55th ANNUAL DIAGNOSTIC SLIDE SESSION 2014

CASE 2014-1

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Clinical History:

The patient was a 72-year-old female hospitalized for management of pleural and pericardial effusions and shock complicating chronic rheumatoid arthritis. As the patient was encephalopathic on admission, neurologic evaluation was limited. Per her family and primary care provider, the patient had a history of depression and possible wide-based gait, but no other overt neurological symptoms. She was employed as a substitute teacher and living independently. MRI of the head without gadolinium contrast was obtained, showing generalized cerebral and cerebellar atrophy, in addition to susceptibility-weighted imaging signal loss involving the bilateral substantia nigra and striatum, suggesting increased iron (radiographic image provided). She expired ten days after admission following withdrawal of life support.

Autopsy Findings:

Gross CNS findings were significant for well-delineated prominent blue coloration of the bilateral caudate nucleus, putamen and globus pallidus (gross image enclosed). The gross exam was otherwise unremarkable.

<u>Materials Submitted</u>: 1 H&E stained slide of the basal ganglia, serial MRI imaging and postmortem gross photograph

Points for Discussion: 1. Additional stains

- 2. Differential diagnosis
- 3. Disease characteristics