

The Prince Charles Hospital  
The Royal Brisbane & Women Hospital  
Redcliffe Hospital  
Caboolture Hospital

Facility/hospital/clinical service name

# Metro North Hospitals ACEM Fellowship Trial Examination

2017.2

Short Answer Questions

SAQ Paper

## Questions

## Booklet one

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# **ACEM Fellowship Trial Examination**

**2017.2**

## **Short Answer Questions**

### **SAQ Paper**

# **Booklet one**

Examination time: 180 Minutes

### Direction to Candidates:

- 1- All questions must be attempted
- 2- Answer each question in the space provided
- 3- Enter your name for each question
- 4- This paper has been divided into 3 parts, each part is to be completed in 60 minutes

Booklet one:	SAQ 1-9
Booklet two:	SAQ 10-18
Booklet three:	SAQ 19-27
Props Booklet:	All props

**SAQ 1 (9 Minutes)  
(Total 18 marks)**

**Candidate name:**

A 20 year old male patient starts talking to you about anaphylaxis, whilst he waits for the result of an x-ray for a twisted ankle. He is surprised when you tell him that people can actually die from anaphylaxis.

**I. What are 4 recognised possible risk factors for a fatal anaphylactic reaction?  
(4 Marks)**


**Now his curiosity is piqued, as he is allergic to pecan nuts. He says he can often first tell from his skin that he is getting an anaphylactic reaction.**

**II. List 3 skin manifestations consistent with an underlying anaphylactic reaction.  
(3 marks)**


You then ask him if he carries an EpiPen, and he says he used to, but has now forgotten how to use it. You decide to tell him exactly how to use it

**III. Describe five (5) steps on exactly how a patient uses an EpiPen. (5 Marks)**


Undeterred, he says he has heard that “*adrenaline is a really dangerous drug*”, and should only ever be used by an expert. You correct him by saying that it is life-saving and absolutely essential in anaphylaxis, but agree there are some side effects and dangers, particularly if used incorrectly.

**IV. List Three (3) recognised ‘normal’ side effects of being given adrenaline. (3 Marks)**


**V. List three (3) serious / potentially lethal side effects of being given adrenaline too fast, too concentrated or too much? (3 Marks)**


**SAQ 2 (6 Minutes)  
(Total 12 Marks)**

**Candidate Name:**

An 11 month old boy is brought in by ambulance following a brief 1-2min generalised tonic clonic seizure. He was well prior to the onset of seizure and has no previous history of seizures.

- I. List six (6) possible causes for the seizure other than a febrile convulsion:  
(6 Marks)**


On further assessment the child has a temperature of 38.5 and evidence of a viral upper respiratory tract infection.  
The child is GCS 15 with no focal neurology. You are comfortable that the child has had a febrile convulsion.

- II. List three (3) criteria for the diagnosis of a simple febrile convulsion.  
(3 Marks)**


- III. It is deemed safe for discharge. State three (3) criteria that suggest this patient is safe to be discharged home.  
(3 Marks)**


**SAQ 3 (6 Minutes)  
(Total 12 marks)**

**Candidate Name:**

A 67 year old lady has been brought to your emergency department with spontaneous bilateral epistaxis. This started about 2 hours ago while she was in her backyard gardening. She is complaining of nausea and difficulty breathing. There is no history of trauma. She has a background of atrial fibrillation, ischaemic heart disease and hypertension.

The ambulance officers have estimated about 500 mls of blood loss.

Her medications include:

Rivaroxaban 20 mg PO OD  
Digoxin 125 mcg PO OD  
Metoprolol 50 mg PO BD  
Perindopril 5mg PO OD

Her observations are:

Temp            36.0 degrees  
BP                150/100 mmHg  
Pulse            120 bpm  
O2 Sats.        91% RA  
RR               25 breaths/min  
GCS              15/15

Your registrar has identified that she has ongoing active bleeding and is becoming more distressed.

- I. List five (5) immediate management options you would perform for this patient.**

**(5 marks)**


**II. List and justify 3 important investigations that would assist you in the resuscitation of this patient. (4 marks)**

Investigation	Justification

You have been unsuccessful in your approach to haemostasis. You suspect a posterior source for the bleeding.

**III. List three (3) options for specific management of posterior epistaxis. (3 marks)**


**SAQ 4 (6 Minutes)**  
**(Total 12 Marks)**

**Candidate Name:**

A 16 year old male patient presents to your ED with a laceration to the plantar surface of the heel of his L foot sustained whilst walking in a freshwater creek bed. The wound was heavily soiled with mud and has been superficially cleaned on arrival to ED. There is no visible foreign body on X-ray.

He has no known allergies and is unvaccinated.

Your junior doctor has attempted to infiltrate with local anaesthetic but the skin is very thick and this has been unsuccessful.

You decide to perform regional anaesthesia to allow washout and laceration repair.

**(See props booklet for photo please)**





- I. List the type of block and the landmarks you would use to perform a regional nerve block for this patient? (4 marks)**

<b>Name of block:</b>
<b>Landmarks:</b>

- II. List the drug and dose you would use for the regional block for this patient. (2 marks)**

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- III. State the details of your preferred method of wound closure in this patient. (2 marks)**

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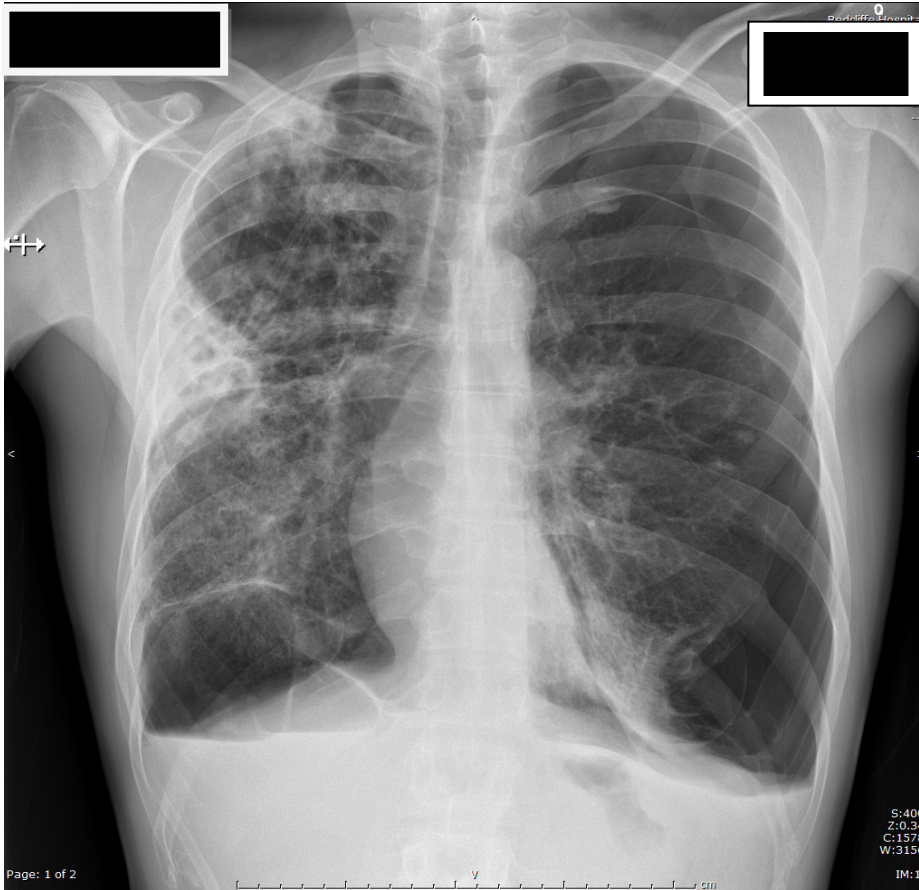
- IV. List 4 treatments you would prescribe in the ongoing management of this patient. (4 marks)**


**SAQ 5 (6 minutes)  
(Total 12 Marks)**

**Candidate Names**

An 86 year old man presents with acute pleuritic chest pain and shortness of breath. He is a long term smoker.

**(His chest x-ray is shown in the props booklet)**



**I. List three (3) radiological abnormalities on his x-ray: (3 marks)**


**II. List three (3) possible causes for the x-ray findings (3 marks)**


**His vitals are:**

HR 100 bpm  
BP 150/80  
RR 25/min  
Sats 86% on 4L O2  
Temp 38.1 degrees

**III. List and justify three (3) initial interventions: (6 marks)**

Intervention	Reason

**SAQ 6 (6 Minutes)**  
**(Total 12 Marks)**

**Candidate Name:**

Your director has asked you to take on the 'Quality Assurance' portfolio within your department.

**I. Define the following terms in relation to your portfolio. (3 marks)**

<b>Quality assurance</b>	
<b>Clinical indicators</b>	
<b>Benchmarking</b>	

**II. List five (5) commonly used quality measures in Emergency Departments in Australasia.**

**(5 marks)**


You are to lead a departmental project on a specific indicator within your department.

**III. Describe the four (4) steps of the quality assurance cycle. (4 marks)**


**SAQ 7: (6 Minutes)**  
**(Total 12 Marks)**

**Candidate Name:**

A 2 year old boy is brought to a suburban emergency department. The mother reports that the child has been increasingly distressed due to pain after the foreskin was retracted that morning. She has been unable to return the foreskin to its normal position.

**(His photo is shown in props booklet)**



**I. List 2 abnormalities in this photograph.**

**(2 marks)**


**II. Describe three (3) methods for the reduction of the foreskin. (6 marks, 2 marks for each method)**


**III. Describe the technique for a penile block. (4 marks)**


**SAQ 8: (6 Minutes)**  
**(Total 12 Marks)**

**Candidate Name:**

A 16 year old girl is brought in by her parents due to concern about her weight and mental health.  
She weighs 38kg.

**I. List four (4) features on history that may suggest an eating disorder .**  
**(4 marks)**


**II. List four (4) medical complications that may occur due to an eating disorder.**  
**(4 Marks)**




**III. What principles of risk assessment need to be considered when deciding her treatment? (4 marks)**


**SAQ 9: (9 Minutes)**  
**(Total 18 marks)**

**Candidate Name**

A 60 year old lady presents to ED with generalised abdominal pain. She was about to have dinner when she noticed onset of constant severe pain. This is associated with nausea without vomiting.

She denies any change in bowel motions or complaints of melaena. She has been well of late with no fevers, chills, rigors or sweats. She has no complaints of urinary symptoms. She has a past medical history of paroxysmal atrial fibrillation, insulin dependent diabetes mellitus and chronic obstructive airway disease. On clinical examination, she is generally tender with no evidence of peritonism. Bowel sounds were present and normal.

Her regular medications include:

- Aspirin 100mg PO OD
- Lantus 30 units SC NOCTE
- Novorapid 10 - 15 units SC TDS
- Salbutamol INH PRN
- Salmeterol/Fluticasone INH BD

Her observations are;

Temp	37.3 degrees
BP	160/80 mmHg
Pulse	110 bpm
O2 Sats.	92% RA
RR	22 breaths/min
GCS	15/15

I. **Based on the assessment above, what is the MOST LIKELY diagnosis?**

(1 mark)

**An initial abdominal XRAY was performed. Refer to prop booklet. (Image A)**



**II. Based on this XRAY, list 2 relevant positive and negatives. (2 marks)**

<b>Relevant positives (0.5 each)</b>	<b>Relevant negatives(0.5 each)</b>

**III. List three (3) other differential diagnoses that should be considered? (3 marks)**


**IV. List five (5) important aspects to the management of this patient. (5 marks)**

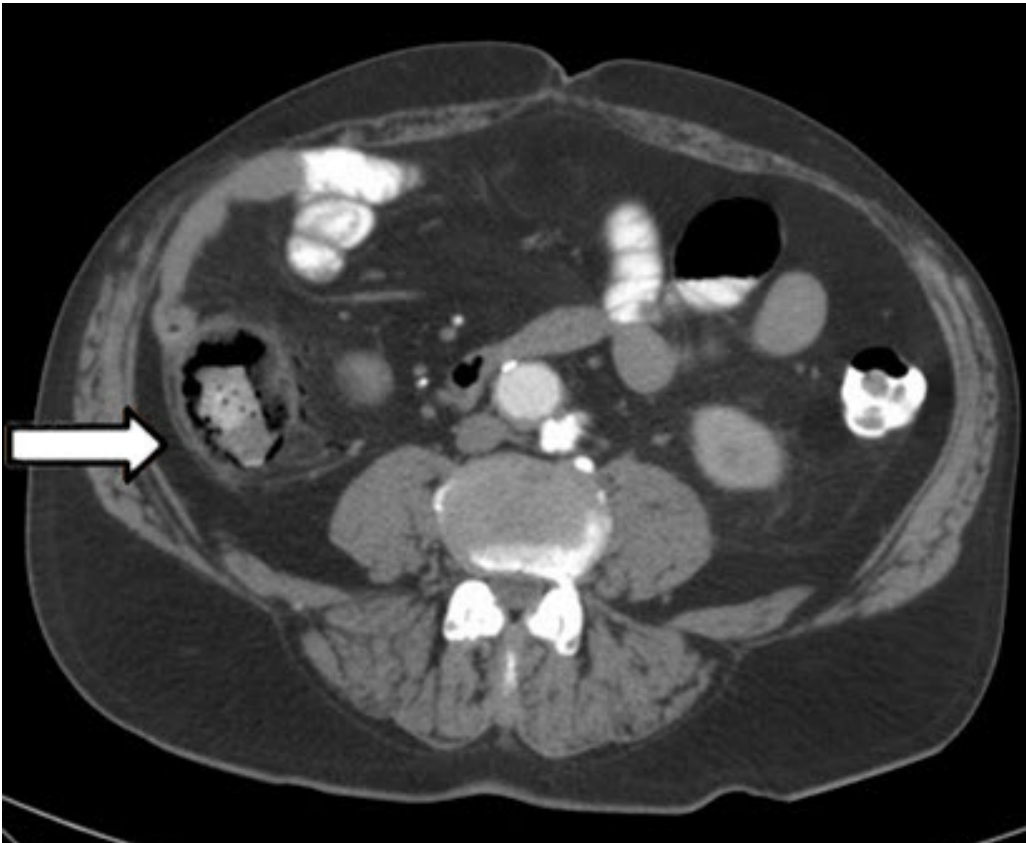

**A CT abdomen has been performed. Refer to prop booklet (Image B)**

**V. On this axial image, what does the arrow indicate? (1 mark)**

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**VI. List 3 other causes of this CT finding. (3 marks)**


**VII. Apart from the above CT finding, list 3 other findings on assessment which would indicate poor prognosis. (3 marks)**

**Image B**

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