

## SAQ 18

### Q1

High AG (or Lactic) Metabolic acidosis with resp acidosis. (Must say all of that to score.)  
or Uncompensated high AG (or lactic) metabolic acidosis.  
[Expected CO<sub>2</sub> 32, AG 16.5]

Comment- Many people said only metabolic acidosis. This is not enough to score the mark.

### Q2

Any reasonable cause of high AG metabolic acidosis or resp acidosis accepted. At first I was going to only accept those specific to the patient in the stem but most people would have scored very poorly (But in the real exam the marking may be stricter than this- Recommend always relating answer to the stem if possible). Main issue was people thinking it was normal AG and thus putting wrong causes down (e.g. RTA). If the same end cause was put down twice it only scores one mark e.g. hyponatraemia causing seizure & etoh withdrawal causing seizure.

E.g. Seizure

Alcoholic ketoacidosis

Liver failure

Toxin e.g. methanol other toxic alcohol

Sepsis esp CNS

Thiamine def

Renal failure

Under ventilation (resp acidosis), seizure, Poorly placed ETT, inadequate ventilation via ETT, Aspiration

Etc etc etc

Q3-Hyponatraemia. Any cause accepted. I was lenient as many causes written down would not have led to such a low Na.

Vomiting

Diarrhoea

Pancreatitis

Diuretics esp thiazides

Anticonvulsants (tegretol)

SIADH- lung dis (tumour, infection, COAD). CNS (Trauma, infection, bleed)

Hepatic disease (water retention) (also CCF, Renal failure)

Water intoxication/psychogenic polydipsia

Etc etc etc

Q4. I needed to see an appropriate justification for each Ix to get 2 marks. If the justification was not to standard, not explained well enough or not relevant to this patient zero was scored for that Ix. That said there were a myriad of acceptable Ix. A common error was putting down Ix that had already been performed. E.g. BSL looking for hypoglycaemia when the stem gave a BSL of 10.7. I also didn't give marks for elects as you already have them (However if specifically said looking for renal impairment that was acceptable).

Stating baseline as a justification was not acceptable.

CXR- check ETT and looking for causes of sepsis  
CTB- Bleed or SOL as cause of seizure, confusion or SIADH  
Osmo (urinary/serum) - to help determine cause of hyponatraemia or to look for evidence of toxic alcohol ingestion  
Urinary elects- to help determine the cause of hyponatraemia  
Renal function- may be cause of acidosis. Also may result from rhabdo.  
CK- Rhabdo may have been present and cause of renal impairment and then acidosis  
Ketones- helps determine cause of acidosis  
ECG- needed to specifically say why in this patient. Just saying to rule out ischaemia was not enough. Saying to check for arrhythmia as cause of the collapse, or ST changes consistent with ICH would have been appropriate for example.  
Septic screen inc LP. Sepsis as cause of acidosis, seizure, confusion  
LFT. Determine extent of liver disease from etoh. Liver failure may cause hyponatraemia and/or acidosis.  
Coags. Help determine extent of liver disease. Predisposes to ICH as cause of confusion/seizure/SIADH.  
Ethanol- intoxicated vs withdrawal  
Etc etc etc

Q5. Needed to say hypertonic saline and at least a benzo to score full marks. Large range of doses accepted as long as safe.

Couldn't score more for more than one benzo.

Glc not acceptable in this question as BSL is given as 10.7 so not hypoglycaemic.

### **Hypertonic saline**

**A Benzodiazepine** (only one can score if use more than one type of benzo)

Other anticonvulsant e.g. phenytoin, keppra

Cutscore

$1+2+1+10+4=18$

### **General Tips**

Writing. If I can't read your answer you won't score a mark.

Only answer the number of items asked. Extra will not be marked. Only the first X answers will be looked at.

Justification must give a reason that's logical here. So ECG looking of ischaemia not correct unless say why you're interested in it in this case. "baseline" is not a justification.

Avoid unexplained acronyms e.g. HAGMA. Write it out in full the first time with acronym afterwards in brackets then can use it again in same SAQ.

Be specific. If asked for causes saying "medications" or "toxic ingestion" without an example will not score.

Don't ask for an Ix that is already given to you. E.g. BSL

Read the stem e.g. Rx of seizures with RSI is wrong, as already intubated. Rx of seizures with glc is wrong as BSL 10.7