Management and Prescribing STUDENT SHEET

You are an FY1 doctor working in the emergency department. Patient Richard Hammond a 23-year-old has presented with shortness of breath.

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: Bacterial Meningitis

Please share this information with candidate at start of station:

Richard Hammond is a 23-year-old male presenting to A&E with neck stiffness and some changes in vision. When you see him is wearing sunglasses and is some pain and not moving his neck at all. He is full alert and his obs are all within a normal range apart from a temperature of 38.0 C. He reports have a rash on his arm yesterday but has since disappeared. He is currently starting university and is very concerned by this.

1. Please state the investigations you would like to request

Bedside:

- A to E assessment
- Blood glucose

Bloods:

- FBC, U&Es, CRP, LFTs
- Blood culture
- Lumbar puncture

Imaging:

- None
- 2. Please interpret the investigations provided and tell me what you see
 - Bacterial meningitis caused by Neisseria meningitides
- 3. Given you diagnosis please prescribe an appropriate medication
 Student must prescribe a suitable antibiotic or steroid such as dexamethasone

Pressure (cmH20)	5-20	> 30
Appearance	Normal	Turbid
Protein (g/L)	0.18-0.45	>1
Glucose (mmol/L)	2.5-3.5	<2.2
Gram stain	Normal	60-90% Positive
Glucose - CSF:Serum Ratio	0.6	< 0.4
WCC	< 3	> 500

CRP – 200 Blood culture – gram positive diplococci

Core EM. (n.d.). *Episode 93.0 – Meningitis*. [online] Available at: https://coreem.net/podcast/episode-93-0/ [Accessed 14 Jan. 2023].

		М	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, bloods and imaging. (1) Requested investigations must be backed up by sound and specific rationale and not generic comments like 'U&Es to check electrolyte levels' (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	Correct diagnosis made (1)		
Management plan	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)	