54th ANNUAL DIAGNOSTIC SLIDE SESSION 2013

CASE 2013-7

Submitted by: Sarah A. Brooks, M.D.
165 Ashley Ave Ste 309
MSC 908
Charleston, SC 29425

Cynthia T. Welsh, M.D.
165 Ashley Ave Ste 309
MSC 908
Charleston, SC 29425

Clinical History:

A 46 year old male presented with extreme fatigue, motor and balance dysfunction, tremor in his dominant hand, occasional choking when swallowing, and 1-2 episodes a month of fever, chills, and sweats. The past medical history is significant for a spindle cell neoplasm removed from the neck during his late 20's and panhypopituitarism including diabetes insipidus, hypothyroidism, and decreased testosterone levels due to a pituitary mass in found in mid 30's. An initial biopsy of the latter mass was nondiagnostic. His symptoms are controlled by medications.

Imaging studies:

Brain MRI: Three principal brain lesions: 1. a 4x3.7 cm enhancing left cerebellar mass crossing the midline with mass effect on the 4th ventricle; 2. a 1.8x1.1 cm enhancing hypothalamic mass involving the infundibulum and extending into the 3rd ventricle; and 3. a 2.7x2.3 cm enhancing sphenoid sinus mass. In addition, patchy signal abnormalities are seen throughout the calvarium and clivus.

Chest CT: Sclerotic lesions within multiple thoracic vertebral endplates and the left sixth rib. There is thickening of the soft tissue around the aorta as well as about the renal capsule and encasing the ureters bilaterally.

The cerebellar mass was resected due to increasing growth, eventually occupying up to 40-50% of the cerebellum.

Material Submitted:

Axial and sagittal MRI of brain
Gross image of lesional tissue
H and E section of cerebellum
Immunohistochemical stains of lesional tissue: S-100, CD1a, and CD68
Electron Microscopy image

Points for Discussion:

1. Diagnosis
2. Pathogenesis
3. Treatment