

Medical Quiz: SBA – Answers

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Question No. 1: Correct Answer - C

Patients with nephrotic syndrome are much more likely to develop infections which should be treated early and aggressively. Venous thromboembolism is also much more common in nephrotic syndrome and prophylaxis with heparin is usual practice. ACE inhibitors limit protein leak and are generally continued and hypercholesterolaemia is a very commonly recognised association with nephrotic syndrome. In the patient described in this scenario, fluid, salt and protein should all be restricted.

Question No. 2: Correct Answer - C

The underlying diagnosis in this patient is rhabdomyolysis leading to acute renal failure, which has been precipitated by the interaction between amiodarone and simvastatin. Amiodarone inhibits cytochrome P450 enzymes and so increases the risk of statin-induced rhabdomyolysis. The urine result hints at this diagnosis by revealing blood + + +, which is due to interference from myoglobin. Patients who are started on amiodarone should be appropriately counselled and care should be taken if they are also on warfarin, theophylline and simvastatin because of the range of interactions.

Question No. 3: Correct Answer - B

The description of bone pain and bowing of an extremity are highly suggestive of Paget's disease of the bone and the increased heat is secondary to a high vascular supply to the affected region. In addition to these symptoms, Paget's can also affect the skull, leading to frontal bossing, headaches, hearing loss and trapped

nerves. Paget's disease is a consequence of excessive osteoclastic bone resorption followed by disorganised and uncoordinated osteoblastic bone formation, which leads to weakened and deformed bones. Patients with Paget's disease have a 1% chance of going on to develop sarcoma.

Question No. 4: Correct Answer - E

This patient has acute on chronic renal failure, as evidenced by the deteriorated creatinine level, which has led to the accumulation of renally excreted drugs such as digoxin and resulted in digoxin toxicity.

This is manifested by nausea and vomiting, which might underlie her renal deterioration but which are also non-specific symptoms of digoxin toxicity. More characteristically, she describes xanthopsia, or a yellow tinge to lights and objects. Cardiac manifestations of excess digoxin are bradyarrhythmias, ventricular ectopics, variable degrees of heart block and, rarely, ventricular tachycardia or fibrillation.

Question No. 5: Correct Answer - D

Treatment of hypercalcaemia can include fluid rehydration, loop diuretics, bisphosphonates, steroids, salmon calcitonin and chemotherapy. In clinical practice intravenous fluids are the first-line agent used to treat hypercalcaemia, both rehydrating the patient and helping to lower the calcium levels. This is combined with the co-administration of bisphosphonates such as pamidronate, which exert their maximal effect 5-7 days after administration. Thiazide diuretics are avoided because they increase serum calcium levels further.