u-4. Ocular Movement; its Diagnostic Value on Vertigo and Ataxia

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u-5. New Diagnostic Method and Surgical Treatment of Acoustic Neurinome

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u-6. Neurotological Examination of Acoustic Tumor

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The early diagnosis of acoustic tumor is done by systematic neurotological examinations. This film illustrates technics of the following examinations:

- I) Vestibular function test
 - a) Examination of equilibrium and coordination
(Man's test, Gait test, Arm-tonus reaction, Pastpointing test)
 - b) Examination of nystagmus
(Gaze-, Positional-, Positioning-, Caloric-, and Rotatory nystagmus, Electronystagmography)
- II) Hearing test
 - a) Pure-tone audiometry
 - b) Speech audiometry
 - c) Békésy audiometry
- III) Examination of cranial nerves
 - a) Facial nerve

- (Blink test, Tear test, Test of stapedial reflex, Taste test)
b) Trigeminal nerve
IV) X-ray
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u-7. Clinical and Experimental Study of Isosorbide

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Isosorbide, an oral osmotic agent, was recently introduced as a means of osmotherapy for various intracranial hypertension in place of the traditional intravenous administration of hypertonic osmotic solution.

The present study deals with a clinical observation of its subsiding effect on cerebrospinal fluid pressure as well as an experiment on its absorption and excretion.

In the experiment, the cerebrospinal fluid pressure was directly recorded continuously with an electromanometer by a tube inserted into the lumbar sac of cats. After a latent stage of about 20 minutes, the pressure turned to a dropping stage that lasted for about two hours and then returned to the original value in four hours after the administration. The degree of such decline, i.e., dropping ratio, and the duration increased in proportion to the administered volume.

Similar result was obtained in a clinical study by measuring the cerebrospinal fluid pressure in the ventricles.

During these studies the amount of urine, plasma osmotic pressure and the serum electrolytes were examined. Urination increased as the cerebrospinal fluid pressure declined and the plasma osmotic pressure increased in proportion to the amount of urination. No change was observed in the serum electrolytes.

The intraocular pressure was examined with the patients and its decline was clearly observed in two hours after the administration.

To examine the absorption and excretion, the isosorbide labeled with H^3 was administered to cats and the radioactivity of the blood and urine was measured in certain intervals by a liquid scintillation counter. In the blood, it appeared in 30 minutes after the administration and reached to its maximum density in one to two hours and almost disappeared in 24 hours. The excretion into the urine was observed in 30 minutes after the administration and reached to its maximum amount in four to six hours and completed in 24 hours.

It can be concluded from the above result that isosorbide is effective in subsiding the cerebrospinal fluid pressure and intraocular pressure and in promoting urination, that its oral administration of 1.5 gr./Kg. corresponds to the intravenous injection of 2 gr./Kg. of Mannitol solution but works more mildly with little secondary rebound phenomenon, that it has an advantage of being safe when used for the patients who suffer from cardiovascular insufficiency due to the