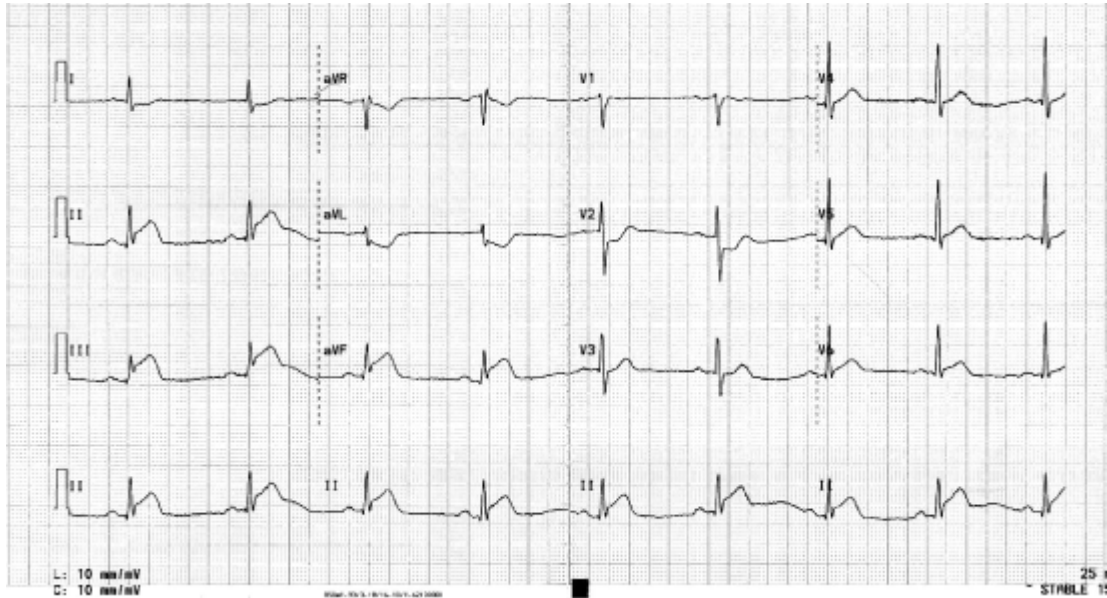


## QUESTION 1



36 year old woman. 20/40 pregnant. Severe left sided heavy chest pain radiating into left arm and jaw. Feels sick and sweaty.

Is on high flow O2 and has been cannulated.

What does the ECG show (2)

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- 

What is the diagnosis (1)

- 

What is your immediate management (4)

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- 
- 
- 

What is the definitive treatment (1)

- 

In what other circumstances can this treatment be used in cardiovascular disease (2)

- 
-

## QUESTION 2

20 year old. Afro-Caribbean female. 16/40 pregnant. Rhesus negative. Has sickle cell. Presented to the ED with dizziness. BP 80/45, pulse of 40. Confesses to having passed some blood OV earlier today.

On high flow O2 and has been cannulated.

What ways could you support her circulation (2)

- 
- 

What further management options will you make (4)

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- 
- 
- 

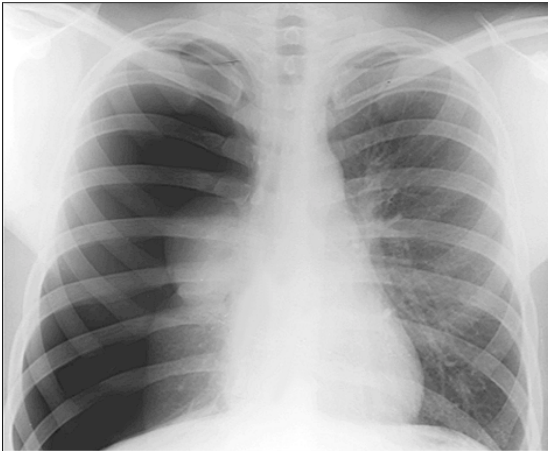
Does she need treatment for her rhesus status and if so when (2)

- 
- 

What are the general management principles of someone with sickle cell (2)

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- 
- 
-

### QUESTION 3



3 and a half year old accompanied by Dad. Known to be 'wheezy' and has had a cold for the last few days. Tonight SOB ++.

On high flow O2 and has cannula.

What clinical features suggest severe asthma in this age group (4)

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- 
- 
- 

Name two drugs you might give immediately with doses and routes (2)

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- 

What does the chest radiograph show (2) [I don't know what it was meant to show!]

- 
- 

What clinical signs might suggest your treatment is not working and the child is deteriorating (2)

- 
-

#### QUESTION 4

2 year old. Has had diarrhea without blood for the last few days. Child has sunken eyes, dry mouth and mottled skin.

What is the likely organism causing the diarrhea (2)

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- 

What percentage fluid loss is the child experiencing (2)

- 
- 

What volume should be given as a fluid bolus (2)

- 
- 

Calculate the child's fluid deficit (2)

- 
- 

What volume is his daily fluid requirements (2)

- 
-

## QUESTION 5

Venous bloods	Arterial blood gas on air
Na 144 K 4.4 Urea 6 Creatinine 80  Hb 11 WCC 16 Plt 229	pH 7.22 pO <sub>2</sub> 13 pCO <sub>2</sub> 3.5  Bicarb 14.3 BE – 7  Na 144 K 4.4 Cl 95

3 year old has eaten ‘Smarties’ out of Mums handbag. These turned out to be multivitamins. The child is vomiting, and has diarrhea. There is blood in the vomit. Mum thinks there were 30m tablets.

What is the diagnosis (1)

- 

What is your immediate management (4)

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- 
- 
- 

Calculate the anion gap (1)

- 

Give two other causes for such an anion gap (2)

- 
- 

Make two comments upon the ABG (2)

- 
-

## QUESTION 6



25 year old motorcyclist. 75 kg. Accident.

Other than a femoral nerve block, what therapeutic options are there for analgesia including doses and routes (2)

- 
- 

Draw the anatomy of where you would site an injection for a femoral nerve block in relation to other local structures and land-marks (4)

What would be your choice of local anesthetic and what is the maximum amount you could give this patient (2)

- 
- 

Name two benefits of putting this man into a Thomas splint in the ED (2)

- 
-

### QUESTION 7

Venous bloods	Arterial blood gas on air
Na 144 K 4.4 Urea 15 Creatinine 132 Alb 52 ALP 70 ALT 51 gGT 71 Amy 798	pH 7.22 pO <sub>2</sub> 13 pCO <sub>2</sub> 3.5  Bicarb 14.3 BE – 7

38 year old with a 2 hour history of severe epigastric abdo pain.

List four potential causes of an elevated amylase in such a patient (4)

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What is your immediate management of this patient (2)

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Comment on the ABG (2)

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- 

List the commonest two causes of pancreatitis in the UK (2)

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- 

List the markers of severity in acute pancreatitis (2)

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### QUESTION 8

“Picture of an ear with erythema around the lobe and adjacent skin on the neck. Shiny and swollen with a few darker spots spread all over.”

An 18 year old girl had her ears pierced two days ago and present with the above.

Describe the rash (3)

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- 
- 

What is the likely diagnosis (1)

- 

What is the likely cause (1)

- 

How might atopic eczema be differentiated clinically from herpetic eczema (3)

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- 
- 

What is the treatment of herpetic eczema (2)

- 
-



## QUESTION 9



Tom is 6 and has been brought to the ED by his mother as he has been suffering with a cold for a few days and now developed a rash. She thinks he has chicken pox. She had shingles about 5 years ago. She has a 7 year old who has had chicken pox previously, and a 5 year old who has not had chicken pox.

What are the risks of the 5 year old, the 7 year old and the mother contracting chicken pox (3)

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- 
- 

List the types of individuals who are likely to be considered for treatment with acyclovir when they have or have been exposed to chicken pox (3)

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- 
- 

List the complications of chicken pox (4)

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## QUESTION 10



Asides dressing this wound, what other simple measures could be under taken to investigate / manage this wound prior to discharge from the ED (4)

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What nerve foot supplies the sole of the foot (1)

- 

What cutaneous nerve supplies the sole of the foot (1)

- 

How is necrotizing fasciitis be suspected clinically (2)

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- 
- 
- 

What organisms are typically responsible in necrotizing fasciitis (2)

- 
-

## QUESTION 11

You are the SpR on duty at the weekend.

You are informed there is an incident at a local swimming pool. An escape of chlorine has caused problems with a mother and toddler group. There are 20 toddlers and their mothers en route to your department.

What steps do you take to prepare for the in-coming casualties (4)

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- 

What parameters might you triage the casualties with at the triage point (2)

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- 
- 

What symptoms do you expect to encounter given the scenario (4)

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- 
-

## QUESTION 12

Venous bloods	
Na 114 K 6.9 Urea 15 Creatinine 132	

A 58 year old man is brought to the department in shock. He was on some medicines for temporal arteritis a few months ago but has since stopped them. He has a chronic productive cough. His BP is 70/40, pulse 123. He is on high flow oxygen and has a cannulae in situ. His bloods are shown above.

What is your immediate management (2)

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- 
- 
- 

What is the likely cause for his shock (1)

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What measures could you use to confirm your suspicions (3)

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- 
- 

List four causes for the underlying condition you suspect (4)

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- 
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### QUESTION 13

Partial thromboplastin time – normal

Thrombin clotting time – normal

Activated partial thromboplastin time – prolonged ++

Bleeding time – prolonged ++

A 15 year old boy has presented with a nose bleed. Clotting results above.

What two steps can be undertaken at triage to stem the bleeding (2)

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What further two steps might be undertaken in the ED to stem the bleeding (2)

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What two haemostatic problems could account for the clotting abnormalities (2)

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What one diagnosis could account for both of these abnormalities (2)

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#### QUESTION 14



List three abnormalities from the IVU (3)

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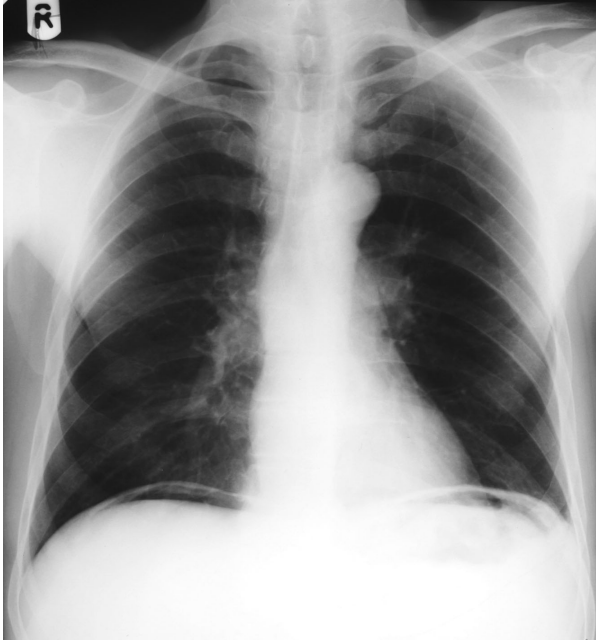
What is your immediate management (4)

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- 

What complications could result following the giving of contrast media for an IVU (2)

- 
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## QUESTION 15

	<p><u>Arterial gasses on air</u></p> <p>pH 7.22 pO<sub>2</sub> 13 pCO<sub>2</sub> 3.5</p> <p>Bicarb 14.3 BE -9</p> <p><u>Venous bloods</u></p> <p>Hb 9.2 WCC 3.2 Plt 109</p>
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A 75 year old man with stable diverticular disease presents to the ED with severe abdominal pain and vomiting. He is unwell.

Comment upon his ABG (2)

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- 

Comment upon his chest radiograph (2)

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What is the diagnosis (1)

- 

What is the likely cause of the haematology results (1)

- 

Tick the three most important management steps in this mans immediate care (3)

<input type="checkbox"/>	Antibiotics	<input type="checkbox"/>	Analgesia	<input type="checkbox"/>	Invasive monitoring
<input type="checkbox"/>	Theatre	<input type="checkbox"/>	Catheterisation	<input type="checkbox"/>	NG tube

## QUESTION 16



Comment upon the hand x-ray (4)

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- 

Asides rheumatoid arthritis, list three possible diagnoses (3)

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- 
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What clinical findings may also suggest rheumatoid arthritis in a patient (3)

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