South East Queensland Fellowship Written Mock Exam

2019.2

3rd October 2019

Book One

SAQ 1 to 9

With thanks to the FACEMs and the Emergency departments of

Sunshine Coast University Hospital

Caboolture Hospital

Redcliffe Hospital

The Prince Charles Hospital

Royal Brisbane & Women's Hospital

Long question 18 Marks

A 24 day old exclusively breast fed male infant is brought to the emergency department by his concerned mother. Previously presented with jaundice at day 3 not requiring treatment, failed to attend follow up.

Vital signs

HR	122
BP:	68/42
RR	26
Weight	3250g

1. In the table below, outline two (2) maternal risk factors and two (2) neonatal risk factors for clinically significant hyperbilirubinaemia in any neonate (4 marks)

	Risk Factors
Maternal	
Neonatal	

2.	With regards the case, list 4 features on each of history and examination that
	will inform your diagnosis and management with justification for each (8
	marks)

History	Justification
Exam	
1.	

3. Specify 4 initial investigations that should be undertaken – complete the following table (4 marks)

Investigation	Justification
1.	
2.	
3.	
4.	

4. The results of examination and investigations were reassuring for a benign cause. Identify the key elements in discharging this baby safely. (2 mark)



12 Marks

An 85-Year-Old lady presents via ambulance after an episode of dizziness and fever at home. She had a fall in the garden earlier that day no injuries at the time but is now complaining of some mild lower back pain which is vague in location.

When the ambulance attended, she had a fever of 38.9 and was given 1g of paracetamol.

BP 125/80 HR 110

SaO2 99% on room air

GCS 14 (E4 V4 M6)

She has a past medical history of dementia, rheumatoid arthritis and hypertension.

1. Complete the table for issues for this patient and what should be done for each of these issues (4 marks)

Issue	Management
New onset of lower back pain	Ÿ
Fever and dizziness	
GCS 14	
Social	

Clinically she has mild right sided flank pain. Otherwise her clinical examination including CNS exam is unremarkable.

Key investigations

Urine >1000 Leucocytes <10 epithelial cells and 50 red blood cells. 2+ bacteria.

FBC - Hb 104 WCC 15 Platelets 210

Chem 20 Na 137 K 4.9 Urea 23 Creatinine 236 eGFR 23

LFT unremarkable

Medications: aspirin, crestor, irbesartan and methotrexate.

The patient becomes confused (GCS 12 E3 V3 M6) with a SBP of 80.

2. List your management of the above situation (4 marks)

3. After a discussion with the son a decision is made to palliate. Complete the table of symptom control medications for the PRN side of the patient's drug chart (4 marks)

Symptoms	Medication
Agitation	
Pain	
Secretions	
Nausea and vomiting	



12 Marks

Your department is in the process of revising its pathway for patients presenting to the ED with chest pain. You have been asked to help develop a pathway.

 As per the National Heart Foundation of Australia & Cardiac Society of Australia and New Zealand guidelines, what are the high risk features of chest pain for Acute Coronary Syndrome (ACS), not including clear ST elevation on an ECG or an elevated Troponin? List 4 features. (4 marks)
Haemodynamic compromise

2. List 4 low risk criteria. (4 marks)

Chest pain resolved		

3. Excluding ACS, list 8 causes of a raised serum Troponin by filling in the table below.(4 marks)

Cardiac causes	Non-cardiac causes



A highly distressed six year old male is brought in by his parents half an hour after a suspected snake bite. He is holding his very bruised fingers. Mum says he vomited twice en route to hospital.

1. What are your three immediate priorities? (3 marks)

The following blood work returns:

INR 5.8	Cr 60 (normal)
APTT > 150	CK 500U/L
Fib < 0.6	Wcc 13 neuts 8
D-dimer > 10	Plt 400
	Hb 120

- 2. What primary abnormality does this demonstrate? (1 mark)
- 3. What types of snake can cause this type of envenomation? (2 marks)
- 4. List four different types of envenomation syndromes caused by Australian snakes, and one way in which antivenom should benefit each. (4 marks)

Clinical or biochemical envenomation feature	Antivenom benefit

5. How does dosing and administration of antivenom vary when children are being treated? (2 marks)

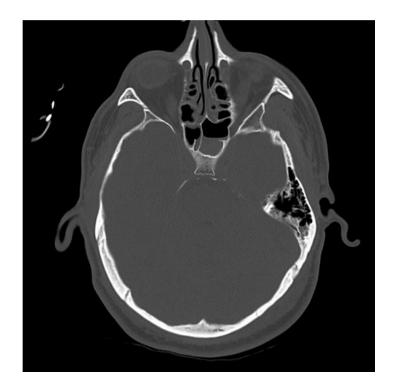
A 5 year old male presents to your regional Emergency Department 1 hour following a minor trauma. He has a history of severe Haemophilia A.

1. List four features on examination you would try to identify for this patient? (4 marks)

The patient has evidence of an isolated small haematoma to his occiput. He complains of a headache and has had two vomits. You decide to undertake neuroimaging.

A non-contrast CT Brain was performed. There are two (2) axial slices below.





2. From the imaging above, please state the diagnosis, with three (3) supporting CT findings. (4 marks)

Diagnosis:

Outline your key management priorities for this patient. (4 marks)

12 Marks

A 35yr old man attends your ED with non-traumatic back pain for three days. He has thoracic and lumbar pain, radiating down his buttocks and the whole of both legs. He uses IV drugs and has had night sweats. His temperature is 38.5deg. He has urinary retention.

tent	ion.
1.	List the 'Red Flags' in <i>any patient</i> with back pain (4 marks)
2.	List key investigations for this man with justification (2 Marks)
3.	What organisms are most associated with epidural abscess? (3 marks)
4.	Investigation suggests epidural abscess in this man. What antibiotics would you give? (3 marks)

12 Marks

Your Director has requested that you write a protocol for the use of Extracorporeal Membrane Oxygenation (ECMO) in your tertiary children's emergency department.

1. List 5 steps you would undertake in preparing such a protocol.(5 marks)

2. List 3 inclusion criteria for initiation of ECMO in the paediatric ED.(3 marks)

3. List 4 broad groups of conditions that might be suitable for ECMO therapy.(4 marks)

12 Marks

A 75 year old woman presents with increasing exertional dyspnoea over several weeks. A CXR shows a unilateral pleural effusion.

CCK	s. A CAN shows a diffiateral piedral endsion.
diag	gnostic pleural tap is performed.
1.	What tests should be done on the pleural aspirate fluid? (2 marks)
2.	What are the causes of a pleural exudate? (4 marks)
3.	What are the indications for a thoracocentesis of a pleural effusion <i>in the ED</i> (3 marks)
4.	What are the risk factors for re-expansion pulmonary oedema after thoracocentesis? (3 marks)

12 Marks

A 56 year old female presents following a moderate speed MVA with isolated right knee pain.

1. List four (4) indications to X-Ray this patients knee following an acute injury. (4 marks)

An AP and lateral right knee X-Ray are performed. There are two (2) images below.



2.	Based on the X-Ray, what is the diagnosis? (1 mark)
3.	What structures are at risk of injury? (3 marks)
4.	What are the priorities for the ongoing care of this patient? (4 marks)