1. Brain injury triggers suppression of neural activity in regions that are not involved and may be spatially distal to the lesion. This is called

   a. Reorganization
   b. Vicariation
   c. Diaschisis
   d. Equipotentiality

   See answer, commentary & reference(s).

2. What is the best predictor of fractures in a person with osteoporosis?

   a. Use of daily corticosteroids
   b. Recent falls
   c. Low physical activity
   d. Prior fractures

   See answer, commentary & reference(s).

3. Which of the following is an example of chronic obstructive pulmonary disease (COPD)?

   a. Asthma
   b. Chronic bronchitis
   c. Pulmonary embolism
   d. Idiopathic pulmonary fibrosis

   See answer, commentary & reference(s).

4. The development of contractures in neuromuscular disease appears to be directly related to:

   a. poor nutrition.
   b. obesity.
   c. transition to wheelchair mobility.
   d. muscle atrophy.

   See answer, commentary & reference(s).

5. The most appropriate first choice interventional treatment for Complex Regional Pain Syndrome is:

   a. Epidural steroid injection.
   b. Sympathetic block.
   c. Spinal cord stimulator trial.
   d. Radiofrequency sympathectomy.

   See answer, commentary & reference(s).
Answers, Commentary & References

1. Answer: c

Commentary: Reorganization refers to tissues adjacent to the affected areas reorganizing or expanding their receptive fields to capture and mediate at least some of the original physiological activities that were destroyed by the injury. Vicariation refers to functions taken over by brain areas not originally in charge of that function. Equipotentiality refers to the capacity of anatomically distinct areas of the brain to mediate a rather wide variety of functions.


2. Answer: d

Commentary: The best predictor of future fractures is prior fractures. Use of daily corticosteroids more than 3 months is a major risk factor. Recent falls and low physical activity are additional risk factors.


3. Answer: b

Commentary: COPD is the fifth leading cause of death worldwide, and the third leading cause of death in the United States. Many patients with COPD have asthma or reactive airway disease. Diseases that fall within the umbrella of COPD include chronic bronchitis and emphysema.


4. Answer: c

Commentary: Transition to a wheelchair, since it leads to prolonged static positioning of the limbs, is the largest contributor to the formation of joint contractures in neuromuscular disease. While poor nutrition and obesity may lead to full-time use of a wheelchair sooner, they are not primary causes of joint contractures.

5. Answer: b

Commentary: Sympathetic block is the most appropriate first choice for treatment as CRPS may be sympathetically mediated pain. As there are not any signs of inflammation, epidural steroid injection would not be indicated. Spinal cord stimulator trials and radiofrequency procedures are not first line treatments.