

**FINDINGS:** There is moderate to severe generalized neuronal loss of the cerebral hemispheres with moderate to severe ventricular enlargement and prominent CSF within the subarachnoid spaces. There is confluent white matter hyperintensity in a bi-hemispherical centrum semiovale distribution extending to the lateral ventricles consistent with severe vasculopathic small vessel disease and extensive white matter ischemic changes. There is normal enhancement of the dural sinuses and cortical veins and there are no enhancing intra-axial or extraaxial mass lesions. There is a cavum velum interpositum (normal variant). There is a linear area of T1 hypointensity becoming hyperintense on T2 images in a left para-atrial trigonal region representing either a remote lacunar infarction or prominent perivascular space. Normal basal ganglia and thalami. Normal internal and external capsules. Normal midbrain. There is amorphous hyperintensity of the basis pontis consistent with vasculopathic small vessel disease. There are areas of T2 hyperintensity involving the bilateral brachium pontis (left greater than right) with no enhancement following gadolinium augmentation most compatible with areas of chronic white matter ischemic changes. The area of white matter signal alteration in the left brachium pontis is of some concern in that it has a round morphology. Interval reassessment of this lesion is recommended. There is a remote lacunar infarction of the right cerebellar hemisphere. Normal left cerebellar hemisphere and vermis. There is increased CSF within the sella turcica and mild flattening of the pituitary gland but no

sellar enlargement. There is elongation of the basilar artery elevating the mammary bodies but no dolichoectasia of the basilar artery., Normal flow within the carotid arteries and circle of Willis., Normal calvarium, central skull base and temporal bones. There is no demonstrated calvarium metastases., IMPRESSION:, Severe generalized cerebral atrophy., Extensive chronic white matter ischemic changes in a bi-hemispheric centrum semiovale distribution with involvement of the basis pontis and probable bilateral brachium pontis. The area of white matter hyperintensity in the left brachium pontis is of some concern as it has a round morphology but no enhancement following gadolinium augmentation. Interval reassessment of this lesion is recommended., Remote lacunar infarction in the right cerebellar hemisphere., Linear signal alteration of the left periautricular trigonal region representing either a prominent vascular space or, lacunar infarction., No demonstrated calvarial metastases.