CASE 2002-10

Submitted by:
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Case reference numbers: CHS00-5765, CHS01-7016

Clinical History:
The patient is a 3-year-old boy who presented on December of 2001 to the Emergency Room with a 2-3 month history of intermittent headache, neck pain, morning nausea and vomiting. The past medical history is relevant for sudden quadriaparesis at age 20 months. MRI performed at the time revealed a large, expansile mass (4.7 cm in greatest craniocaudal dimension by 1.8 cm in greatest AP dimension by 1.9 cm in greatest transverse dimension) with fairly homogeneous enhancement extending superiorly from the level of the pontomedullary junction and inferiorly to approximately the C3-4 interspace level. The tumor itself appeared to be solely intramedullary with no definite extra-axial extension. There was no abnormal dural enhancement around the tumor. A craniotomy and laminectomy for gross total resection of tumor was performed on September 15, 2000. The patient was discharged to a rehabilitation facility with some improvement of his quadriaparesis. One month after the surgery, his right upper and lower extremities seemed normal. The left side had moderately severe hyperreflexia. His incision was well healed. He could walk a few steps unaided but walked with a rather stiff left lower extremity. A follow up MRI performed on January 29, 2001 showed no evidence of residual tumor. The most recent MRI performed at the time of the current admission on December 6, 2001, showed regrowth of tumor with expansion of the lower medulla and upper cervical cord. This was associated with a 2.0 x 2.0-cm (AP x transverse diameter) probable tumor cyst growing off of the dorsal medulla/brainstem with no definite contrast enhancement. The cervical cord and medulla now appeared expanded in the AP dimension with associated loss of the normal cervical lordosis. The patient underwent a second craniotomy and laminectomy. The slides provided are either from the first (CHS00-5765, 9/15/2000) or the second (CHS01-7016, 12/10/2001) resection specimens.

Materials submitted:
1. H&E stained section
2. Kodachrome showing MRI studies at first presentation, 4 months after the first operation and most recent recurrence.

Point of discussion:
1. Diagnosis
2. Classification