

Medical Quiz: SBA – Answers

Question No. 1: Correct Answer – E

The subacute onset of upper motor neuron signs on a background of episodes of optic neuritis in a young woman makes relapsing–remitting multiple sclerosis (MS) the likely diagnosis. The diagnosis of MS hinges on the presence of multiple central nervous system (CNS) lesions separated by time and space. There is no specific role for NSAIDs in MS. NSAIDs would not be appropriate for neuropathic pain. This patient may be eligible for a disease-modifying drug such as interferon beta or glatiramer acetate, as she has a relapsing–remitting course and recent symptoms, but this would not be the most immediate treatment. Bed rest alone is inappropriate as this patient would benefit from a course of steroids as she has disabling symptoms. Oral steroids have been shown to be as effective as intravenous steroids. They reduce the length of the relapse so the patient would recover quicker, but have no effect on number of relapses or accumulation of disability.

Question No. 2: Correct Answer - B

Recurrent venous or arterial thrombosis with a history of miscarriages should point to primary anti-phospholipid syndrome as the correct answer in this question. Anti-phospholipid syndrome is associated with SLE and a proportion of patients with SLE may develop secondary anti-phospholipid syndrome. The absence of any clinical features of SLE in this case means that this answer is the incorrect option. Raynaud's disease is digital ischemia due to vasospasm, often precipitated by the cold in the absence of an underlying cause. When an underlying cause, for example SLE, is present, it is termed Raynaud's phenomenon. Recurrent venous thrombosis and miscarriage are not features of systemic sclerosis or Behcet's disease, making these answers incorrect.

Question No. 3: Correct Answer - A

Poor adherence to therapy is probably the most common cause of apparent resistance to hypertensive therapy. In

cases where this occurs despite good adherence, spironolactone is often highly effective, although it is not clear why. Verapamil is very occasionally added to a dihydropyridine in severe hypertension. If he is already a patient of the hypertension clinic, one can presume that he has been screened for possible secondary causes, so this is very likely to be primary hypertension.

Question No. 4: Correct Answer - D

This patient is suffering from most likely cholera. The most appropriate initial management for patients with profuse diarrhea due to cholera is rehydration with intravenous fluids and oral loading dose of azithromycin. Rehydration with intravenous fluids is favored here as the patient is tachycardic and shows signs of hypovolemia. Oral rehydration solution may not be adequate for volume maintenance in case of profuse watery diarrhea. Oral azithromycin alone is not sufficient for treatment as patient may go into shock due to dehydration.

Question No. 5: Correct Answer - C

In this patient, the diagnosis best fits an episode of acute severe asthma with hypoxemia for which the optimal management is oxygen in order to maintain an SpO₂ between 94 and 98 per cent and combat hypoxemia. β_2 agonist bronchodilators, such as salbutamol, constitute second-line therapy in the presence of hypoxemia. In acute asthma with normal oxygen levels, high dose inhaled bronchodilators are first-line therapy as they act efficiently to reduce bronchospasm, there is no advantage in giving nebulized adrenaline which acts as a nonselective β_2 agonist when compared to salbutamol or terbutaline. High dose steroid therapy follows oxygen and bronchodilator interventions and may be given orally or parenterally dependent on the patient's ability to swallow. IV magnesium sulphate has bronchodilatory effects also and is considered only if there is no response to inhaled bronchodilators or in life-threatening asthma.