SPINAL CORD DISORDERS

Date: January 23, 2019

Resources:
- Spinal cord disorders handout (Gruener)
- Spinal cord disorders PowerPoint (Gruener)

KEY CONCEPTS & LEARNING OBJECTIVES (What you need to demonstrate on an exam in order to pass the test!)

I. Demonstrate the ability to:
   a.) List the clinical signs found with upper motor neuron (UMN) lesions versus lower motor neuron (LMN) lesions, (use those findings to localize lesions to cervical, thoracic, or lumbar levels of the spinal cord)
   b.) Identify level of a radiculopathy based on dermatomal, muscle weakness and reflex loss pattern
   c.) Define spinal or neurogenic shock
   d.) Contrast the clinical features of an intramedullary versus extramurally lesion
   e.) Provide examples of etiologies for the following:
      i. Acute/subacute myelitis
      ii. Acute/subacute noninflammatory myelopathy
      iii. Chronic onset myelopathy
   f.) Predict the clinical features of the following clinical spinal cord syndromes:
      i. Transverse myelopathy
      ii. Spinal cord hemisection
      iii. Central cord syndrome
      iv. Anterior cord syndrome
      v. Dorsal column syndrome
      vi. Posterolateral syndrome
      vii. Anterior horn syndrome
   g.) Provide examples of disorders that can be seen with each spinal cord syndrome
   h.) Describe the clinical characteristics of Amyotrophic Lateral Sclerosis

II. As your education progresses you will begin to demonstrate the integration of your knowledge by:
   a.) Suggest a site of dysfunction that would explain signs and symptoms in a clinical case presentation
   b.) Based on a clinical presentation identify the (expected) site of abnormality on an MRI (or CT) scan of the brain
   c.) Develop 2-3 potential diagnoses, appropriate to the patients' clinical scenario, course and medical history, which would explain the etiology of their difficulty

Additional resources for those who are really (we mean really) interested!

Li J, et al. *A retrospective study of 23 cases with subacute combined degeneration*. International Journal of Neuroscience 2016;126(10):872-7
Rabinstein AA. *Traumatic Spinal Cord Injury*. Continuum (Minneap Minn) 2018;24(2):551-566