paraproteins. The 'S-100' protein was demonstrated in 8 of the 117 cases, and 6 of 8 cases were glioma.

D-7. The Effect of Dexamethasone Phosphate on Production of CSF in Subarachnoid Space

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So far we have postulated the actual CSF production and absorption not only in the ventricular system, but also in the cerebrospinal subarachnoid space. The CSF production rate in the whole intracranial space is 0.047 ml/min., which can be reduced to about 50% with the use of 0.15 mg/kg of intravenous dexamethasone phosphate. Also we have obtained the production rate of 0.018 ml/min. in the spinal subarachnoid space by means of perfusion.

This investigation was designed to clarify whether or not was there any difference in the effect of dexamethasone phosphate on production rate in whole intracranial space and spinal subarachnoid space.

Adult mongrel dogs weighing 10–15 kg of body weight were used. Laminectomy was performed in the cervical and lumbar region, after which catheter was inserted into the subarachnoid space under direct vision. In caudo-cephalad fasion, perfusion of the system was carried out for two hours after intravenous administration of dexamethasone phosphate with physiological isolation of the spinal subarachnoid space. Perfusion fluid was artificial CSF containing 25 mg% of Inulin as a tracer which was recovered by Resorcinol method.

Result was as follows: the production rate began to reduce immediately after i.v. injection of dexamethasone phosphate and attained to maximal reduction of production rate of —50% in 50 min. No difference between whole intracranial space and spinal subarachnoid space was found as to the effect of dexamethasone phosphate in CSF production rate.

It is noteworthy to notice above described evidence when one realizes the absence of both choroid plexus and ependymal lining in the spinal subarachnoid space about the effect of dexamethasone phosphate on CSF production mechanism.