

**Department of Emergency Medicine**

**Prince of Wales Hospital**

**ACEM NSW  
Fellowship Exam Practice  
(2019.2)**

**27 August 2019**

**Short Answer Questions  
Booklet 1  
Questions 1 – 9**

**Examination Time: 3 hours**

**Directions to Candidates**

1. The exam is divided into three question booklets.
2. Write your name on the front page of each question booklet and on each subsequent page.
3. Answer each question in the space provided.
4. Cross out any errors completely.
5. Please do not start until you are told to do so.
6. No exam papers or materials to leave the room.

**Candidate name:** \_\_\_\_\_

Name: \_\_\_\_\_

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SAQ 1 (this is a double question – total 20 marks)

Scenario:

Please review the following complaint made to your Emergency Department and answer the questions below.

A 76 year old woman presented to your ED 4 days ago. She complained of 1 day of vomiting, non-bloody diarrhoea and crampy LLQ pain. She had fever and chills at home. She had no sick contacts and no travel history.

On the day of the presentation:

Temp: 38C. HR 110 BP, 118/76, RR 16, SAO2 97% RA.

Her documented examination findings were mild tenderness in the LLQ with no guarding or rebound. Her rectal exam was noted as an “empty rectum”.

Her WCC: 10.3 with 77% neutrophils. Hb 15g/L. EUC, lipase and LFT were all within normal limits.

At 4 hours, her pain improved. Her vitals signs were: Temp: 38C. HR 100, BP 122/80. She was discharged home.

Q1. Based on the clinical documentation above, what makes this a high-risk discharge? (2 marks)

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Her discharge letter was a “cut and paste” of the clinical encounter, together with the lab results. The diagnosis was gastroenteritis. She was asked to see her GP within the next 48 hours. She was given a fact-sheet for management of gastroenteritis.

Q2. What discharge information would you consider essential to include in the letter?? (5 marks)

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Name: \_\_\_\_\_

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The patient returned to the ED on Day 2 with a temp of 39C. She continued to have vomiting and diarrhoea. She was discharged with a diagnosis of gastroenteritis and asked to start oral rehydration fluid.

She returned on Day 3 with an acute abdomen. Her CT showed a diverticular phlegmon with possible perforations.

Q3. Part of your review of this complaint requires you to identify processes that would prevent a recurrence of this encounter in your ED. How would you address this? (4 marks)

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SAQ 2 (total 10 marks)

A 32 year old woman is brought in by police. She is handcuffed and screaming obscenities on arrival. She is in your resuscitation room.

Q1. What non-pharmacologic de-escalation would you use? (2marks)

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She doesn't respond to your actions. You decide to use physical restraints.

Q2. What precautions would you take to ensure the patient remains safe when physically restrained? (4 marks)

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Name: \_\_\_\_\_

Q3. What is the purpose of chemical restraints? (1 mark)

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She is now calm.

Q4. What would you examine or investigate for? Provide a management/ treatment where appropriate (3 marks). Fill in the table below.

Examination /investigation	Management



Name: \_\_\_\_\_

SAQ 3 (total 10 marks)

A two year old Vietnamese child is referred in by her GP for assessment of pallor and failure to thrive. The problem probably dates back to her first birthday. Her FBE is as follows:

Hb 26 g/L (135 - 175)	Retics 5.3%
Plt $324 \times 10^9/L$ (140 - 400)	Neuts $3.24 \times 10^9/L$ (1.7 - 7.0)
MCV 60 fL (80 - 100)	Lymp $4.37 \times 10^9/L$ (1.5 - 4.0)
HCT 0.1 L/L (0.37 - 0.47)	Mono $1.3 \times 10^9/L$ (0.1 - 0.8)
WCC $9 \times 10^9/L$ (3.5 - 11.0)	Eos $0.06 \times 10^9/L$ (0.04 - 0.44)
	Baso $0.00 \times 10^9/L$ (0.0 - 0.2)

Pencil cells noted.

Q1: List the three most important features of this blood count (3 marks)

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

Q2: List the 4 most important differential diagnoses and historical discriminators. (4 marks)

Differential diagnosis	Discriminating historical feature

Name: \_\_\_\_\_

Q3: What are your initial management priorities? (3 marks)

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Name: \_\_\_\_\_

SAQ 4 (total 10 marks)

18 year old female who has a history of asthma presents with 3 days of worsening shortness of breath

Q1. List 2 examination findings and 2 basic investigation findings which correlate with defined features of life-threatening asthma. (4 marks)

Clinical features	Investigation results
1.	
2.	

Q2. Despite treatment with continuous nebulised B-agonists, ipratropium and steroids, the patient continues to deteriorate. Outline three treatments including doses, you might use before intubation. (3 marks)

Treatment	Dose
1.	
2.	
3.	

Name: \_\_\_\_\_

Q3. With regard to initial ventilator settings for the asthmatic, fill in the following table (3 marks):

Parameter	Range
Tidal volume	
Respiratory rate	
I:E time	

Name: \_\_\_\_\_

SAQ 5 (total 10 marks)

Mum presents with Sebastian, born 2 days ago via NVD at term. Mum has developed a vesicular rash on her chest this morning, and she is worried about infecting Sebastian.

You are concerned it might be herpes zoster.

Sebastian is well, with an unremarkable exam and normal observations

Q1. What is your treatment of him? (2 marks)

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Q2. What complications may Mum get? (5 marks)

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Name: \_\_\_\_\_

Q3. What are other considerations during mum and baby's stay in your ED? (3 mark)

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Name: \_\_\_\_\_

SAQ 6 (total 10 marks)

A 67yr old male farmer is brought in to your rural ED by ambulance with CPR in progress following a lightning strike.

Q1. What are your immediate management priorities? (5 marks)

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He is successfully resuscitated.

Q2. List one short and one long term complications from the three systems in this table. (3 marks)

<b>System</b>	<b>Short Term</b>	<b>Long Term</b>
Neurological (pass/fail)		
Ophthalmological (pass/fail)		
<u>Otological</u>		

Name: \_\_\_\_\_

Q3. Give one example of each of the skin and deep tissues of the electrical injury listed in the table (2 marks).

	<b>Skin effect</b>	<b>Deep tissue effect</b>
High voltage		
Lightening		





Name: \_\_\_\_\_

Q2. What are the 4 likely underlying causes for her haemorrhage? (4 marks)

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

\_\_\_\_\_

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

\_\_\_\_\_

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

\_\_\_\_\_

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

\_\_\_\_\_

Q3. Describe one method of providing external aortic compression for intractable torrential PV bleeding (1 mark)

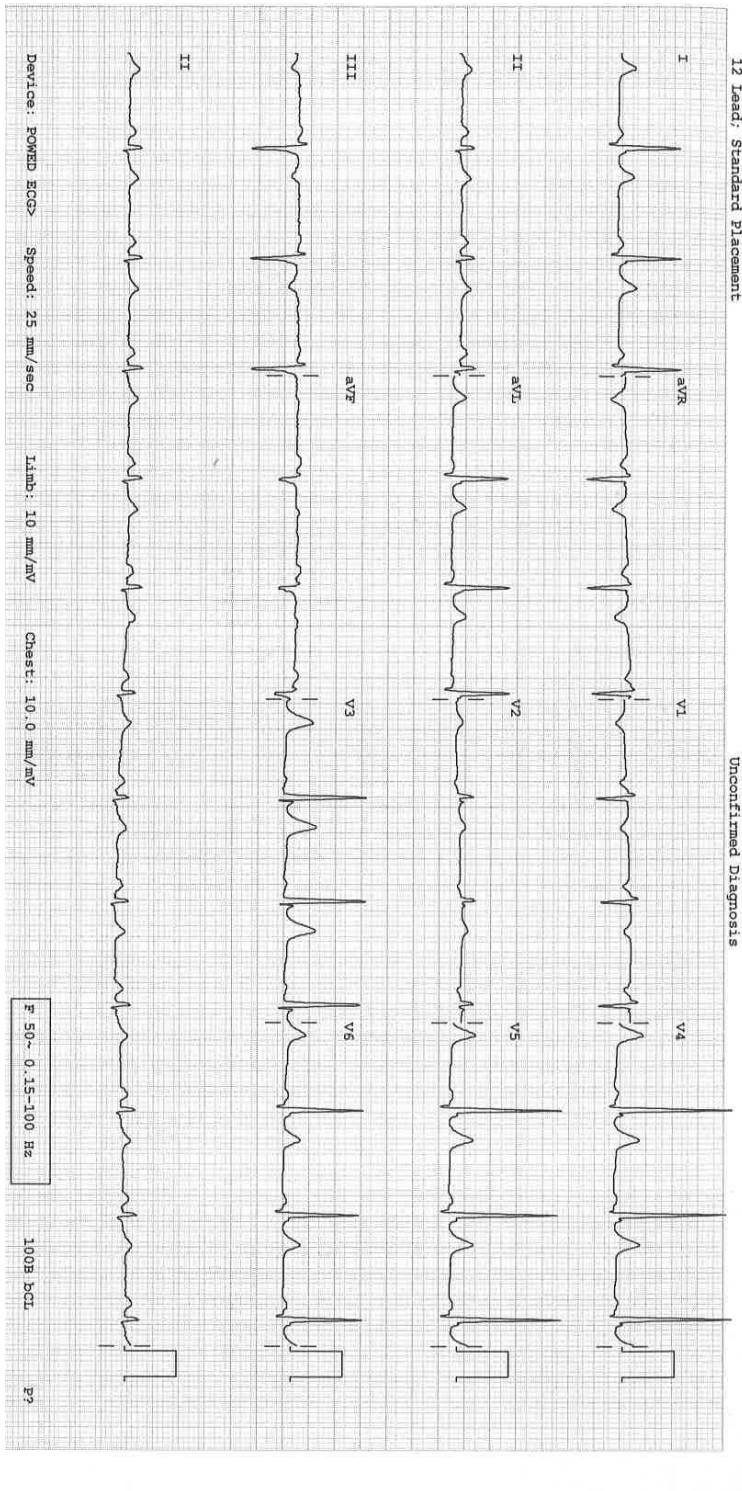
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SAQ 8 (total 10 marks)

A 42 year old man presents to your ED with palpitations. This occurred while he was ocean swimming. The duration was less than 5 mins. He presented today because it is his 3<sup>rd</sup> episode this week. He has no associated symptoms.

He was triaged to the waiting room and you have been asked to review his ECG.



Name: \_\_\_\_\_

Q1. Describe his ECG. (2 marks)

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Q2. What is the most likely diagnosis? (1 mark)

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Q3. What rhythm could have caused his palpitations? (1 mark)

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Q4. In his risk assessment, what questions would you ask? (2 marks)

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Name: \_\_\_\_\_

Currently, he has no symptoms and no abnormal findings on examination.  
You speak with your cardiologist who wants to see him in her rooms tomorrow morning. He is reluctant to do so because he has other obligations. He wants to know why it is necessary.

Q5. What essential information would you need to convey? (2 marks)

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Q6. What investigations are usually performed and why? (2marks)

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SAQ 9 (total 10 marks)

A 75 year old man arrives by ambulance with epistaxis. He has a blood soaked towel pressed against his nares.

His observations in the resus bay: BP 156/99 HR 122 RR 14 SaO2 96%.

He speaks in full sentences and able to spit out the blood. While you are talking to him he begins to clear his mouth of large volumes of bright blood. His medications at the end of his bed include clopidogrel and aspirin.

You notice active bleeding from both nares. Direct pressure is no longer stemming the bleeding

Q1. What historical features would make you suspect a posterior bleed? (2 marks)

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Q2. What physical findings would make you suspect a posterior bleed? (2 marks)

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Q3. What are your options in the Emergency Department? (2 marks)

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

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

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Name: \_\_\_\_\_

Q4. What complications can be caused by the methods of haemostasis? *Expect local and systemic complications. Accept any combination of local and systemic (4 marks)*

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**-End of Booklet 1-**