

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 three

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ACEM Fellowship Trial Examination

2017.2

Short Answer Questions

SAQ Paper

Booklet three

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 19: (9 Minutes)

Candidate Name:

Total 18 Marks

A 77 year old male presents with lower back pain after a recent minor trip. He has a normal lower limb neurological examination, and no focal spinal tenderness. He is noted to have bruising on his buttocks, and routine biochemical examination is taken and is as follows:

Hb 60
WCC 0.4
Plt 6
MCV 81
HCT 0.17
Neutrophils 0.18

I. Describe the relevant features of these blood tests: (1 Mark)

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II. List three central and three peripheral causes which must be considered as an underlying diagnosis. (3 Marks)

Causes:	
Central (0.5 each)	Peripheral (0.5 each)

III. He will require transfusion of blood products. List four (4) blood products which may be used (carefully) *without* confirming ABO compatibility? (4 Marks)

IV. He is transfused 2 units and becomes acutely hypoxic, and dyspnoeic.

**Please complete the following table with respect to transfusion reactions:
(10 Marks)**

Type of reaction (1 mark each)	Incidence (0.5 mark each)	Two (2) Discriminating features on examination or investigation (0.5 Mark each)

**SAQ 20: (6 Minutes)
(12 Marks)**

Candidate Name:

A 28 year old male patient is brought to your ED following an injury in a tackle during a rugby match. There is concern for a C spine injury as he been unable to move his upper or lower limbs after the injury.

On arrival he is being managed in appropriate spinal immobilisation.

His vitals signs are:

GCS 15/15

Temp 36.0

HR 60 regular

BP 90/60

SpO2 93% RA

Questions:

- I. **Complete the following table with 4 indications for intubation that may occur in a patient with a spinal injury and state the supporting features you would look for on assessment. (8 Marks)**

Indication for intubation	Supporting Features on Assessment

II. List 4 modifications would you make to your standard RSI in this patient if you were to proceed with intubation in the ED? (4 marks)

SAQ 21: (6 Minutes)

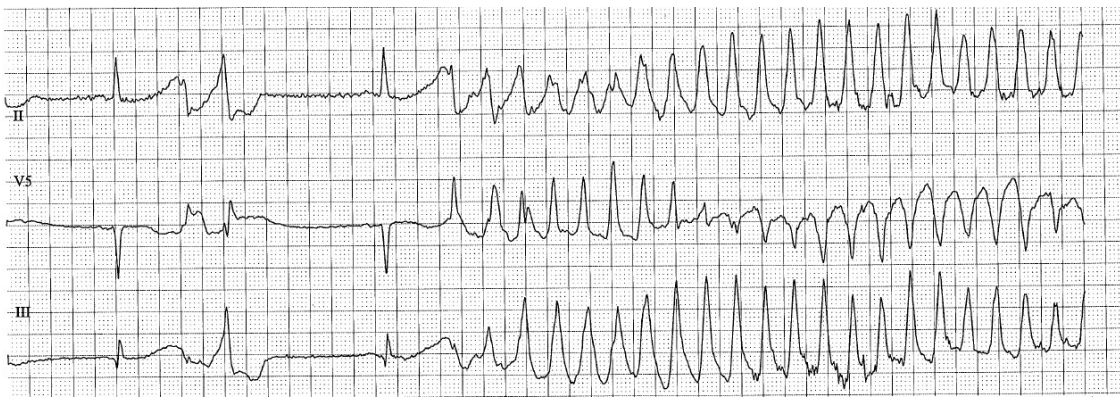
Candidate Name:

(Total Marks 12)

A 50 year-old woman is in your ED with epigastric pain and vomiting. She has a background of hypertension and GORD. You are reviewing her on the ward round as an ECG is being performed.

She states that she feels a bit light headed.

The following ECG is recorded:
(See prop booklet for her ECG please)



I. List three (3) relevant abnormalities on her ECG. (3 marks)

II. State 3 possible causes for this clinical presentation. (3 marks)

III. The patient's BP is 100/60 mmHg. List three (3) potential treatment, including doses and endpoints where relevant.

(6 marks)

Drug and dose	End point

**SAQ 22: (6 Minutes)
(Total Marks 12)**

Candidate Name:

**A 32 year old male is brought to your ED by the ambulance in refractory VF. He has a down time of approximately 35minutes and has received advanced life support in accordance with published guidelines.
His partner states he self discharged yesterday after being diagnosed with myocarditis.**

- I. The Australian and New Zealand Committee on Resuscitation recommend the use of prospectively validated termination of resuscitation (TOR) rules for out of hospital cardiac arrests (OHCA).

List 4 criteria used by a prospectively validated TOR rule in the setting of OHCA receiving advanced life support:

(4 marks)

- II. List two (2) pros and two (2) cons with respect to the use of mechanical CPR devices in OHCA

(4 marks)

III. Which Extra Corporeal Membrane Oxygenation (ECMO) modality would be most appropriate for this patient and why? (2 marks)

IV. List two (2) contraindications to commencement of ECMO. (2 marks)

SAQ 23: (6 Minutes)
(Total marks 12)

Candidate Name:

A 32 year old female self presents to your emergency department following a fall down 6 stairs at work.

She is 28/40 G1P0.

She has no complaints of pain but wants to be 'checked out'.

- I. What are four of the major cardiovascular physiological changes in pregnancy that may impact on the clinical assessment of this patient?**
(4 Marks)

- II. On assessment, her primary and secondary survey is normal. List one (1) specific examination and three (3) investigations related to the pregnancy that need to be performed for this patient?**
(4 Marks)

Examination:
Investigations:
1:
2
3

**III. What four criteria need to be met for safe discharge of this patient?
(4 Marks)**

SAQ 24: (6 minutes)
Total Marks 12

Candidate Name:

A 60 year old man is brought by ambulance to your tertiary ED following a 'one punch' attack, where he was punched and fell, hitting his head. There was a brief (<5 minutes) loss of consciousness.

He has no prior medical history and is on no medications.

On arrival his vital signs are:

GCS 14/15 (E3, V5, M6)
Pupils equal and reactive
P 85
BP 125/85
RR 18
O2 sats 98% room air

He has no injuries other than bruising and a large haematoma to the right parietal region of his head. He has a collar in place.

**I. A single slice from a CT of his head is shown in the props booklet.
List four (4) key findings?**

(4 Marks)

On return from CT he is poorly responsive. His GCS is now 7 (E1 V2 M4). His other vital signs do not change. He has an endotracheal tube placed for airway protection and commenced on ventilation without incident. The neurosurgical service is called to attend.

II. List six (6) priorities in his care while waiting for neurosurgery,

(6 Marks)

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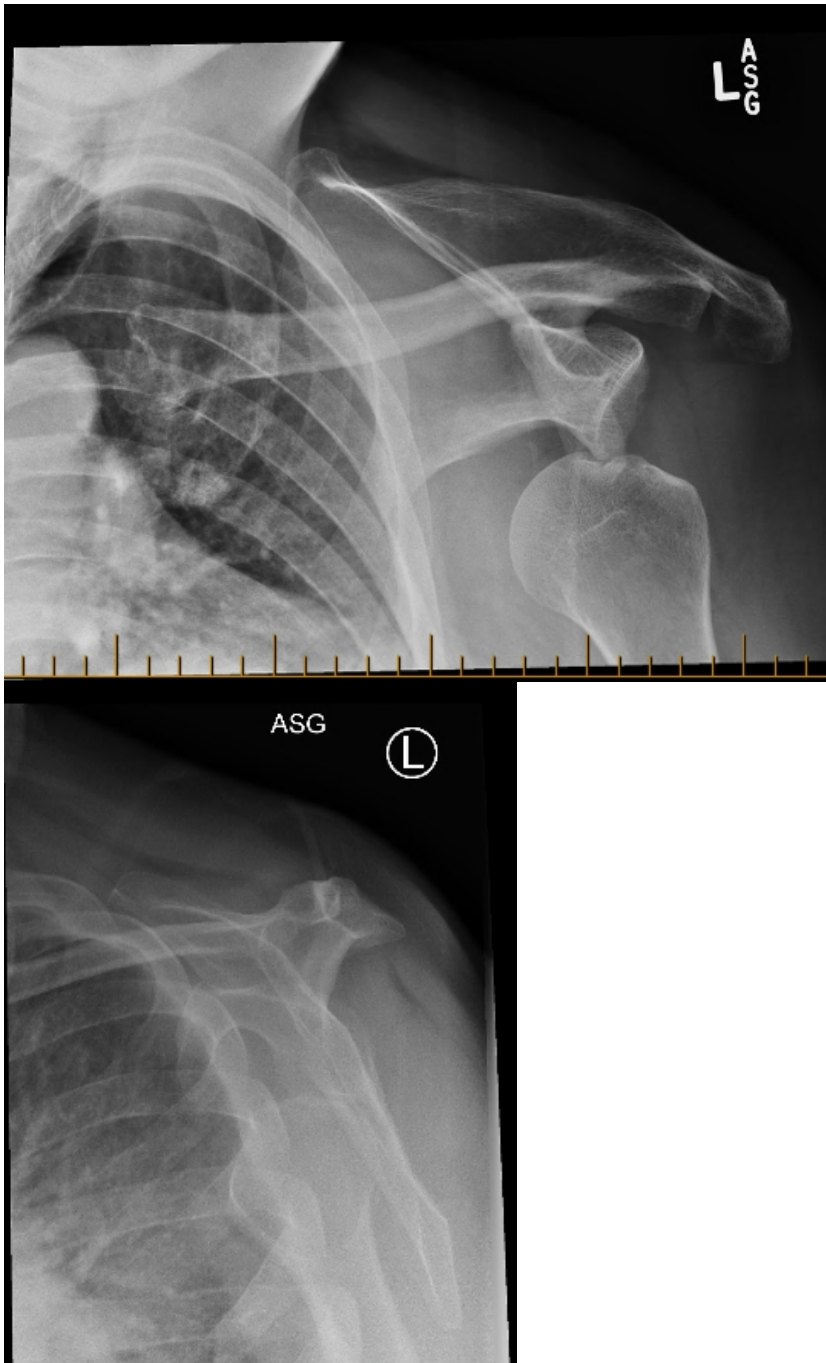
**III. His pupils are noted to be different sizes left 3mm, right 7mm.
List (2) additional interventions that you will perform?**

(2 Marks)

SAQ 25 (6 minutes)
(Total marks 12)

Candidate name:

You are the ED Consultant on the day shift at a district general hospital.
A 61 year old man presents with an injury after a fall while pushing his grandchildren down a slide.
After the primary and secondary survey, you determine that his only injury of significance is to his left shoulder.
You order x-rays of this joint.



- I. List two (2) relevant positives and two (2) relevant negative findings on the above x-ray views. (4 Marks)**

Positive:
Negative:

- II. He has received Methoxyflurane from the ambulance officers, but is still in considerable pain.**

List four (4) options for acute pain management of this injury.

(4 Marks)

III. Having seen the X-rays, you determine the need for reduction. Name and briefly describe two techniques for reduction. (4 Marks)

SAQ 26 (6 Minutes)
(Total Marks 12)

Candidate name:

A 22 year old HIV negative male presents to an urban district emergency department with a history of unprotected anal intercourse with an anonymous male partner the previous night. He is asymptomatic and requesting post-exposure prophylaxis (PEP).

I. List (4) other factors on assessment that are important in determining his risk of contracting HIV in this setting?

(4marks)

II. List (6) important principles of discharge advice that you will provide to the patient.

(6 Marks)

III. What other condition may require urgent treatment in this setting and what will determine if this is required? (2 Marks)

SAQ 27: (9 Minutes)

Candidate name:

(18 marks)

A 5 day old baby girl is brought into the emergency department. She has had poor feeding for the last 24 hrs and has had increasing lethargy. The baby appears pale, floppy and mottled.

The child is 3.8kg.

Initial vital signs are:

HR	190
RR	60
Cap refill	5secs
BP	Unable to record
Sats	Not reading

I. List eight (8) differential diagnoses for this presentation (8 Marks)

II. List four (4) immediate actions you would take (4 Marks)

III. You decide to intubate the baby.

(6 Marks)

List six (6) pieces of equipment (including sizes –multiple sizes do not count as separate answers) that you would prepare for the intubation of this child.

Good luck
Oh forgot, still you have SCQ in the afternoon 😊