
Demographic: Male, 77yrs, America North, General speciality

Clinical features extracted from the case and entered into the query box:
ataxic gait
progressive weakness
urinary stress incontinence
increased fatigue
persistent, dry cough
dysarthria
diminished right dorsalis pedis and posterior tibial pulses
On tandem walking fell to either side
diminished vibratory sensation in both lower legs and feet
asymmetric weakness
Widespread fasciculations in the muscles of arms and legs
mild atrophy of the intrinsic muscles of hands
Deep-tendon reflexes hyperactive
some weakness of neck flexion
mild numbness developed bilaterally in the tips of fingers in median-nerve distributions
Babinksi sign present

Synonyms used by Isabel (optional) for the above query:
dysarthria

STOP!

Before you read further you might want to construct your own:

- Complete differential diagnosis
- Final diagnosis

In the following section you will find:

- The differential diagnosis constructed by the MGH panel
- The final diagnosis of the case
Which of the MGH panel differential diagnoses did Isabel contain?
Did Isabel suggest the Final diagnosis?

**Differential Diagnoses considered by the MGH panel:**

- Pure motor syndromes: myeloradiculopathy, vitamin B12 deficiency, luetic meningomyelitis, Intoxication with heavy metals, particularly lead, Polymyositis, Inclusion-body myositis

- Combined Upper and Lower Motor Neuron Disease: Familial amyotrophic lateral sclerosis (ALS), X-linked spinal-bulbar muscular atrophy (Kennedy’s disease), Late-onset Tay–Sachs disease, Polyglucosan body disease

- Amyotrophic lateral sclerosis

**Final Diagnoses of the case according to NEJM:**
Amyotrophic lateral sclerosis

**Differential Diagnoses of the case as given by Isabel:**
Amyotrophic lateral sclerosis – Isabel 1st page
Polymyositis – Isabel 1st page
Vitamin B 12 deficiency – Isabel 2nd page

**Was the final diagnosis given by Isabel:**
Yes, Isabel 1st page

**Entire presentation cut and pasted into the Isabel query box:**
Motor Neuron Disease – Isabel 1st page
## Isabel differential:

### NERVOUS SYSTEM DISORDERS
- Cervical Spondylosis
- Syringomyelia
- CVA / Stroke
- Spinal Cord Tumors
- Carpal Tunnel Syndrome
- Ataxic Disorders
- Multiple Sclerosis
- Progressive Supranuclear Palsy
- Ekbom's Syndrome
- Myelitis
- Intracranial Hemorrhage
- Diabetic Neuropathy
- Thoracic Outlet Syndrome

### NEUROMUSCULAR DISORDERS
- Polynuropathy Disorders
- Hereditary Motor-Sensory Neuropathies
- Motor Neurone Disease
- Dermatomyositis / Polymyositis
- Endocrine Myopathies
- Familial Spastic Paraplegia

### RESPIRATORY SYSTEM DISORDERS
- Lung Neoplasms
- Sarcoidosis

### ENDOCRINE SYSTEM
- Hypothyroidism

### ORTHOPEDIC DISORDERS
- Degenerative Spinal Disorders
- Intervertebral Disk Herniation

### NUTRITIONAL DISORDERS
- Thiamine Deficiency

### RHEUMATIC DISEASES
- Fibromyalgia

### INFECTIONOUS DISEASES
- Lyme Disease

### VASCULAR DISORDERS
- Peripheral Arterial Disease