

## Experience with Cerebrospinal Fluid Space Scintigraphy

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The compartmental distribution and movement of cerebrospinal fluid can be determined by cisternoscintigraphy, myeloscintigraphy and ventriculoscintigraphy.

So, the term "cerebrospinal fluid space scintigraphy" should be used to define these diagnostic procedures.

To date we have performed 21 cerebrospinal fluid space scintigraphies in 18 cases.

$^{131}\text{I}$ -human serum albumin ( $^{131}\text{I}$ -HSA) or  $^{99\text{m}}\text{Tc}$ -pertechnetate was introduced into the spinal intrathecal space (in 11 scintigraphies) or the cerebral ventricles (in 10 scintigraphies). The following results were obtained.

1) This procedure was useful for detecting abnormalities in the pathways of cerebrospinal fluid flow, and in almost all cases the diag-

nosis were determined by this procedure.

2) When the purpose is to diagnose cerebrospinal fluid rhinorrhea, communicating hydrocephalus and so on,  $^{131}\text{I}$ -HSA was superior since pertechnetate was too readily absorbed, but for myeloscintigraphy (spinal intrathecal injection) and ventriculoscintigraphy (intraventricular injection)  $^{99\text{m}}\text{Tc}$ -pertechnetate was available.

3) If the circulation of the cerebrospinal fluid is normal, the activity is not seen in the lateral ventricles.

The activity in the lateral ventricle is rather difficult to detect by the lateral view, but easily detected by the anterior scintigraphy.

4) There were no untoward effects from this procedures.