

## **Management and Prescribing STUDENT SHEET**

You are the Emergency Registrar working in A&E. William Miles, 16, has come in with his father, presenting with Abdominal Pain + Vomiting.

The examiner will tell you relevant parts of the history to assist your decision making.

This station will last 10 minutes. During the first 5 minutes you will need to:

- State a differential diagnosis
- Request the appropriate investigations that you think this patient needs
- Interpret the test results
- Re-evaluate your differential diagnosis and formulate a management plan

The second 5 minutes will comprise of you writing an appropriate prescription for this patient.

## Management and Prescribing EXAMINER SHEET

### DIAGNOSIS: Diabetic Ketoacidosis

Please share the following information with the student. "William Miles is presenting to A&E with 2 hours of Abdominal Pain + Vomiting". He is alert and orientated to date, time, and place. His father tells you that she was diagnosed with Diabetes last year.

Q: Please state the investigations you would like to request for this patient.

#### Bloods:

- FBC: Rule out Infective cause
- Capillary Glucose
- U&Es to assess Potassium levels
- ABG: Assess for Acid-Base disturbance
- Blood/ Urine Ketones

Q1: Please interpret the investigation results on the last page and tell me their significance.

Q2: In light of this information, please state your top differential diagnosis and preferred IMMEDIATE management plan.

- Diagnosis: Diabetic Ketoacidosis
- Mx: IV 0.9% Saline 1 Litre over 1 hour.

Q3: The diagnosis is Diabetic Ketoacidosis please prescribe an appropriate drug to reduce this. The patient has no allergies.

Student must prescribe IV 0.9% Saline 1 Litre over 1 hour. See Mark Scheme below for further details.

		Marks		
Initial Diagnosis	Student states a sensible and likely diagnosis which they can justify from the initial information provided. (1)			
Requesting Investigations	Student requests a range of investigations in a structured order such as Bedside and Bloods (1)  Requested investigations must be backed up by sound and specific rationale and not generic comments. (1)  Investigations must be requested to support the theorised differential and rule out other differentials. (1)			
Interpretation	Student interprets more than half of the investigation results correctly and in a systematic and structured order (1)  Student interprets all investigations correctly in the context of the differential diagnosis, in a systematic and structured order (1)			
Diagnosis and Management Plan	Correct diagnosis made (1)  Appropriate management plan outlined in a structured format such as conservative, medical, surgical (1)			
Prescription	Patient details and allergy status correctly recorded (1) Medication prescribed in the correct location (1)  Medication name in all capitals and correctly spelt with correct dosage and route (1)  Date and prescriber details recorded correctly (1)			

Global Rating:      Fail      Borderline      Good      Very Good      Excellent



## Management and Prescribing INTERPRETATION

Capillary Glucose	22mmol/L
Blood Ketones	2.4mmol/L
Serum Potassium	6.1mmol/L
ABG	pH 7.29 pO <sub>2</sub> : 10kPa pCO <sub>2</sub> : 2.1kPa Raised Anion Gap