PLEASE REFER TO YOUR SCRIPTS

OSCE

# 01

## PROMPT

A 68-year-old male, Mr. Johnson, presents with palpitations and shortness of breath.

OSCE

02

# LET'S DISCUSS

# INTRODUCTION AND RAPPORT BUILDING

- Introduces Self and Purpose: Introduction of the medical professional, confirms patient identity, explains the purpose of the conversation, and ensures patient comfort. [1 point]
- Obtains Consent: Asks for consent to proceed with the questions and possibly a physical examination later on. [1 point]
- Chief complaint and duration.

OSCE

01

# INTRODUCTION AND RAPPORT BUILDING

"Hello [patient's name], thank you for taking the time to meet with me today. I'd like to discuss your symptoms and health in detail to best understand how we can help. If you have any questions or concerns at any point, please feel free to stop me."

# OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- Onset and duration of symptoms.
- Palpitations: regularity, associated chest pain, dyspnea, or dizziness.
- Syncope or pre-syncope.
- Fatigue or reduced exercise tolerance.
- History of previous cardiac conditions.
- Thromboembolic events: stroke, transient ischemic attack (TIA).

# OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- **Onset and duration:**
  - "Can you tell me when you first noticed these symptoms?"
  - "How long have you been feeling like this?"
- **Palpitations**:
  - "Do you ever feel your heart racing or skipping beats?"
  - "Are these palpitations regular or irregular? Do they come with any chest discomfort, difficulty breathing, or dizziness?"
- **Syncope**: "Have you ever fainted or felt like you were about to faint?"
- **Fatigue**: "How has your energy level been lately? Do you find yourself getting tired easily?"
- **Previous cardiac history:** "Have you had any heart problems in the past?"
- **Thromboembolic events:** "Have you ever been diagnosed with a stroke or a mini-stroke, also known as a TIA?"

# FURTHER EXPLORATION...

- Description of palpitations (fluttering, racing, skipping).
- Precipitating or relieving factors.
- Association with caffeine or alcohol intake.

- **Detailed History of Presenting Complaint:**
  - Duration and severity of symptoms.
  - Any interventions tried (e.g., Valsalva maneuver).
  - Patterns or triggers noticed.

COLLATERAL

- Observations by family/friends about the patient's behavior or symptoms.
- Any witnessed syncopal events or seizures.

# FURTHER EXPLORATION

- **Description**:
  - "Can you describe these palpitations? Do they feel like fluttering, racing, or skipping?"
- **Precipitating or relieving factors:**
  - "Have you noticed anything that triggers these feelings or makes them stop?"
- **Association with intake:**
  - "Have you noticed if caffeine or alcohol affects your symptoms?"
- **Interventions**:
  - "Have you tried anything to relieve these symptoms, like holding your breath or bearing down?"
- **Patterns**:
  - "Are there specific times of the day or situations when these symptoms seem more prominent?"

**COLLATERAL**

- "Has anyone around you noticed anything unusual about your behavior or symptoms?"
- "Has anyone seen you faint or have a seizure?"

# RED FLAGS/COMPLICATIONS

- **Red Flags**
  - Chest pain or tightness.
  - Acute breathlessness.
  - Severe dizziness or vertigo.
  - Hemoptysis.
  - Severe weakness or paralysis.

- **Common Complications:**
  - Stroke or TIA.
  - Heart failure.
  - Thromboembolism.
  - Cardiomyopathy.

- **Risk factors**
  - Age.
  - Obesity.
  - Excessive alcohol consumption.
  - Chronic kidney disease.
  - Family history of AF.

OSCE

01

# RED FLAGS...

"Have you had any chest tightness or pain? Any sudden difficulty in breathing? Any severe dizziness or spinning sensation? Have you ever coughed up blood? Noticed any sudden weakness or paralysis?"

COMPLICATIONS

- "Apart from the symptoms you mentioned, have you noticed any swelling in your legs, difficulty breathing especially at night, or any other new symptoms?"

RISK FACTORS

- "Do you smoke or consume alcohol? How would you describe your diet and exercise routine?"

HISTORY

# PAST MEDICAL HISTORY

- Hypertension.
- Diabetes mellitus.
- Previous AF episodes or other arrhythmias.
- Thyroid disorders.
- Rheumatic heart disease.

**DRUG HISTORY**

- Current medications, including anti-arrhythmics or anticoagulants.
- Over-the-counter drugs, including supplements.
- Allergies and reactions.

**FAMILY HISTORY**

- Cardiac arrhythmias.
- Cardiac surgeries or interventions.
- Sudden cardiac deaths.

**Social History:**

- Alcohol, caffeine, tobacco, and drug use.
- Occupational exposures.
- Living conditions and support systems.

# PAST MEDICAL HISTORY

Past Medical and Surgical History:

- "Have you been diagnosed with conditions like high blood pressure, diabetes, thyroid problems, or rheumatic fever in the past?"

Social History:

- "Does anyone in your family have a history of heart problems, surgeries, or sudden deaths?"
- "Can you tell me a bit about your lifestyle? Do you smoke, drink alcohol, or caffeine? What is your profession, and are there any particular stressors or chemicals you're exposed to?"

# IDEAS, CONCERNS AND EXPECTATIONS

- ICE
  - "I'd like to take a moment to understand your perspective on your illness. It's important for me to know your ideas, concerns, and expectations regarding your condition and this consultation. Please feel free to express any fears, worries, or questions you may have. We're here to address them together."

OSCE

01

# EXAMINATION

- **Examination Findings: - <u>CHAPERONE</u>**
  - Vital Signs: BP, HR, RR, O2 saturation, temperature, weight.
  - Airway: Clear, no obstructions.
  - Breathing: Equal air entry, no added sounds.
  - Cardiovascular: Irregularly irregular pulse, heart sounds, murmurs.
  - Respiratory: Lung fields, effusion signs.
  - Abdominal: Organomegaly.
  - Neurological: Alertness, cranial nerves, motor & sensory system, reflexes.
  - Peripheral: Pulses, edema.
  - Psychiatric and MMSE: Orientation, recall, language, attention, calculation.
  - Risk Assessment: Risk of stroke (CHADS-VASc score), bleeding risk (HAS-BLED score).

# 01
# EXAMINATION

- **"I'd like to conduct a few physical examinations to get a clearer picture. Is that alright?"**
  - Begin with vital signs: "I'll start by checking your blood pressure, heart rate, respiratory rate, oxygen saturation, temperature, and weight."
  - Clear the airway: "Just let me know if you have any trouble breathing or if you feel any discomfort as I proceed."
  - Assess breathing: "I'll listen to your breath sounds and check for any added sounds."
  - Cardiovascular examination: "I'll be assessing your heart rhythm, listening to your heart sounds, and checking for any murmurs."
  - Respiratory examination: "I'll examine your lung fields and assess for any signs of effusion or other pulmonary conditions."
  - Abdominal examination: "I'll be checking for any organomegaly or tenderness in your abdomen."
  - Peripheral examination: "I'll also be checking your pulses and looking for any signs of edema."

OSCE

# 01

# RISK ASSESSMENT

- Explain the purpose of risk assessment: "We want to ensure your safety and tailor our approach based on your individual risk factors."
- Explain CHADS-VASc and HAS-BLED scores: "We use these scores to estimate your risk of stroke and bleeding."
- Reassure the patient: "We'll consider these scores to make well-informed decisions about your care."

EXAMINATION

# DIFFERENTIAL DIAGNOSIS

- AF.
- Atrial flutter.
- Supraventricular tachycardia.
- Ventricular tachycardia.
- Reason for exclusion: ECG findings, clinical history, age of onset.

OSCE

01

# DIFFERENTIAL DIAGNOSIS

- Explain the process of considering different possibilities: "In medicine, we consider a range of possibilities before arriving at a diagnosis."
- Discuss AF and atrial flutter: "We're focusing on atrial fibrillation and atrial flutter based on your symptoms and findings."
- Discuss reasons for exclusion: "Other rhythms were excluded based on your ECG, clinical history, and age of onset."

HISTORY

OSCE

01

# INVESTIGATION

- ECG: Irregular rhythm, absence of P waves.
- Bloods: FBC, U&E, Thyroid function tests, Coagulation profile.
- Echo: Evaluate heart chambers and function.
- Chest X-ray: Rule out other pulmonary conditions.

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01

# INVESTIGATION

- Share the purpose of investigations: "We'll be performing some tests to get a better understanding of your condition."
- ECG: "This test will help us evaluate your heart's rhythm and any irregularities."
- Blood tests: "We'll also do some blood tests to check your full blood count, electrolytes, thyroid function, and coagulation profile."
- Echo: "An echocardiogram will give us a detailed picture of your heart's chambers and function."
- Chest X-ray: "We'll do a chest X-ray to rule out any other pulmonary conditions."

# MANAGEMENT PLAN

- **Immediate Management:** Rate or rhythm control (beta-blockers, calcium channel blockers, amiodarone).
- **First Line:** Anticoagulation (Warfarin, DOACs).
- **Second Line:** Catheter ablation.
- **Third Line:** Pacemaker/AV node ablation.

- **Prevention & Lifestyle Changes:**
  - Limit caffeine and alcohol.
  - Manage weight.
  - Regular cardiovascular exercise.

- **Management in the Community:**
  - Anticoagulation clinics.
  - Regular ECG monitoring.
  - Patient education on AF management.

# MANAGEMENT PLAN

- Immediate Management: "Right now, our priority is to manage your heart rate or rhythm to improve your symptoms."
- First Line: "We'll consider medications like beta-blockers, calcium channel blockers, or amiodarone to help control your heart rate."
- Second Line: "If needed, we might discuss a procedure called catheter ablation to correct the rhythm."
- Third Line: "In some cases, a pacemaker or AV node ablation might be considered to manage the rhythm."

- Prevention & Lifestyle Changes:
  - Discuss the importance of lifestyle: "Lifestyle adjustments can greatly impact your overall health and condition management."
  - Limit caffeine and alcohol: "Cutting back on caffeine and alcohol can contribute to better heart health."
  - Weight management: "Managing your weight through a balanced diet and regular exercise can be beneficial."
  - Regular exercise: "Engaging in cardiovascular exercise can improve your heart's strength and function."

# COMMUNITY MANAGEMENT

Management in the Community:

- Anticoagulation clinics: "These clinics provide support and monitoring for individuals on anticoagulation therapy."
- Regular ECG monitoring: "We might suggest regular ECG monitoring to track your heart's rhythm."
- Patient education: "We'll provide you with information and resources to manage your atrial fibrillation effectively."

# KEY PRINCIPLES BEFORE DISCHARGE AND SAFETY NETTING (5 POINTS)

- Stable heart rate/rhythm.
- Initiation or continuation of anticoagulation.
- Absence of acute complications.
- Patient understanding of AF.

- **SAFETYNETTING (1 Point):**
  - Return if worsening symptoms, chest pain, or neurological deficits.
  - Keep emergency contacts.
  - Importance of adhering to medications and follow-ups.

# KEY PRINCIPLES BEFORE DISCHARGE AND SAFETY NETTING (3 POINTS)

- Stable heart rate/rhythm: "We aim for your heart rate and rhythm to be stable before discharge."
- Continued anticoagulation: "Ensuring proper anticoagulation is vital for your safety."
- Absence of acute complications: "We'll make sure there are no acute issues before you leave."
- Patient understanding: "We want to ensure you're well-informed about your condition and management."

- Be vigilant: "If you notice any worsening of your symptoms, chest pain, or neurological changes, it's important to seek medical attention."
- Emergency contacts: "Keep a list of emergency contacts handy for your peace of mind."

# ADVICE TO GUARDIANS/RELATIVES

- "Atrial fibrillation is an irregular heart rhythm. It can increase the risk of stroke."
- Importance of medication adherence, especially anticoagulants.
- Potential complications and when to seek help.

- **Advice to Guardians, Useful Resources (2 points):**
  - Atrial Fibrillation Association.
  - NHS website on AF.

# ADVICE TO GUARDIANS/RELATIVES

- Use simple language: "Atrial fibrillation means your heart's rhythm is irregular, which can increase your risk of stroke."
- Emphasize importance of adherence: "It's important to take your medications as prescribed, especially the anticoagulants."
- Discuss potential complications: "While the condition can be managed, there's a risk of complications that we're here to address."

- Support and information: "The Atrial Fibrillation Association and NHS website are great resources for information and support."

# COMPLICATIONS OF TREATMENT

**Complications of Medication:**

1. Bleeding (anticoagulants).
2. Bradycardia (beta-blockers).

**Mechanism of Action:**

1. Beta-blockers: Decrease heart rate by blocking adrenaline.
2. Anticoagulants: Prevent clot formation by targeting clotting cascade.

**Surgical Therapies:**

1. Catheter ablation: Destroying aberrant pathways.
2. AV node ablation: Blocking electrical conduction.

# COMPLICATIONS OF TREATMENT

**Complications of Medication:**

1. Potential bleeding risk: "Some medications might slightly increase your risk of bleeding."
2. Possibility of bradycardia: "Certain medications could cause your heart rate to slow down."

**Mechanism of Action:**

1. Beta-blockers: "Beta-blockers work by blocking the effects of adrenaline, leading to a slower heart rate."
2. Anticoagulants: "Anticoagulants prevent the formation of blood clots by targeting the blood's clotting cascade."

**Surgical Therapies:**

1. Catheter ablation: "Catheter ablation involves targeting and destroying abnormal pathways in your heart to restore normal rhythm."
2. AV node ablation: "AV node ablation involves blocking the electrical conduction between the upper and lower chambers of your heart."

# FOLLOW UP

- Cardiologist review in 4 weeks.
- ECG in 2 weeks.
- INR checks if on warfarin.

# SEVERITY SYSTEM

- Frequency of AF episodes.
- Symptom severity.
- Complications (e.g., stroke, heart failure).
- Response to therapy.

# FOLLOW UP

- "You'll have a follow-up appointment with a cardiologist in about 4 weeks to assess your progress."
- "Before discharging, we'll ensure your symptoms have significantly improved and that safety measures are in place at home. Additionally, we'll provide educational resources to both you and caregivers to manage the condition better."

# NEVER MISS

1. Diagnosis with ECG.
2. Risk assessment (CHADS-VASc, HAS-BLED).
3. Anticoagulation decision.
4. Immediate management.
5. Safety netting.

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01

# TOP 1% QUESTIONS

1. Describe the electrophysiological changes in AF.
2. How does AF increase stroke risk?
3. Differentiate between paroxysmal, persistent, and permanent AF.
4. Describe the role of the pulmonary veins in AF.
5. Discuss newer advances in AF management.

# SOFT SKILLS

- Demonstrating empathy and effective communication throughout the consultation.
- "Thank you for sharing all this information with me, it's been really helpful in understanding your situation. Do you have any questions or concerns about anything we've discussed today?"
- Closing the consultation: "Thank you for your time today. I know this can be a lot to take in, but it's important to remember that we're here to support you every step of the way. If you have any further questions or concerns, please don't hesitate to ask."

# KEY LEARNING POINTS

- TO BE DONE TOGETHER

DATA

OSCE

03

# MANAGEMENT

- What went well?
- What went poorly?
- What will you do next time?

OSCE

02

# LET'S DISCUSS

OSCE

03

# WHY DON'T YOU TRY?

- Test your history taking skills?
- Try examination/investigation/dx formulation?
- Try a Mock exam?

# QUESTIONS?

MDT

ACUTE MEDICINE

# ACUTE HEART FAILURE

HISTORY X MANAGEMENT

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01

# TOPIC - HISTORY TAKING

MEDIC

PATIENT

MARKER

## PLEASE REFER TO YOUR SCRIPTS

OSCE
01

# PROMPT

Sarah Johnson presents to the Emergency Department with severe shortness of breath, significant swelling in her lower limbs, and persistent coughing

OSCE
02

# LET'S DISCUSS

# INTRODUCTION AND RAPPORT BUILDING

- Introduce self and verify patient's identity.
- Obtain consent.
- Open-ended question about presenting complaint.

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01

# INTRODUCTION AND RAPPORT BUILDING

1. Good morning, my name is Dr. [Your Name], and I'll be your physician today. May I kindly confirm your name and date of birth?"
2. "Before we proceed, I'd like to ask for your consent to discuss your medical history and perform an examination."
3. "Could you please start by telling me about the reason for your visit today? Is there anything specific that's been bothering you?"

# OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- Identify the primary symptoms: Explore and identify the most important symptoms, such as severe shortness of breath, productive cough with pink frothy sputum, orthopnea, and leg swelling.
- Duration, progression, and triggers: Ask about the onset, duration, and progression of symptoms. Identify any triggers for the exacerbation.
- Orthopnea: Specifically ask about orthopnea and the number of pillows needed to sleep.

Document when the symptoms started, how long they have been present, and if they have progressively worsened.

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# OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

"I understand you've been experiencing some symptoms, such as shortness of breath, difficulty breathing when lying down, sudden awakening at night due to breathlessness, feeling tired easily, and swelling in your legs. Can you please elaborate on these symptoms?"

# FURTHER EXPLORATION...

- Onset, duration, and progression: Document when the symptoms started, how long they have been present, and if they have progressively worsened.
- Any other associated symptoms: Inquire about additional symptoms like palpitations, tiredness, or claudication.

- COLLATERAL HISTORY:
  - From family or carers: If applicable, gather information from family members or caregivers regarding the patient's recent condition and decline in energy.

# FURTHER EXPLORATION

- Detailed History of Presenting Complaint: "Could you tell me when these symptoms started, how long they've been going on, and if anything seems to trigger or alleviate them?"
- Collateral History: "Is there anything significant that has happened recently in your life? For instance, have you had any recent illnesses, been exposed to any infections, or changed any medications?

# RED FLAGS/COMPLICATIONS

- **Red Flags**
  - Common Red Flag Symptoms: Address chest pain, syncope, altered mental status, and worsening dyspnea.

- **Common Complications:**
  - Emphasize the risks of pulmonary edema, cardiogenic shock, and organ failure.
  - Myocardial infarction, stroke, peripheral vascular disease: Educate the patient about the potential complications of acute heart failure.

- **Risk factors**
  - Identification of Risk Factors: Explore factors such as smoking, alcohol, and familial cardiac diseases.

# RED FLAGS...

- Common Red Flag Symptoms: "It's essential to be aware of any warning signs, such as severe chest pain, fainting, or confusion, as they could indicate a serious problem that requires immediate attention."

COMPLICATIONS

- Common Complications: "In cases like these, the heart can struggle, and it may lead to complications such as fluid accumulating in the lungs, a severe condition known as pulmonary edema, shock, or organ dysfunction. We'll work to prevent these complications."

RISK FACTORS

- Identification of Risk Factors: "Let's discuss some risk factors that can influence heart health, such as smoking, alcohol consumption, or a family history of heart disease. Do any of these apply to you?"

# PAST MEDICAL HISTORY

- Medical History: Assess previous cardiac issues, hypertension, diabetes, renal disease, and anemia.

**DRUG HISTORY**

- Current medications: List the medications the patient is taking, focusing on those relevant to heart failure, such as ACE inhibitors or beta-blockers.
- Nature of allergy and reaction: Document any known drug allergies and describe the nature of the reaction.

**FAMILY HISTORY**

- Heart diseases, strokes, hyperlipidaemia: Inquire about a family history of relevant conditions.

**Social History:**

- Current living situation: Ask about the patient's living circumstances, including support systems.

# PAST MEDICAL HISTORY

- Medical History: "Have you had any previous heart problems or other conditions like high blood pressure, diabetes, kidney disease, or anemia? It's important to understand your medical history."

DH

- Could you share information about the medications you are currently taking, any known allergies, and how you've reacted to them in the past?

FAMILY AND SOCIAL HISTORY:

- How about your family history? Have any of your close relatives experienced cardiovascular diseases?
- Lastly, let's discuss your lifestyle. What is your typical diet, and how physically active are you?

# IDEAS, CONCERNS AND EXPECTATIONS

- ICE
  - "I'd like to take a moment to understand your perspective on your illness. It's important for me to know your ideas, concerns, and expectations regarding your condition and this consultation. Please feel free to express any fears, worries, or questions you may have. We're here to address them together."

# EXAMINATION

- **Examination Findings: - <u>CHAPERONE</u>**
  - Vital Signs: Record blood pressure, heart rate, respiratory rate, and weight. Assess airway and breathing.
  - Cardiovascular Examination: Inspect for jugular venous distension, listen for murmurs, and palpate for edema.
  - Respiratory Examination: Examine for crackles, wheezing, and respiratory distress.
  - Abdominal and Neurological Examination: Check for hepatomegaly, ascites, and altered mental status.
  - Peripheral and Psychiatric Examination:
  - Peripheral Examination: Inspect extremities for cyanosis, clubbing, and peripheral edema.
  - Psychiatric Findings and MMSE: Evaluate mental health and perform Mini-Mental State Examination.

**RISK ASSESSMENT**

- Risk Assessment: Identify the patient's risk for decompensation.

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# EXAMINATION

- **"I'd like to conduct a few physical examinations to get a clearer picture. Is that alright?"**
    - Examination Findings:
        - Now, we'll move on to a physical examination. We'll begin by checking your vital signs, including blood pressure, heart rate, respiratory rate, and your weight. I'll also assess your airway and breathing.
    - Cardiovascular Examination:
        - During the cardiovascular examination, I'll be looking for any signs of jugular venous distension, listening for murmurs, and checking for edema by gently pressing on certain areas.
    - Respiratory Examination:
        - Next, I'll examine your respiratory system for any crackles, wheezing, or signs of respiratory distress.
    - Abdominal and Neurological Examination:
        - Additionally, I'll check your abdomen for signs like hepatomegaly or ascites, and I'll perform a brief neurological examination to assess your mental status.
    - Peripheral Examination:
        - Looking at your extremities, I'll inspect for any signs of cyanosis, clubbing, or peripheral edema.

- RISK ASSESSMENT:
    - Based on our discussion and examination, I'll now assess your risk for any potential decompensation.

# DIFFERENTIAL DIAGNOSIS

1. Thyroid disorders.
2. Nephrotic syndrome.
3. Diabetes.
4. Explain why each is less likely based on presentation and findings.

# DIFFERENTIAL DIAGNOSIS

- Before we discuss potential diagnoses, I'd like to explain why some other possibilities are less likely.

- Acute Coronary Syndrome (ACS):
  - Chest pain is a significant symptom seen in ACS, often accompanied by signs of myocardial infarction, such as ECG changes and elevated cardiac enzymes. However, your chest pain doesn't seem to be the primary focus of your symptoms.
- Chronic Obstructive Pulmonary Disease (COPD) Exacerbation:
  - Individuals with COPD can experience exacerbations leading to shortness of breath. However, your symptoms appear more focused on fluid retention and peripheral edema, which is not a typical feature of COPD.
- Pneumonia:
  - Pneumonia may cause respiratory distress, but typically presents with symptoms such as fever, productive cough, and abnormal chest sounds on auscultation. Your primary symptoms don't align with an infectious etiology.

OSCE

01

# INVESTIGATION

1. Bloods: Obtain laboratory values, including total cholesterol, LDL, HDL, triglycerides, complete blood count, electrolytes, renal function, and cardiac biomarkers like BNP.
2. Imaging: Order a chest X-ray to visualize pulmonary congestion and cardiac size.
3. ECG: Perform an electrocardiogram to assess for arrhythmias and ischemic changes.
4. Echocardiogram: To evaluate cardiac function and structure.

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01

# INVESTIGATION

- Moving forward, we might need to perform some laboratory tests, such as B-type natriuretic peptide (BNP), troponin, and imaging studies to gather more information.

OSCE
01

# MANAGEMENT PLAN

- Immediate Management: Stabilize the patient with oxygen, diuretics, and monitoring vital signs.
- First Line: Prescribe medications such as ACE inhibitors, beta-blockers, and diuretics.
- Second Line: Consider coronary angiography if ischemia is suspected.
- Prevention: Highlight the importance of lifestyle changes, medication adherence, and regular follow-up.
- Management in the Community: Outline monitoring and primary care follow-up.

# MANAGEMENT PLAN

- Immediate Management:
  - "Initially, we'll prioritize relieving your symptoms, focusing on improving respiratory distress and addressing fluid overload. This might involve oxygen therapy and diuretic medications."
- First-Line Interventions:
  - "We'll initiate medications like loop diuretics to reduce fluid retention and improve breathing. Additionally, we'll address potential precipitating factors such as infections."
- Second-Line Interventions:
  - "If the response to diuretics is suboptimal, we might consider vasodilators or inotropes to enhance cardiac output. Adjustments to the medication plan will depend on ongoing assessments."
- Third-Line Interventions:
  - "In refractory cases, advanced interventions like mechanical circulatory support or consultation with a cardiac specialist may be necessary. These decisions will be based on your response to initial treatments."

# KEY PRINCIPLES BEFORE DISCHARGE AND SAFETY NETTING (5 POINTS)

- Detail criteria for safe discharge, emphasizing stability
- Ensure the patient understands the diagnosis and treatment plan.
- Confirm medication compliance and schedule regular follow-up.

- **Explanation to Patients/Relatives**:
  - Describe what acute heart failure is, its causes, complications, and the importance of management.

- **SAFETY NETTING: Return if:**
  - Instruct the patient on when to seek help, such as worsening symptoms or side effects from medications.

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# KEY PRINCIPLES BEFORE DISCHARGE AND SAFETY NETTING (3 POINTS)

- Before we conclude, I'd like to emphasize the key principles that ensure a safe discharge. This includes stability and having a plan for adequate follow-up.
- **SAFETYNETTING:** To ensure your safety, I'll provide guidance on when to seek urgent medical attention and what signs to look out for.
- **EXPLANATION:** "Finally, I want to make sure you have a comprehensive understanding of your condition and its management. If there's anything unclear, please feel free to ask.
- **Lifestyle**: "Discuss lifestyle modifications, including a heart-healthy diet and regular physical activity within the patient's capacity. These changes contribute to overall heart health."

# ADVICE TO GUARDIANS/RELATIVES

- **Advice to Guardians & Resources:**
  - Provide resources and support groups for both patients and their families.

# ADVICE TO GUARDIANS/RELATIVES

- **Advice to Guardians:**
  - Fluid Restriction:
    - "Encourage a fluid-restricted diet for the patient. Limiting daily fluid intake can help manage fluid retention and reduce the strain on the heart."
  - Medication Adherence:
    - "Ensure strict adherence to prescribed medications. Consistency in taking medications, especially diuretics, is crucial for effective symptom management."
  - Regular Follow-Up:
    - "Emphasize the importance of regular follow-up appointments. Monitoring the patient's progress and adjusting the treatment plan will require frequent medical assessments."
  - Recognition of Warning Signs:
    - "Educate on recognizing warning signs, such as sudden weight gain, increased swelling, or changes in breathing patterns. Prompt reporting of these signs allows for timely intervention."

# EXPLANATION

- Nature of Acute Heart Failure:
  - "Acute Heart Failure is a condition where the heart is temporarily unable to pump blood efficiently. This can lead to symptoms like shortness of breath, fatigue, and fluid retention."
- Causes and Triggers:
  - "Common causes include exacerbation of pre-existing heart conditions, infections, or other stressors. Identifying and addressing the underlying cause is crucial for effective management."
- Importance of Medications:
  - "Medications prescribed, such as diuretics and vasodilators, aim to alleviate symptoms and improve heart function. Adhering to the prescribed regimen is vital for optimal outcomes."

# COMPLICATIONS OF TREATMENT

1. **Medication Complications:**
   - ACE Inhibitors: While effective, ACE inhibitors can cause side effects such as a dry cough, hyperkalemia, and, rarely, angioedema. Patients need to be aware of these potential issues and report them.
   - Beta-Blockers: Patients may experience fatigue, bradycardia, or bronchospasm. Emphasize the importance of reporting significant changes in heart rate or any difficulty in breathing.
   - Diuretics: Frequent urination and electrolyte imbalances can occur, particularly hypokalemia. Patients should be educated on dietary potassium intake and how to recognize signs of imbalance like muscle cramps.
   - Digoxin: Common side effects include nausea, vomiting, and visual disturbances. Patients should be informed to report any concerning visual changes or gastrointestinal symptoms.

# COMPLICATIONS OF TREATMENT

1. **Surgical Complications:**
   - Coronary Artery Bypass Grafting (CABG): Potential complications encompass infection, bleeding, stroke, or graft failure. Patients should be informed about these risks, emphasizing the importance of meticulous post-operative care and monitoring.
   - Cardiac Resynchronization Therapy (CRT) and Implantable Cardioverter-Defibrillator (ICD): Patients undergoing CRT and ICD implantation need to understand the risk of infection, bleeding, and device malfunction. Provide guidance on recognizing signs of device malfunction and when to seek medical attention.

# MOA OF TREATMENT

1. ACE Inhibitors: These medications inhibit the angiotensin-converting enzyme, reducing the production of angiotensin II. This results in vasodilation, reduced aldosterone secretion, and decreased blood pressure, thereby reducing the workload on the heart.
2. Beta-Blockers: By blocking beta-adrenergic receptors, beta-blockers slow the heart rate, reduce contractility, and lower blood pressure, relieving stress on the heart.
3. Diuretics: Diuretics increase the excretion of sodium and water by the kidneys, decreasing fluid volume, preload, and, ultimately, the workload on the heart.
4. Digoxin: This medication enhances cardiac contractility and reduces heart rate, making the heart pump more effectively.

# MOA OF SURGERY

1. Left Ventricular Assist Device (LVAD): In end-stage heart failure, LVADs are used to support circulation by pumping blood from the left ventricle into the aorta. The LVAD helps the weakened heart pump blood, improving overall cardiac output.
2. Coronary Artery Bypass Grafting (CABG): CABG is a surgical procedure to bypass blocked coronary arteries. A healthy blood vessel is grafted to reroute blood around the blockage, restoring blood flow to the heart muscle.
3. Cardiac Resynchronization Therapy (CRT) and Implantable Cardioverter-Defibrillator (ICD): CRT devices synchronize ventricular contractions in patients with heart failure and left bundle branch block, improving cardiac output. ICDs continuously monitor the heart's rhythm and deliver electrical shocks to terminate life-threatening arrhythmias.

# FOLLOW UP

- Plan for follow-up, including initial follow-up 6 weeks post-initiation of medications and annual check-ups.

# SEVERITY SYSTEM

- Use recognized severity systems, such as the New York Heart Association (NYHA) classification, to objectively measure disease activity

# FOLLOW UP

"After initiating statin therapy, we'll schedule a follow-up in about six weeks, and then we'll continue with annual check-ups."

# NEVER MISS

1. Recognizing red flag symptoms.
2. Prioritizing immediate management.
3. Ensuring patient education on lifestyle changes.
4. Implementing safety netting strategies.
5. Addressing complications and follow-up plans.

# TOP 1% QUESTIONS

1. What are the specific complications of acute heart failure?
2. Elaborate on the criteria for initiating second-line therapies.
3. What is the role of B-type natriuretic peptide (BNP) in the assessment of heart failure?
4. Explain the significance of jugular venous distension in cardiovascular examination.
5. How does acute heart failure differ in presentation in pediatric patients compared to adults?

# SOFT SKILLS

- "Before we conclude, I want to make sure that all your concerns and questions have been addressed. Is there anything else you'd like to discuss?"
- Demonstrating empathy and effective communication throughout the consultation.
- "Thank you for sharing all this information with me, it's been really helpful in understanding your situation. Do you have any questions or concerns about anything we've discussed today?"
- Closing the consultation: "Thank you for your time today. I know this can be a lot to take in, but it's important to remember that we're here to support you every step of the way. If you have any further questions or concerns, please don't hesitate to ask."

# KEY LEARNING POINTS

- TO BE DONE TOGETHER

DATA

# MANAGEMENT

- What went well?
- What went poorly?
- What will you do next time?

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02

# LET'S DISCUSS

OSCE
03

# WHY DON'T YOU TRY?

- Test your history taking skills?
- Try examination/investigation/dx formulation?
- Try a Mock exam?

# QUESTIONS?

MDT

ACUTE MEDICINE

# BLS

OSCE 1.6

HISTORY X MANAGEMENT

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# TOPIC - HISTORY TAKING

MEDIC

PATIENT

MARKER

## PLEASE REFER TO YOUR SCRIPTS

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# PROMPT

Mr. James Reynolds, a 36-year-old male, presents with a three-month history of persistent abdominal pain, diarrhea, and rectal bleeding.

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# LET'S DISCUSS

# INTRODUCTION AND RAPPORT BUILDING

- Introduce self and verify patient's identity.
- Obtain consent.
- Open-ended question about presenting complaint.

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# INTRODUCTION AND RAPPORT BUILDING

1. Good morning, my name is Dr. [Your Name], and I'll be your physician today. May I kindly confirm your name and date of birth?"
2. "Before we proceed, I'd like to ask for your consent to discuss your medical history and perform an examination."
3. "Could you please start by telling me about the reason for your visit today? Is there anything specific that's been bothering you?"

# OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- Any difficulty breathing?
- Chest pain or discomfort?
- Feeling faint or lightheaded?
- Any palpitations?
- Any confusion or dizziness?
- History of a collapse?

1. Previous episodes and their management.
2. Association with physical activity.
3. Symptom progression.

# OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- "Are you experiencing any difficulty breathing or shortness of breath?"
- "Have you had any chest pain or discomfort recently?"
- "Have you felt faint or lightheaded?"
- "Do you experience palpitations, a fluttering or racing heart?"
- "Have you had any confusion or dizziness?"
- "Have you ever collapsed or fainted unexpectedly?"

# FURTHER EXPLORATION...

- Onset, duration, and progression.
- Any triggers?
- Associated symptoms.

- COLLATERAL HISTORY:
  - Information from bystanders or family

# FURTHER EXPLORATION

- "C"When did your symptoms begin? How have they progressed?"
- "Have you noticed any triggers or specific situations associated with these symptoms?"
- "Could you describe any other symptoms that you have experienced along with these?"
-

Collateral History:

- "Has anyone witnessed or provided information about your symptoms, such as family or friends?"

# RED FLAGS/COMPLICATIONS

- **Red Flags**
  - Unresponsiveness.
  - Not breathing or gasping for breath.
  - Seizures post collapse.

- **Common Complications:**
  - Aspiration, prolonged cardiac arrest, injuries from collapse.

- **Risk factors**
  - Smoking, hypertension, diabetes, family history of cardiac diseases.

# RED FLAGS...

- "If at any point you become unresponsive or experience difficulty breathing, it's crucial to seek immediate medical help."

COMMON COMPLICATIONS

- "In severe cases, these symptoms can lead to potential complications, such as aspiration or injuries from a fall after a collapse."

RISK FACTORS

- "Do you have a family history of heart conditions or other similar issues?"
- "Do you have any personal risk factors such as smoking, hypertension, or diabetes?"

# PAST MEDICAL HISTORY

- Relevant cardiac, respiratory conditions.

**DRUG HISTORY**

- Regular medications and over-the-counter drugs.

**FAMILY HISTORY**

- Sudden cardiac deaths, congenital heart conditions

**Social History:**

- Living conditions, alcohol, drugs, and occupation.

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01

# PAST MEDICAL HISTORY

- "Do you have any pre-existing conditions related to your heart or breathing?"

DH

- "Are you currently taking any medications or supplements, including over-the-counter drugs?"

Family History:

- "Has there been a history of sudden heart-related deaths or any known heart conditions among your close family members?"

Social History:

- "Could you describe your living conditions or circumstances at home?"
- "Do you smoke, drink alcohol, or have any involvement with drugs?"
- "What do you do for work?"

# IDEAS, CONCERNS AND EXPECTATIONS

- ICE
  - "I'd like to take a moment to understand your perspective on your illness. It's important for me to know your ideas, concerns, and expectations regarding your condition and this consultation. Please feel free to express any fears, worries, or questions you may have. We're here to address them together."

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# EXAMINATION

- **Safety First:**
  - Before you approach the individual, ensure the scene is safe for both you and the person. This might mean checking for potential dangers such as traffic, fire, electricity, or hazardous materials.
- **Check Responsiveness:**
  - Gently shake or tap the person and shout, "Are you okay?" to determine if they are responsive.
  - If the individual does not respond, they are considered unresponsive.
- **Call for Help:**
  - If you are alone, shout for help. If someone responds, ask them to call emergency services (like 911 in the U.S. or 999 in the UK) and retrieve an automated external defibrillator (AED) if available

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# EXAMINATION

- **Check for Breathing and Pulse:**
  - Breathing: Open the airway using a head tilt-chin lift maneuver. Listen and feel for breathing by placing your ear close to the person's mouth and nose. Look for chest movement.
  - Agonal Breaths: Occasionally, someone in cardiac arrest may have gasping breaths, known as agonal breaths. These are not effective breaths, and CPR should be started if you observe them.
  - Pulse: At the same time as checking for breathing, check for a pulse. In BLS, this is typically done by palpating the carotid artery, which is located in the neck. Use the pads of your first two fingers (not the thumb, as you can feel your own pulse with it) and press gently in the groove between the windpipe and the muscles of the neck, at the level of the Adam's apple or slightly below.
- **Make a Decision:**
  - If the individual is not breathing (or only has agonal breaths) and you cannot feel a pulse within 10 seconds, begin CPR. The emphasis in modern BLS is on high-quality chest compressions, so if you're uncertain about the pulse or breathing status, start chest compressions.

# EXAMINATION

- **CPR:**
  - Begin with chest compressions. Place the heel of one hand on the center of the person's chest and place the other hand on top. Using your upper body weight, compress the chest at least 2 inches deep and at a rate of 100-120 compressions per minute.
  - After 30 compressions, give 2 rescue breaths if you are trained to do so. If not, continue with hands-only CPR.
- **Use an AED:**
  - If an AED becomes available, turn it on and follow the voice prompts. AEDs are designed to be user-friendly, with step-by-step instructions.
  - If a shock is advised by the AED, ensure no one is touching the person and deliver the shock. Then immediately return to CPR, starting with chest compressions.

# EXAMINATION

- **Examination Findings: - <u>CHAPERONE</u>**
  - **Vital Signs:** Pulse, BP, respiratory rate, temperature, and SpO2.
  - **Airway:** Open or obstructed?
  - **Breathing**: Effective? Rate and depth.
  - **Cardiovascular:** Pulse rate and rhythm.
  - **Respiratory:** Breath sounds, signs of respiratory distress.
  - **Abdominal:** Distension, tenderness.
  - **Neurological:** GCS, pupil response.
  - **Cranial Nerves:** Not typically relevant in this setting.
  - **Peripheral Examination:** Peripheral pulses, capillary refill time**.**
  - **Psychiatric Findings and MMSE:** Alertness, orientation.
  - **Risk Assessment:** Risk of further collapse, immediate dangers**.**
  -

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# EXAMINATION

- **Vital Signs:**
  - "I'll measure your pulse, blood pressure, breathing rate, temperature, and blood oxygen levels."
- **Airway:**
  - "I'll check if your airway is open and clear or if there are any obstructions."
- **Breathing:**
  - "I'll assess the pattern, rate, and depth of your breaths to ensure you're breathing comfortably."
- **Cardiovascular:**
  - "I'll check your pulse rate and rhythm to evaluate your heart function."
- **Respiratory:**
  - "I'll listen to your chest for any abnormal breath sounds and signs of distress."
- **Abdominal:**
  - "I'll gently examine your abdomen for any unusual tenderness or swelling."
- **Neurological:**
  - "I'll conduct a simple assessment of your consciousness and eye response."
- **Cranial Nerves:**
  - "While typically not relevant in this context, I'll briefly check your cranial nerves."
- **Peripheral Examination:**
  - "I'll check the strength of your peripheral pulses and capillary refill time."
- **Psychiatric Findings and MMSE:**
  - "I'll assess your alertness and orientation to time, place, and surroundings."
- **Risk Assessment:**
  - "I'll evaluate the potential risks of further collapse or any immediate dangers."

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01

# DIFFERENTIAL DIAGNOSIS

1. Acute MI
2. PE
3. Stroke
4. Hypoglycemia
5. Electrolyte Imbalance.

HISTORY

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01

# DIFFERENTIAL DIAGNOSIS

- "Based on your symptoms, some possibilities might include conditions such as a heart attack, a pulmonary embolism, a stroke, low blood sugar levels, or an electrolyte imbalance."

HISTORY

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# INVESTIGATION

1. Bloods: CBC, electrolytes, cardiac enzymes.
2. Swabs: If required for infections.
3. Imaging: ECG, Chest X-ray.
4. Other tests based on clinical findings.

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# INVESTIGATION

1. Bloods:
    a. "I'll need to collect some blood samples to assess your blood count, electrolytes, and cardiac enzymes."
2. Swabs:
    a. "If required, we might conduct swab tests to check for any infections."
3. Imaging:
    a. "We might need to perform an ECG and Chest X-ray to examine your heart and lung functions."
4. Other Tests Based on Clinical Findings:
    a. "Depending on the results and symptoms, we might proceed with additional tests or investigations."

# MANAGEMENT PLAN

- Immediate Management:
  - Ensure safety.
  - Call for help.
  - Begin CPR if required.
  - Use AED.
- First Line: Stabilization, ABCs.
- Second Line: Identification of cause.
- Third Line: Referral to specialist teams.

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# MANAGEMENT PLAN

- Immediate Management:
  - "We will ensure your safety and call for assistance if necessary. If needed, we will commence CPR and utilize an Automated External Defibrillator (AED)."
- First Line:
  - "We will focus on stabilizing and ensuring the basic functions of your body."
- Second Line:
  - "We'll attempt to identify the underlying cause of these symptoms."
- Third Line:
  - "If necessary, I may refer you to other medical teams specialized in these conditions."

# KEY PRINCIPLES BEFORE DISCHARGE AND SAFETY NETTING (5 POINTS)

- Prevention
  - Discuss lifestyle modifications, importance of regular medical check-ups.

- Safety Netting:
  - Signs of deterioration to look out for.

# ADVICE TO GUARDIANS/RELATIVES

- **Explanation to Patients and Relatives:** Simple terms on condition, management steps, expected outcomes.
- **Advice to Guardians:** Importance of regular medical checkups and potential lifestyle changes.
- Useful Resources: Handouts, websites on BLS, CPR courses.

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# COMPLICATIONS OF TREATMENT

Risks associated with potential interventions e.g., bleeding from anticoagulants.

Mechanism of Action of Medication Therapies: E.g., Aspirin inhibits platelet aggregation.

Surgical Therapies: E.g., CABG, PCI.

# FOLLOW UP

- Review within a week or earlier based on severity.

# SEVERITY SYSTEM

- Use GCS for neurological assessment; Create a simple system if none exists.

# NEVER MISS

1. Immediate start of CPR.
2. Use of AED.
3. Calling for help.
4. Ensure the safety of the scene.
5. Continuous assessment and reassessment of the patient.

# TOP 1% QUESTIONS

1. What is the chain of survival in cardiac arrest?
2. At what rate and depth should chest compressions be given?
3. What are the reversible causes of cardiac arrest (Hs and Ts)?
4. What's the difference in approach between witnessed and unwitnessed cardiac arrest?
5. How does hypothermia play a role in post-cardiac arrest care?

# SOFT SKILLS

- "Before we conclude, I want to make sure that all your concerns and questions have been addressed. Is there anything else you'd like to discuss?"
- Demonstrating empathy and effective communication throughout the consultation.
- "Thank you for sharing all this information with me, it's been really helpful in understanding your situation. Do you have any questions or concerns about anything we've discussed today?"
- Closing the consultation: "Thank you for your time today. I know this can be a lot to take in, but it's important to remember that we're here to support you every step of the way. If you have any further questions or concerns, please don't hesitate to ask."

# KEY LEARNING POINTS

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- What went well?
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# LET'S DISCUSS

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# WHY DON'T YOU TRY?

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- Try examination/investigation/dx formulation?
- Try a Mock exam?

# QUESTIONS?

MDT