Medical Quiz: SBA – Answers

Question No. 1: Correct Answer – E
Once pulmonary embolism is suspected, anti-coagulation must be commenced with treatment dose subcutaneous low molecular weight heparin (e.g. Dalteparin) and warfarin loading. Once the INR has stabilized, usually between a therapeutic range of 2–3, the low molecular weight heparin may be stopped and the patient is to continue on warfarin for a minimum of three months. If this is a first presentation of pulmonary embolism, treatment usually ranges from three to six months. If there is a recurrent history of pulmonary embolism, the patient will usually stay on warfarin for life. Patients who have pulmonary emboli secondary to a malignant process (e.g. ovarian carcinoma, bronchogenic carcinoma) will usually be on life-long treatment dose low molecular weight heparin as studies have shown improved anti-coagulation when compared to warfarin.

Question No. 2: Correct Answer - B
Drugs which are known to cause cholestasis include: Clavulanic acid, Penicillins, Oestrogens, Erythromycin, Chlorpromazine. Therefore, (A) would be the most likely drug to cause cholestasis. The drugs mentioned in answers B–E are not known to cause cholestasis.

Question No. 3: Correct Answer - E
Paget’s disease is a disorder of bone remodeling, in which the constant resorption and formation of bone can lead to deformity. Sites that are typically affected include the skull, spine, pelvis, femur and tibia. Typical deformities include skull changes and bowed tibia. The remodeling of bone can lead to nerve compression. Nerves affected commonly include cranial nerve VIII, resulting in sensorineural deafness. In addition, Paget’s disease may often be asymptomatic or present with bone pain (typically of the spine or pelvis) or joint pain. X-rays of the bones involved in Paget’s disease may show lytic lesions. Osteomalacia and Ricketts are caused by deficiency of vitamin D, causing inadequate mineralization of bone. Osteomalacia occurs in adults and deformity is uncommon, nerve compression is not a feature. Ricketts occurs in children and can cause bone deformity, typically bow legging. However, skull changes and nerve compression do not occur. Patients with osteoporosis have loss of bone mass. They usually present with fractures. Acromegaly is unlikely in this question as typical features include prognathism, coarsening of facial features, deepening of the voice, hypertension and diabetes.

Question No. 4: Correct Answer - A
This male has most likely suffered a left cortical infarct, probably as a result of an embolus secondary to atrial fibrillation. Treatment with warfarin would have reduced his annual risk of stroke from roughly 5 to 1 per cent. It is a left-sided infarct because of the contralateral (right) hemiparesis and dysphasia (involvement of the dominant cortex). It is not a capsular or brainstem event as the patient has an expressive dysphasia which implies involvement of Boca’s area which is cortical. It is more likely to be ischemic than hemorrhagic. Roughly 80 per cent of strokes are infarcts, 20 per cent hemorrhagic and in this case there is a plausible embolic explanation coupled with only mild hypertension. Hemorrhagic strokes tend to occur in younger patients with severe hypertension and a family history (pointing to an anatomical anomaly). However, they cannot be differentiated clinically and a CT is required to confirm the stroke subtype.

Question No. 5: Correct Answer - B
Spinal cord compression is an oncological emergency that requires urgent treatment. Initial management should include administering dexamethasone and contacting oncology and neurosurgical teams. Subsequent treatment of the cord compression includes spinal radiotherapy or neurosurgical decompression and options must be discussed with the relevant teams. The patient should be initially kept flat, with neutral spine alignment, including log-rolling while being nursed. Therefore, physiotherapy is an inappropriate answer here. However, physiotherapy has an important role once spinal stability is ensured to rebuild strength. Chemotherapy is not a treatment for cord compression.