

63rd ANNUAL DIAGNOSTIC SLIDE SESSION 2022

CASE 2022-2

Submitted by:

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Clinical History:

The patient was a 72-year-old man with a 12-year history of progressive gait difficulties. He presented with ataxia, lower extremity weakness, posterior column dysfunction, neurogenic bladder, and mild cognitive impairment. The clinical impression was most compatible with multiple system atrophy. His medical history was otherwise positive for hypertension, type 2 diabetes, paroxysmal atrial fibrillation, and staghorn calculus. There was no known neurological disease in his family. Neuroradiological studies revealed cerebral atrophy greater than expected for the patient's age, and more pronounced atrophy of the cerebellum, medulla, and upper cervical cord (Figures 1 and 2)

Autopsy findings:

On postmortem examination, the brain weighed 1150 grams with mild cortical atrophy of the frontal, parietal and temporal lobes. The medulla was decreased in diameter. Coronal sections revealed no overt lesions. The substantia nigra and locus ceruleus showed no apparent depigmentation.

Material submitted:

Two T2/FLAIR images of the brain (axial and sagittal planes)

One representative H&E section

Points for discussion:

1. Histopathological features
2. Diagnosis and molecular findings