

- arteries.
- 6) By the compression method, there is no complain and clincial complication in any case.
  - 7) This method precedes usually to the brain scintigraphy in all case.
  - 8) We have compared the findings with or with-

out compression in each case. Conclusionally we have recongized that the compression of bilateral carotid arteries is practically ease and useful in the case of posterior, basilar insufficiency.

### **Radioisotope Cisternography in Cerebral Atrophy**

K. SENDA\*, T. IMAEDA\*\*, T. KATO\*\*, S. ASADA\*\*, M. SHIBAYAMA\*\*,  
H. DOI\*\* and I. MORIUCHI\*\*\*

\**Department of Radiology, Hamamatsu University School of Medicine*

\*\**Department of Radiology, \*\*\*Department of Neuropsychiatry, Gifu University School of Medicine*

The purpose of this study was to compare radioisotope (RI) cisternographic patterns with computed cranial tomographic (CCT) patterns in the patients with cerebral atrophy and to obtain the characteristic pattern of RI cisternography in cerebral atrophy.

RI cisternography were performed on 15 patients, showing such CCT patterns of cerebral atrophy as lesser or moderate degrees of dilatation of the lateral, the third and the fourth ventricles, and moderate or severe degrees of dilatation of the Sylvian fissures and the cerebral sulci.

RI cisternography was done in the standard manner following the lumbar intrathecal administration of  $^{169}\text{Yb}$ - or  $^{111}\text{In}$ -DTPA. And imaging and counting of three projections of the head were simultaneously performed with a scintillation camera in 3, 6, 24 and 48 hours after administration.

RI cisternographic patterns were evaluated with regard to the images of the cerebrospinal fluid pathway and to the mean ratio of 48 hours to 6

hours count rates ( $C_{48}/C_6$ ) corrected by background and physical half life.

RI cisternographic images of 15 patients showed lesser degrees of the lateral ventricular reflux in 12, lesser to severe degrees of dilatation of the Sylvian fissures (cisterns) in 13 and lesser to severe degrees of pooling of the parasagittal convexities in 7 patients.

The degrees of dilatation of the Sylvian fissures and pooling of the parasagittal convexities shown by RI cisternography were considerably correlative to those of the Sylvian fissures and the cerebral sulci shown by CCT respectively. The degrees of the lateral ventricular reflux did not correspond with those of the lateral ventricles.

The mean values and standard deviations of  $C_{48}/C_6$  were  $0.32 \pm 0.14$  in 3 pediatric patients and  $0.45 \pm 0.13$  in 12 adult patients. High values of  $C_{48}/C_6$  in the both pediatric and adult patients were statistically significant, comparing with the values of normal pediatric and adult controls respectively.

### **“Hot Spot in Warm Area” Appearance in Tc-99m HEDP Brain Scan**

K. LEE\*, S. WATANABE\* and T. TANAKA\*\*

\**Department of Radiology, \*\*Department of Neurosurgery, Aomori Prefectural Central Hospital*

Eleven patients with a variety of intracranial neoplasms, including five meningioma, were studied with brain scanning using Tc-99m HEDP

following conventional Tc-99m pertechnetate study. Two convexity meningioma in five represented focally accentuated uptake in an area of