

Management and Prescribing STUDENT SHEET

You are an FY1 doctor working in the emergency department. Patient Alex Johnston D.O.B 05/05/1980 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: ATRIAL FIBRILLATION

Please share the following information with the student:

“Alex Johnston is a 42-year-old man presenting to the emergency department with dyspnoea. He is also saying that he can feel his heart beating very fast. He is alert and orientated to date, time, and place. He also has chest pain and dizziness. On observation you can see that he has quite laboured breathing. Examination reveals an irregular, tachycardic pulse. He says he his heart has been beating this fast on and off for the last 3 days but now he has developed all these other symptoms which is why he came in”

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

Bedside:

ECG to check for arrhythmias such as AF and SVT

Full set of observations

Bloods:

FBC for anaemia and infection markers, to check potential infective cause

ABG – checking for respiratory failure and acid base disturbance since he is breathless

U&E's as electrolyte disturbances can precipitate arrhythmia

TFTs as hyperthyroidism can cause atrial fibrillation

Cardiac troponin to exclude myocardial infarction

Imaging:

Chest X-ray to check for respiratory causes of breathlessness like pneumothorax

Echocardiogram for cardiac abnormalities like valvular stenosis

2. Please interpret the investigations on the last page and tell me what you see.
 - ECG: irregularly irregular tachycardia with absent P-waves, suggestive of atrial fibrillation
 - CXR: normal

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

Atrial Fibrillation

Present for > 48 hours, therefore this patient must be on anticoagulant therapy such as Apixaban for 3 weeks minimum and must have a trans-oesophageal echocardiogram to check for clots in the heart. Following this 3-week period, providing that this patient does not have any structural heart defects, they can be treated with long term beta-blockers.

4. The diagnosis is atrial fibrillation, please prescribe an appropriate drug to reduce this patient’s risk of a thromboembolic event. This patient has no allergies.

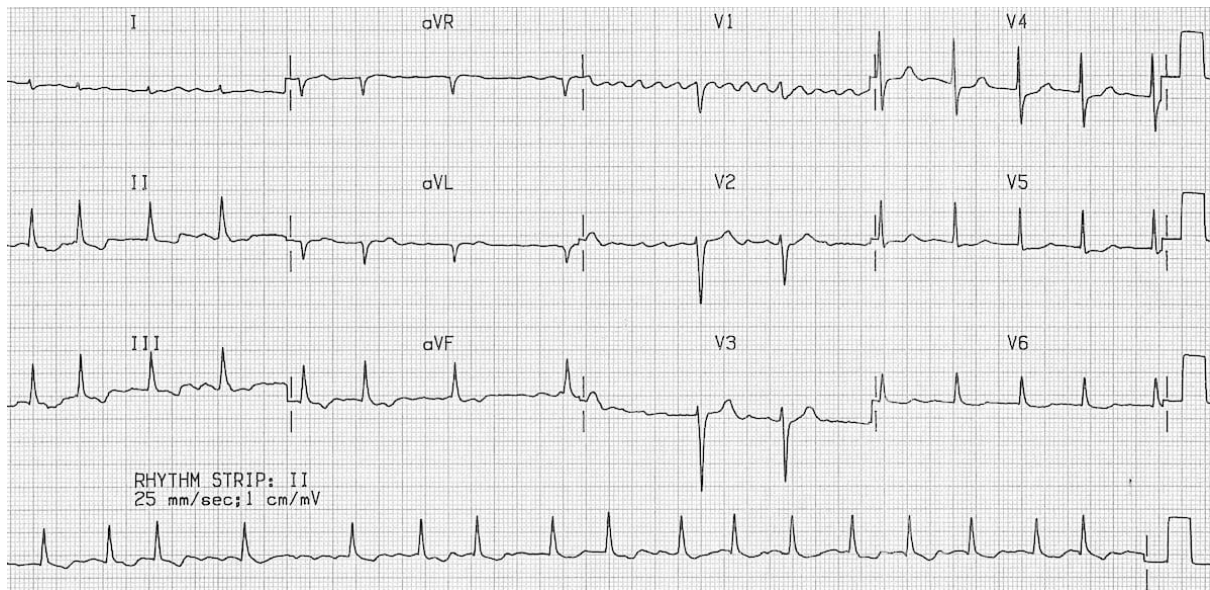
Student must prescribe a DOAC, such as Apixaban or Rivaroxaban.
See mark scheme below for further details

		Marks		
Initial Diagnosis	Student states a sensible and likely diagnosis which they can justify from the initial information provided. (1)			
Requesting Investigations	<p>Student requests a range of investigations in a structured order such as bedside, bloods and imaging. (1)</p> <p>Requested investigations must be backed up by sound and specific rationale and not generic comments like ‘U&Es to check electrolyte levels’ (1)</p> <p>Investigations must be requested to support the theorised differential and rule out other differentials. (1)</p>			

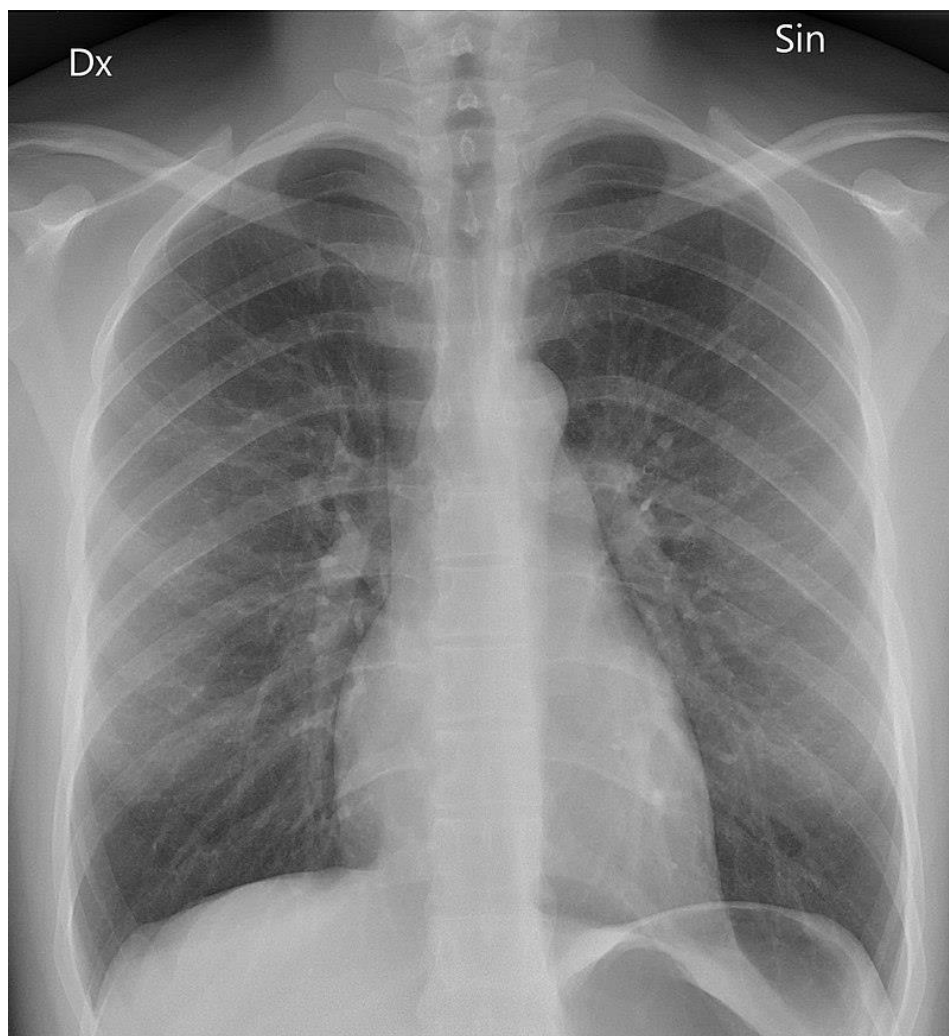
<p>Interpretation</p>	<p>Student interprets more than half of the investigation results correctly and in a systematic and structured order (1)</p> <p>Student interprets all investigations correctly in the context of the differential diagnosis, in a systematic and structured order (1)</p>			
<p>Diagnosis and Management plan</p>	<p>Correct diagnosis made (1)</p> <p>Appropriate management plan outlined in a structured format such as conservative, medical, surgical (1)</p>			
<p>PRESCRIPTION</p>	<p>Patient details and allergy status correctly recorded (1)</p> <p>Medication prescribed in the correct location (1)</p> <p>Medication name in all capitals and correctly spelt with correct dosage and route (1)</p> <p>Date and prescriber details recorded correctly (1)</p>			

Global Rating: Fail Borderline Good Very Good Excellent

Management and Prescribing INTERPRETATION



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