CASE 1995-10

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Clinical History: The patient is a 14-year-old girl, exceptionally small in stature, who presents with a progressive history of headaches over the last 1-2 years. Her headaches occur in the morning, 3-4 times per week and are often associated with vomiting. Over the past several months she has become involved with volleyball and has noticed that she is quite uncoordinated. She had been the most coordinated and athletic of her siblings, but over the past several years her disability had slowly progressed to the point where she could barely run. During this period she also noted that her eyes have started "jumping".

A medical evaluation five years ago disclosed no problem. At present her height is 140.3 cm and her weight 29.5 Kg (both under the 1st percentile for age). She is prepubertal (Tanner Stage I). Her head circumference is 55 cm (well above the 75th percentile for a person of her age). Neck motion is full range with no pain. Her hairline is normal without scalp abnormalities. Her pupils are equal, round and reactive to light; vertical and horizontal nystagmus is evident in all directions of gaze. Cranial nerves are intact. Sensation is normal. Motor examination shows increased muscle tone in the lower extremities; deep tendon reflexes are 2+ UE, 3+ knees, 4+ ankles. Her toes are downgoing to plantar stimulation bilaterally. She has minimal dysmetria on finger to nose testing, exhibits poor balance, walks with wide based gait, and is unable to perform tandem gait maneuver.

MRI: large posterior fossa mass (see Kodachrome).

At surgery a large fibrous tumor was removed. It was primarily intradural but extended through the dura into the epidural space wherein it indented the base of the occipital bone. Dense arachnoid adhesions separated the tumor from the underlying cerebellar parenchyma, which appeared grossly atrophic, partially hemorrhagic, and necrotic. No cerebellar invasion was identified. Superiorly in the midline the tumor involved the torcula thus causing severe bleeding at resection. Resection was near total with the exception of a small amount of tumor being left at the torcula.

Material submitted: Kodachrome of MRI of posterior fossa tumor, and an H&E section of the tumor