64th Annual Diagnostic Slide Session 2023

Case # 10

Submitted by:

M. Adelita Vizcaino, MD¹, Divyanshu Dubey, MBBS², R. Ross Reichard, MD¹

Departments of ¹Laboratory Medicine and Pathology and ²Neurology, Mayo Clinic Rochester, MN

Clinical history:

A 76-year-old woman presented with gradually progressive symptoms for over 10 years. She debuted with facial tightening and throat pulsations. Later on, she developed dysphagia, dysarthria, ophthalmoplegia, obstructive sleep apnea and REM sleep behavior disturbance, followed by ataxia and choreiform movements. Copper, ceruloplasmin, erythrocyte sedimentation rate, TSH, and CPK levels were within normal limits. A myasthenia gravis panel and antibodies to acetylcholine and N-methyl-D-aspartate receptors and thyroid peroxidase resulted negative. Serial brain MRI and electromyography showed no significant abnormalities. She ultimately died of pneumonia.

Material submitted:

- 1. Virtual H&E slides
- 2. Macroscopic brain autopsy photographs

Points for discussion:

- 1. Differential diagnosis
- 2. Proposed pathogenetic mechanisms