

Case 10

Submitted by: Stephanie S. Erlich, M.D., Department of Neurological Surgery  
University of Southern California School of Medicine  
Los Angeles, California 90033

Benjamin H. Landing, M.D.  
Department of Pathology  
Children's Hospital of Los Angeles  
Los Angeles, CA 90027

Clinical Abstract:

The patient was a 10 year old female with a history of medullary brainstem glioma at age 8, diagnosed by pneumoencephalography. She was initially treated with radiation therapy, CCNU, vincristine and prednisone. She had multiple subsequent admissions for dizziness, nausea, vomiting, headache and diminished oral intake with continuous drooling. She had been included in a cancer study group, utilizing a protocol consisting of misonidazole and radiation therapy for recurrent brain tumor. Periods of well-being were noted, but she continued to deteriorate in mental and neurological status.

On her last admission, she had difficulty in swallowing, nausea and headache. A gastrostomy tube was inserted for feedings. Her neurological status progressively deteriorated, and included the development of ataxia, weakness, slurring of speech, lateral nystagmus and ptosis. She was found one day in cardiopulmonary arrest and pronounced dead.

The positive general autopsy findings included pulmonary hemorrhages, necrotizing pneumonitis, acute pulmonary edema, pulmonary emphysema, and pleural effusion. Gross examination of the brain was unremarkable except for a partly cystic and necrotic gray-tan area of the pons and medulla.

Material Submitted: 1 H & E stained section from brainstem and  
1 unstained section

Points for Discussion: Diagnosis