

NEUROLOGICAL AND MUSCULAR DISORDERS

COURSE OUTLINE

by

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Week One – Normal Function

- I. Organization of the nervous system
- II. The neuron
- III. Organization of skeletal muscles
- IV. The muscle cell

Week Two – Diagnostics

- I. Physical examination
- II. Gait examination
- III. The neurological exam
- IV. Blood tests
- V. Spinal tap
- VI. Biopsies
- VII. Genetic tests

Week Three – Acute Neurological Diseases

- I. Viral encephalitis/myelitis
- II. Botulism
- III. Rabies
- IV. Tetanus

Week Four – EPM - Equine Protozoal [Encephalo]Myelitis

- I. Organisms
- II. Symptoms
- III. Diagnosis
- IV. Treatment
- V. Lyme myopathy (?)

Week Five – Equine Motor Neuron Disease (EMND)

- I. Symptoms
- II. Diagnosis
- III. Causes
- IV. Treatment

Week Six – Tying-Up

- I. Symptoms
- II. Diagnosis
- III. Sporadic versus recurrent
- IV. Causes of sporadic TU
- V. Causes of recurrent TU
- VI. Treatment and prevention

Week Seven – Hyperkalemic Periodic Paralysis and Hormonal Myopathies

- I. HYPP
- II. Cortisol related
- III. Role of the thyroid

Week Eight – Dietary Factors in Neuromuscular Disease

- I. Electrolytes and dehydration
- II. Calcium and magnesium
- III. B vitamins and other micronutrients
- IV. Energy supplies

Week Nine – Fasciculations and Gait Disorders

- I. Review of disorders with fasciculations
- II. Myotonia
- III. Stringhalt
- IV. Shivers
- V. Ossifying myopathy

Week Ten – Miscellaneous Conditions

- I. Viral, bacterial and parasitic myopathies
- II. Atypical myopathy
- III. Glycogen branching enzyme disease
- IV. Toxic plants