48th ANNUAL DIAGNOSTIC SLIDE SESSION, 2007
DIAGNOSES AND REFERENCES

MODERATOR: E. Tessa Hedley-Whyte, M.D.

EDITOR: Leroy R. Sharer, M.D.

Case 2007-1

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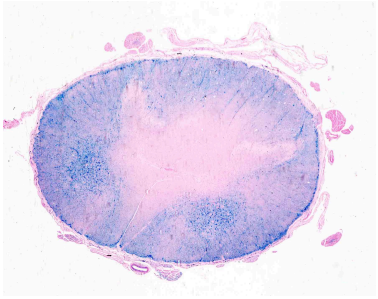
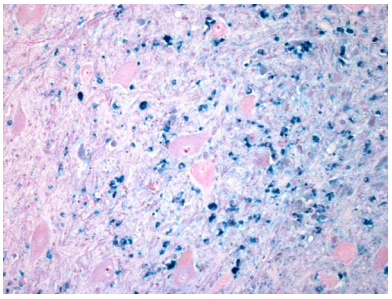
Diagnosis: "Superficial" Siderosis

Comment: Because of changes associated with brain death, the spinal cord, which was intact, was used to evaluate the pathology in this case. Iron was present in macrophages (with co-localization of iron staining and CD68 by immunohistochemistry), astrocytes (confirmed by electron microscopy) and oligodendrocytes (also on EM), but not in neurons (anterior horn cells, as shown in the image, below). The source of chronic hemorrhage was thought to be the craniopharyngioma.
From the presenter (Dr. Kellermier): In addition to the changes observed in the spinal cord, hemosiderin deposition was also noted in the leptomeninges and the superficial parenchyma of the insula, the entorhinal cortex, the ventral midbrain, the medulla, and the pons. These findings were seen amidst a background of marked hypoxic/ischemic encephalopathy. There was no systemic evidence of hemochromatosis.



Spinal cord, Prussian blue.



Lumbar cord, Prussian blue.

References:

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