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**University Hospital, Geelong  
Emergency Medicine  
Trial Fellowship Exam  
Short Answer Questions (SAQ)**

Week 15

**DIRECTIONS TO CANDIDATE**

1. Answer each question in the space provided in this question paper.
2. Do not write your name on this question paper.
3. Enter your examination number in the space below.
4. Cross out any errors completely.
5. Do not begin the exam until instructed to do so.
6. Do not take examination paper or materials from this room.
7. The booklet binder may be removed during the exam.

**QUESTION & ANSWER  
BOOKLET**

**Question 1 (18 marks)**

- a. Complete the table to distinguish between the historical features of Guillain-Barré Syndrome and Multiple Sclerosis. (4 marks)

	<b>Historical feature</b>	<b>Guillain-Barré Syndrome</b>	<b>Multiple sclerosis</b>
<b>1. (1 mark)</b>			
<b>2. (1 mark)</b>			
<b>3. (1 mark)</b>			
<b>4. (1 mark)</b>			

**Question 1 (continued)**

b. Complete the table to distinguish between the examination features of Guillain-Barré Syndrome and Multiple Sclerosis. (4 marks)

	<b>Examination feature</b>	<b>Guillain-Barré Syndrome</b>	<b>Multiple sclerosis</b>
<b>1. (1 mark)</b>			
<b>2. (1 mark)</b>			
<b>3. (1 mark)</b>			
<b>4. (1 mark)</b>			

### Question 1 (continued)

- c. List the two (2) investigations of choice to assist with the diagnosis of Multiple Sclerosis. State two (2) diagnostic findings that are supportive of Multiple Sclerosis for each investigation. (6 marks)

Investigation of choice 1: \_\_\_\_\_

Supportive findings:

1. \_\_\_\_\_

2. \_\_\_\_\_

Investigation of choice 2: \_\_\_\_\_

Supportive findings:

1. \_\_\_\_\_

2. \_\_\_\_\_

- d. Assuming the diagnosis of Guillain-Barré Syndrome, which drug must not be given if intubation is required? State the reason why. (2 marks)

Drug: \_\_\_\_\_

Reason: \_\_\_\_\_

\_\_\_\_\_

- e. List the two (2) options for specific treatment of Guillain-Barré Syndrome. (2 marks)

1. \_\_\_\_\_

2. \_\_\_\_\_

**Question 2 (11 marks)**

A 35 year old man is brought into your emergency department after an isolated injury to the left ankle sustained in a motor cycle accident.

His observations are:

BP	160/ 50	mmHg supine
HR	110	bpm
GCS	15	

**Two (2) of his ankle X-rays are shown in the props booklet- page 1 & 2**

a. State four (4) features shown on these xray that suggest a severe injury. (3 marks)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

**Question 2 (continued)**

He is delivered by ambulance and has received only penthrane enroute. He does not have intravenous access on arrival. He is extremely distressed with pain. He last ate 2 hours ago. His weight is 70 kg.

- b. List seven (7) analgesic options for this patient while he is in the emergency department. Include initial doses and routes where applicable. (7 marks)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

**Question 3 (12 marks)**

A 65 year old female, non- English speaking, Italian lady presents with about 1 cup of haemoptysis.

You are unable to obtain any medical history.

Her observations are:

BP	135/65	mmHg
HR	80	bpm
GCS	15	

a. List four (4) likely differential diagnoses for this presentation. (4 marks)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

**Question 3 (continued)**

b. Other than a CXR, list three (3) key investigations that you would consider ordering in the emergency department for this patient. (3 marks)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

A Chest X-ray shows unilateral changes.

She experiences a large volume haemoptysis (estimated blood loss 500 ml).

c. State five (5) key steps in the treatment of this patient over the next 30 minutes. (6 marks)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

**Question 4 (17 marks)**

A 64 year old man is being evaluated in your emergency department after an episode of chest pain which has now resolved. He has been given aspirin only en route to hospital. His observations are:

BP	140/85	mmHg
RR	20	bpm
O2 saturation	97%	room air

**An ECG is taken- refer to the props booklet- page 3 (labelled ECG 1).**

a. State four (4) abnormal findings shown in this ECG. (4 marks)

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_

b. List four (4) likely causes for these findings. (4 marks)

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_

**Question 4 (continued)**

The patient becomes suddenly unwell. He is lightheaded with no chest pain. His BP is 70/50 mmHg. He is given a 500ml fluid bolus with no improvement.

**His ECG at this stage is shown in the props booklet- page 4 (labelled ECG 2).**

c. State five (5) abnormal findings shown in this ECG. (5 marks)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

**Question 4 (continued)**

- d. List in order of escalation, your first two (2) choices of drug treatment for this patient. For each specify dose and route. (4 marks)

	<b>Drug treatment (2 marks)</b>	<b>Dose and route (2 marks)</b>
1 <sup>st</sup> line		
2 <sup>nd</sup> line		

### Question 5 (14 marks)

Three (3) X-rays from three (3) different patients are shown in the props booklet- pages 5, 6 & 7.

- a. For X-ray 1, state where the foreign body lies. (1 mark) **Props booklet- Page 5**

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- b. For X-ray 1, list two (2) options for the nature/composition of the foreign body. (2 marks) **Props booklet- Page 5**

1. \_\_\_\_\_

2. \_\_\_\_\_

- c. For X-ray 1, list two (2) factors that would mandate urgent removal of the foreign body. (2 marks) **Props booklet- Page 5**

1. \_\_\_\_\_

2. \_\_\_\_\_

- d. For X-ray 2, state where the foreign body lies. (1 mark) **Props booklet- Page 6**

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- e. For X-ray 2, what is the nature/composition of the foreign body? (1 mark) **Props booklet- Page 6**

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### Question 5 (continued)

- f. For X-ray 2, state your disposition. Provide two (2) points of justification for this choice. (3 marks) **Props booklet- Page 6**

Disposition: \_\_\_\_\_

Justification:

1. \_\_\_\_\_

2. \_\_\_\_\_

- g. For X-ray 3, state where the foreign body lies. (1 mark) **Props booklet- Page 7**

\_\_\_\_\_

- h. For X-ray 3, state your disposition. Provide two (2) points of justification for this choice. (3 marks) **Props booklet- Page 7**

Disposition: \_\_\_\_\_

Justification:

1. \_\_\_\_\_

2. \_\_\_\_\_

### Question 6 (12 marks)

A 45 year old man with type 1 diabetes mellitus is brought in by ambulance with an altered conscious state.

**Initial investigations are taken- refer to the props booklet- page 8.**

His observations are:

BP	90/70	mmHg
HR	120	bpm
Temperature	36.8	°C
Oxygen saturation	97%	on 8L by Hudson mask
GCS	12	E4, V3, M5

- a. Provide three (3) calculations to help you to interpret these results. (3 marks)

Derived value 1: \_\_\_\_\_

\_\_\_\_\_

Derived value 2: \_\_\_\_\_

\_\_\_\_\_

Derived value 3: \_\_\_\_\_

\_\_\_\_\_

- b. Provide a unifying explanation for this clinical picture based on these results. (3 marks)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Question 6 (continued)**

- c. Complete the following table demonstrating three (3) key specific treatment tasks in the first 2 hours of the emergency department stay. For each choice, state how you would achieve each of these tasks. (6 marks)

	<b>Key treatment task (3 marks)</b>	<b>How will you achieve the task? (3 marks)</b>
1		
2		
3		

**Question 7 (12 marks)**

A 65 year old man presents with a left hand injury.

**A photograph of the man is taken- refer to the props booklet- page 9.**

- a. List three (3) factors that are evident from this image, that would suggest a poor prognosis for successful reimplantation. (3 marks)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

- b. List six (6) historical factors that would suggest a poor prognosis for successful reimplantation. (6 marks)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

**Question 7 (continued)**

- c. How you would store the amputated parts, pending a decision for potential reimplantation? List two (2) points in your answer. (2 marks)

1. \_\_\_\_\_

2. \_\_\_\_\_

- d. What is the most appropriate regional anaesthesia technique for this patient? (1 mark)

\_\_\_\_\_

**Question 8 (12 marks)**

A 6 year old boy presents with a left supracondylar humeral fracture.

- a. State two (2) types of pain scoring systems that you could apply to this child. (2 marks)

1. \_\_\_\_\_

2. \_\_\_\_\_

- b. List two (2) reasons why a pain score is used. (2 marks)

1. \_\_\_\_\_

2. \_\_\_\_\_

- c. List four (4) indications for general anaesthetic, manipulation and plaster for this patient. (4 marks)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

**Question 8 (continued)**

- d. List four (4) pieces of advice that you would give to this boy's parent if the patient is able to be discharged from the emergency department. (4 marks)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

**Question 9 (12 marks)**

A 46 year man is brought to your emergency department with suspected alcohol withdrawal.

- a. List seven (7) of the 10 scale domains that form the Alcohol Withdrawal Assessment Scale. (7 marks)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

**Question 9 (continued)**

A 35 year old male is identified as having “very severe” alcohol withdrawal.

- b. State five (5) key management steps for this patient over the next 1 hour. (5 marks)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

University Hospital, Geelong- Fellowship Exam Short Answer Questions  
Week 15

**ID NUMBER:**

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Emergency Medicine  
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Short Answer Questions (SAQ)  
Week 15**

**PROP BOOKLET**

**Question 2      Xray 1**

**(2nd xray is shown on the following page)**



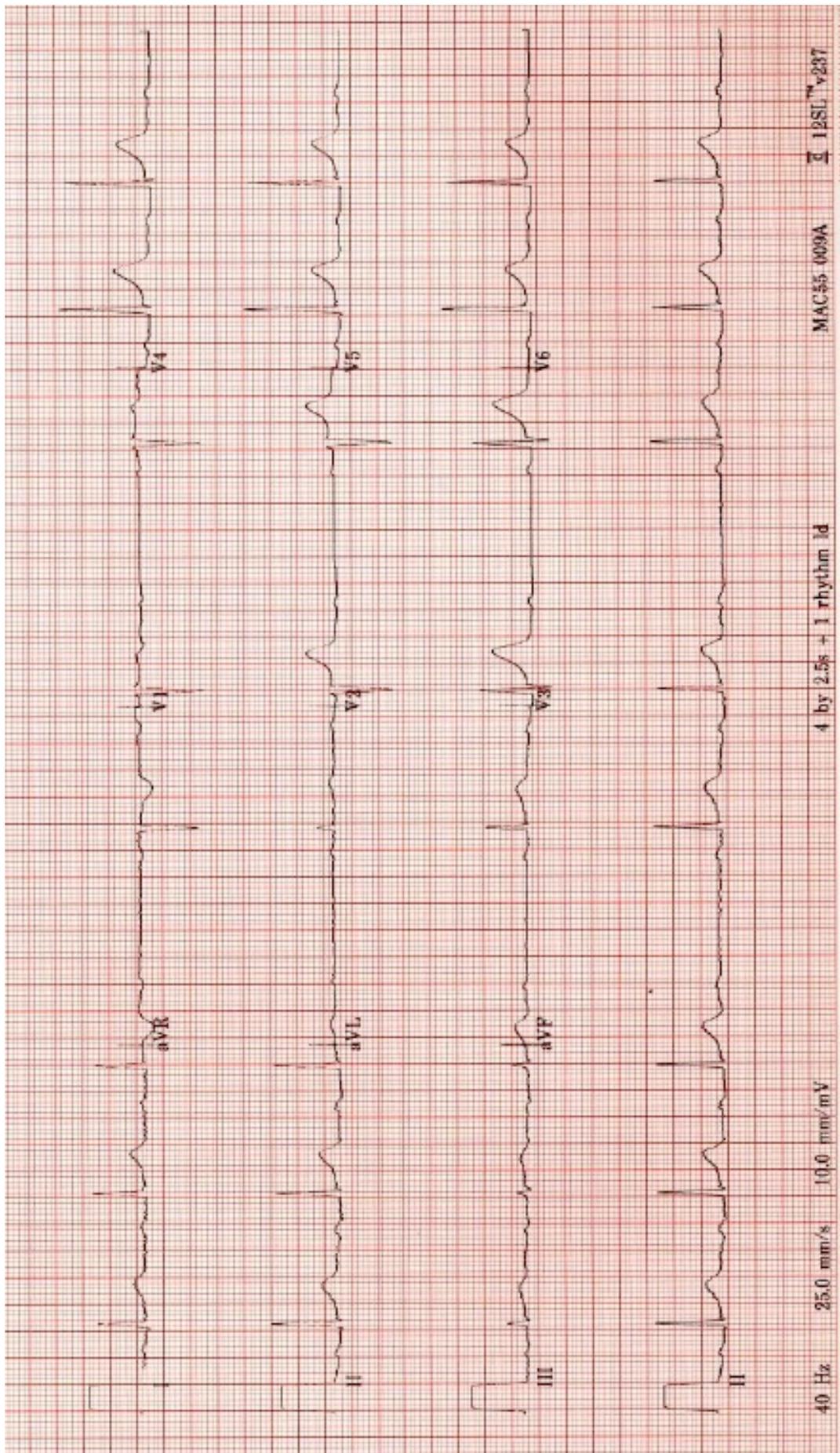
**Question 2      Xray 2**

**(1st xray is shown on the previous page)**



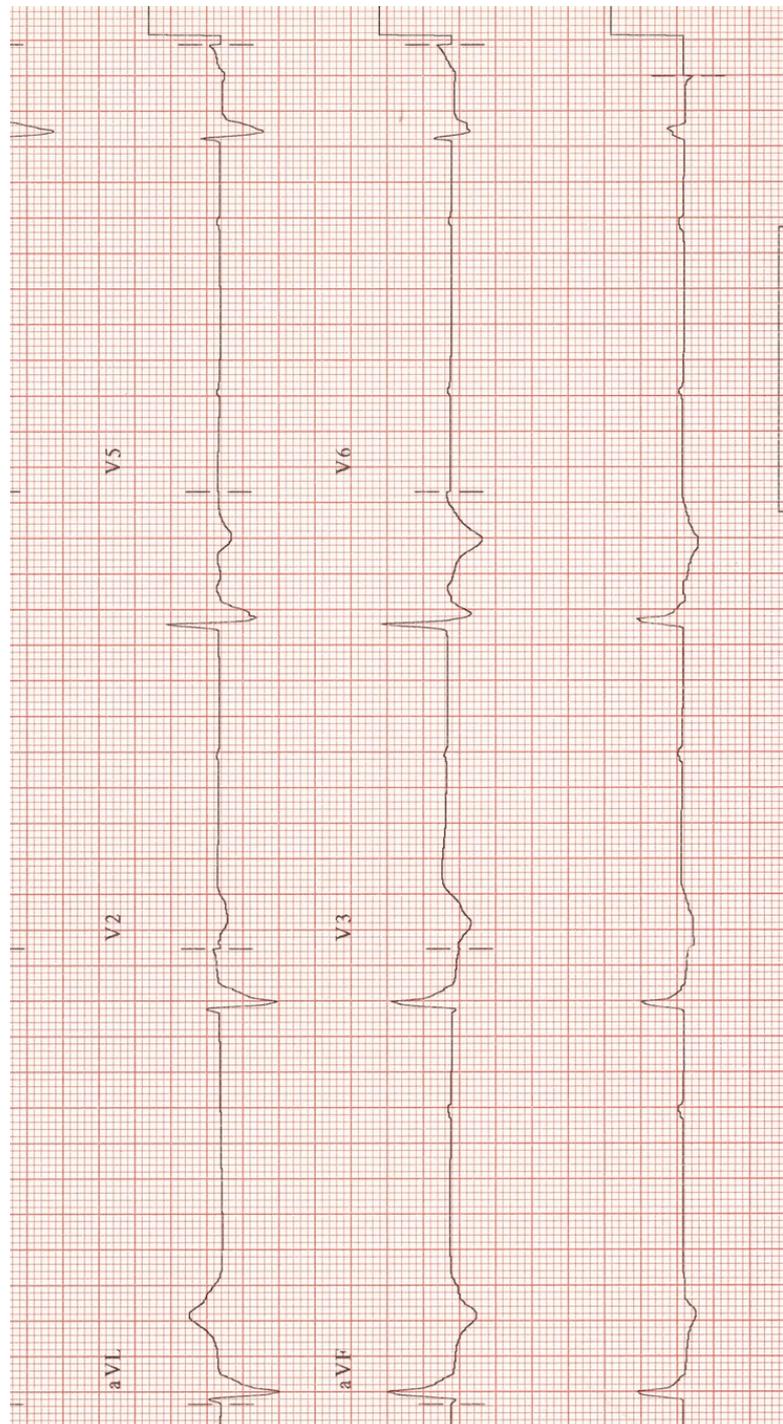
Question 4

ECG 1 (2<sup>nd</sup> ECG is shown on the following page)

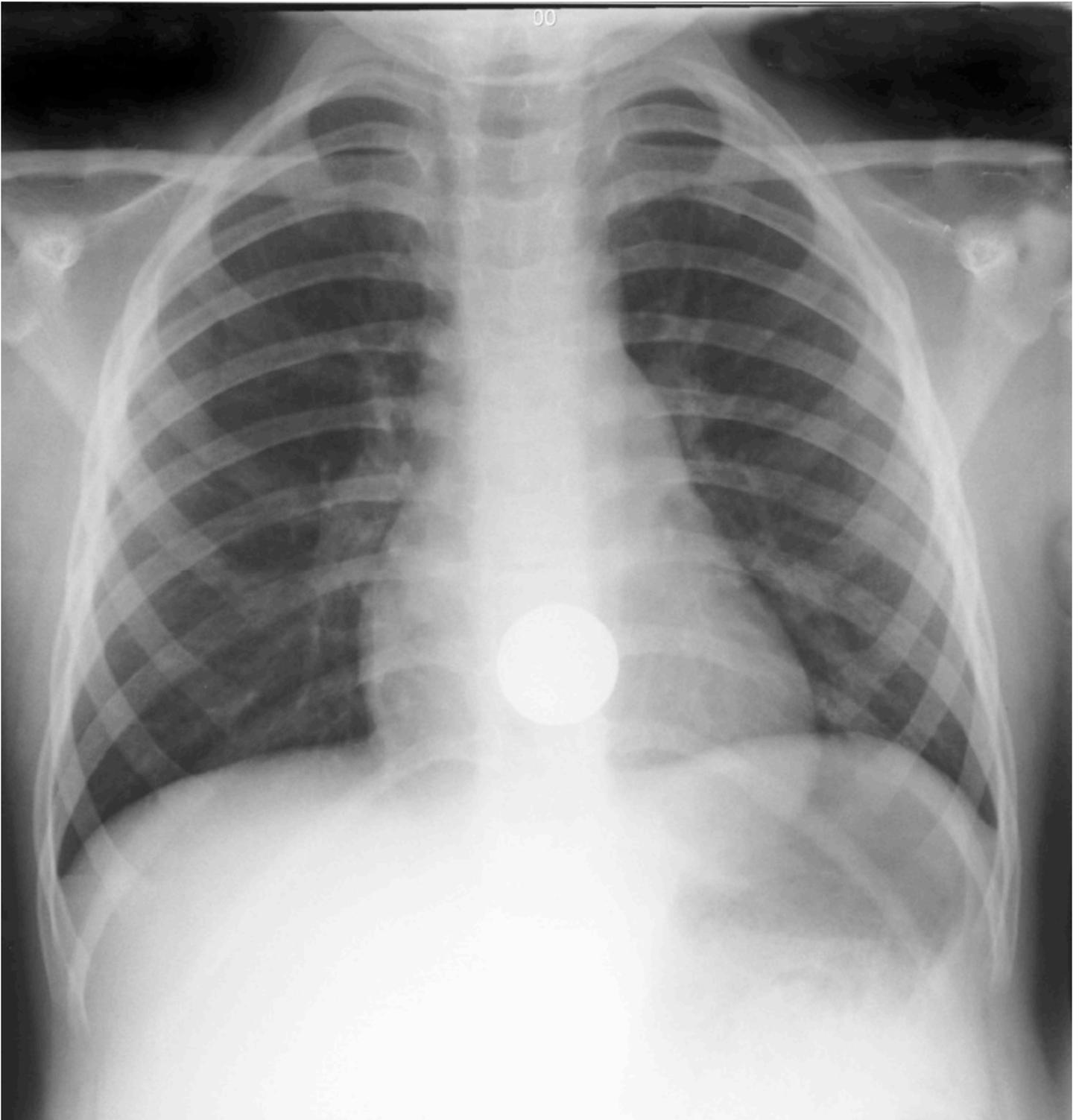


**Question 4**

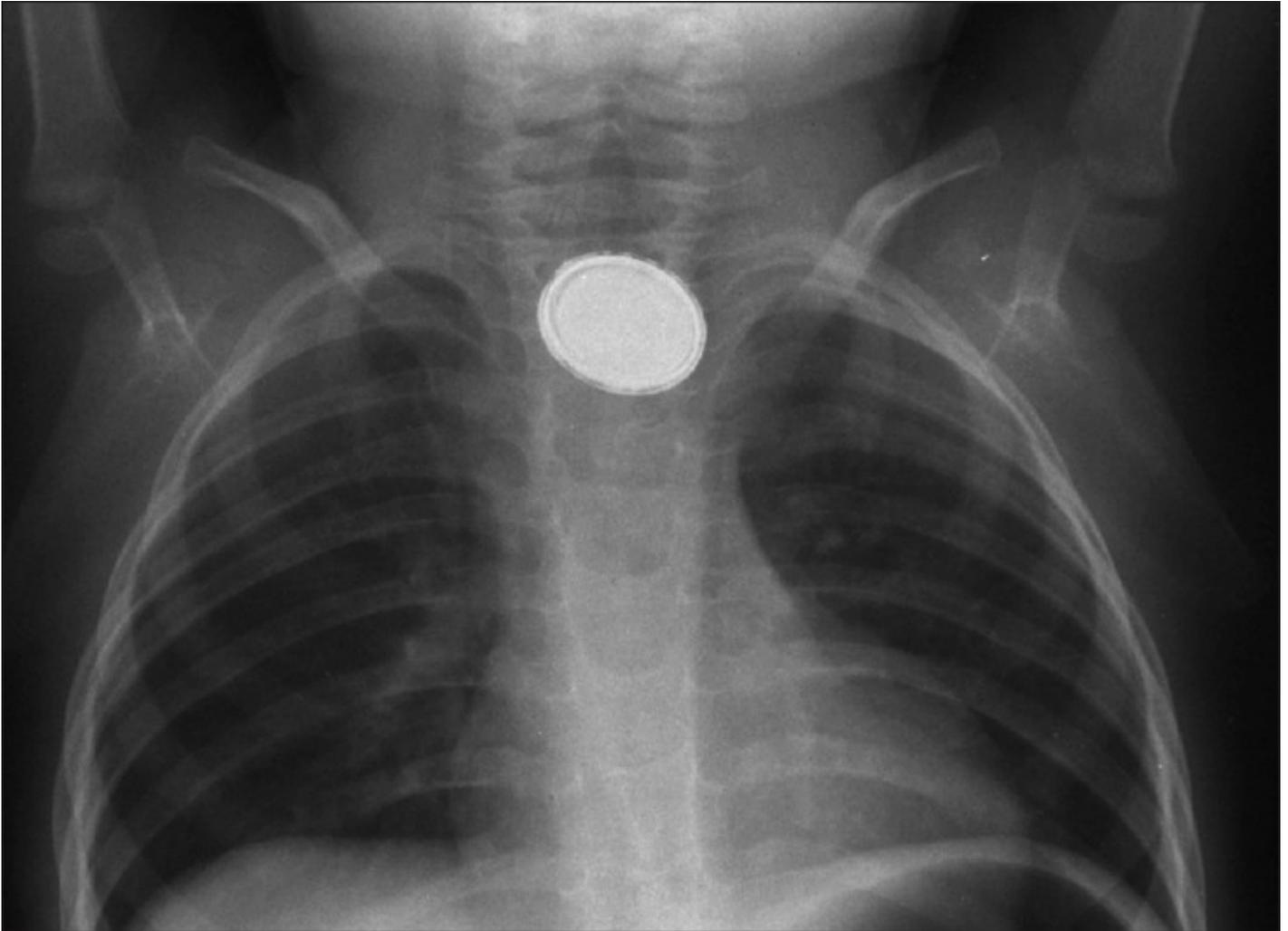
**ECG 2 (1st ECG is shown on the previous page)**



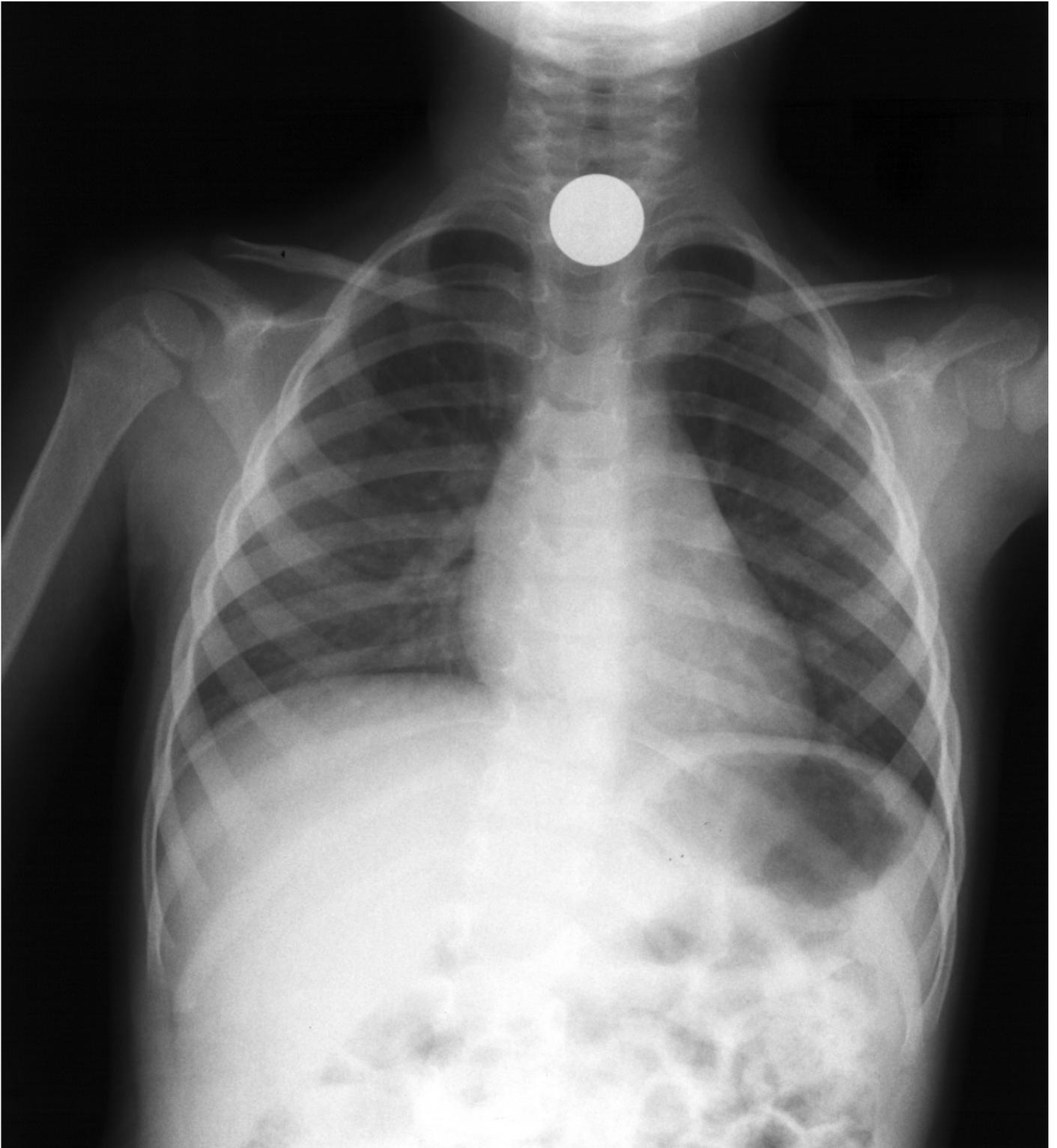
**Question 5 Xray 1 (2<sup>nd</sup> Xray is shown on the following page)**



**Question 5 Xray 2 (1st Xray is shown on the previous page)**



**Question 5 Xray 3 (1st and 2<sup>nd</sup> Xray are shown on the previous pages)**



### Question 6

FIO <sub>2</sub>	0.50		
pH	7.05		7.35-7.45
pCO <sub>2</sub>	66	mmHg	35-45
pO <sub>2</sub>	247	mmHg	80-95
Bicarbonate	18	mmol/L	22-28
Base excess	-14		-3 - +3
O <sub>2</sub> saturation	99	%	> 95
Na <sup>+</sup>	131	mmol/L	134-146
K <sup>+</sup>	5.0	mmol/L	3.4-5
Cl <sup>-</sup>	92	mmol/L	98-106
Urea	15	mmol/L	3-8
Creatinine	227	micromol/L	45-90
Glucose	50.9	mmol/L	3.5-5.5

**Question 7**

