RI-Cisternogram in Subarachnoid Hemorrhage (SAH)


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It is well known that subarachnoid hemorrhage exerts an influence on the circulation of the CSF to cause complex clinical symptoms and signs to evolve.

Today, RI-cisternography is accepted as the most useful study means of catching hold of alterations in the circulation of the CSF.

In our department, RI-cisternography was performed in 57 cases of subarachnoid hemorrhage in order to assess their prognoses by means of comparing the RI-cisternograms in them with various clinical symptoms and signs; and the following conclusions were drawn:

1. In performing RI-cisternography, it is necessary to observe the morphology of the cisternal RI-image in subarachnoid hemorrhage within 3 weeks after onset, and to study both the morphology of cisternal RI-image and the clearance curve in subarachnoid hemorrhage over 3 weeks after onset.
2. The more frequently subarachnoid hemorrhage has occurred, the slower is the circulation of the CSF.
3. It is not directly related with the severities of clinical symptoms and signs whether there is a ventricular reflex of RI or not, but in cases presenting ventricular filling for more than 24 hours, the longer the ventricular filling stays, the severer is the disturbance of mentality.
4. It should be determined not only from these findings but also from the results of saline infusion test, etc., whether hydrocephalia following subarachnoid hemorrhage will indicate surgery or not.

Clinical Evaluation of Microcephalus with RI Cisternography


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Abstract

Microcephalic infants and children have been studied from various points of view for surgical indication in our clinic. The purpose of this report is to analyze and discuss the RI cisternographic characteristics in microcephalus. 62 cases were examined with $^{169}$Yb-DTPA or $^{111}$In-DTPA intra-thecal administration.

C.S.F. clearance was represented by the ratio of head count 24 hr after administration per head count 5 hr after administration (C24/C5).

Head circumference has a correlation with clearance. Head circumference is smaller when C24/C5 showed over 50% or even under 40%.

Development Quotient (D.Q.) was useful for evaluate the mental and physical development of pediatric cases. The more the clearance delayed the poorer the D.Q. was marked. In addition, clearance showed under 40%, the low D.Q. was noted. And D.Q. was poor in cases with convesity filling abnormalities e.g. laterality, pooling, defect, especially frontal rention. These findings reflected the cortical atrophy i.e. low D.Q.

Microcephalic cases were classified into 3 types morphologically with other neuroradiological examinations in our clinic.

Type 1; cortical atrophy and ventricular dilata-

Type 2; cortical atrophy.

Type 3; ventricular dilatation.

Characteristics of these types in RI cisternography were summarized as follows.