

Self-assessment questions

(Select the *best* response to each question)

1. A 56-year old heavy smoker for over 20 years presents with a history of chronic cough, yellowish-green sputum and loss of weight for 4 weeks. He brings a "Health Check" blood report from a medical laboratory with several biochemical and haematological test results. His serum calcium is 2.87 mmol/l (reference range 2.20-2.26). The most likely cause of his hypercalcaemia is
 - a. primary hyperparathyroidism
 - b. thyrotoxicosis
 - c. bronchial carcinoma
 - d. sarcoidosis with lung involvement
 - e. lymphoma

2. A 40-year old woman with truncal obesity, plethoric facies and a blood pressure of 165/98 mm Hg is suspected to have Cushing syndrome. Which one of the following features will favour a diagnosis of a pituitary adenoma rather than a paraneoplastic syndrome?
 - a. A serum sodium of 148 mmol/l (reference range 135-145)
 - b. Dexamethasone suppression test positive for cortisol suppression
 - c. Marked metabolic alkalaemia with serum potassium 2.9 mmol/l (reference range 3.5-5.0)
 - d. Severe proximal myopathy
 - e. Onset of symptoms and signs in 3 months

3. A 40-year old man is admitted to hospital with a complaint of proximal muscle weakness and occasional episodes of diplopia for 4 weeks. The initial impression is myasthenia gravis, but he had no xray and CT scan evidence of thymoma or thymic hyperplasia. He is referred to a neurology unit for specialist review. Which of the following features will most strongly favour a diagnosis of Lambert-Eaton myasthenic syndrome?
 - a. Partial bilateral ptosis
 - b. Transient weakness of left lateral rectus and right medial rectus muscles
 - c. Biochemical hypothyroidism with goitre
 - d. Detection of antibodies against voltage-gated calcium channels (anti-VGCC) in serum
 - e. Detection of acetylcholine receptor antibodies (anti-AChR) in serum

4. Which one of the following non-metastatic skin manifestations of malignancy **does not** usually spare the palms or soles?
 - a. Acquired ichthyosis
 - b. Acquired hypertrichosis lanuginosa
 - c. Laser-Trélat sign
 - d. Acanthosis nigricans
 - e. Migratory thrombophlebitis

Answers to self-assessment questions

- Q1. Correct answer, c. Given the history, a,b,d and e are much less likely causes of hypocalcaemia
- Q2. Correct answer, b. Cushing syndrome of paraneoplastic origin develops more rapidly and is characterised by severe myopathy, alkalaemia and hypokalaemia
- Q3. The cardinal features that distinguish LEMS from myasthenia gravis include anti-VGCC positivity, absent tendon reflexes and muscle weakness that improves with repetitive use, and absence of thymic tumour or hyperplasia. Correct answer, d.
- Q4. Correct answer is acanthosis nigricans, d.

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