DISORDERS OF THE MOTOR UNIT

Date: January 23, 2019

Resources: TeachSheet Disorders of the Motor Unit (Gruener)
            Introduction to Disorders of the Motor Unit Plus (modified from Merchut)
            Disorders of the Motor Unit 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.) Explain the common presentations of amyotrophic lateral sclerosis (ALS) and how it is diagnosed
   b.) Describe the common signs and symptoms of polyneuropathy, and which features suggest a hereditary polynueuropathy
   c.) Describe the pathogenesis of polyneuropathies (axonal versus demyelination)
   d.) List examples of polyneuropathy due to endocrine or metabolic disorders, systemic disease, infections, nutritional deficiencies, toxins, and medications
   e.) Describe the presentation of the Guillain-Barré syndrome and explain how it is diagnosed and treated
   f.) Contrast the pathogenesis of myasthenia gravis (MG) versus Lambert-Eaton myasthenic syndrome (LEMS) and rationale for mechanisms of treatment
   g.) Define the following terms: ptosis, diplopia, dysarthria, and dysphagia, ocular myasthenia, generalized myasthenia
   h.) Explain how the diagnosis of MG is made and recognize that the most specific test is presence of serum acetylcholine receptor antibodies
   i.) List the treatment options for MG, including treatment of myasthenic crisis
   j.) Describe the typical signs and symptoms of myopathy
   k.) List examples of myopathy due to endocrine disorders, systemic disease, infections, medications, and hereditary syndromes
   l.) Explain how immune-mediated polymyositis is diagnosed and treated

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!


