

of the aqueduct of Sylvius causing sudden, acute, internal hydrocephalus. Repeated paroxysmal attacks of acute, headache, usually referred to the orbital region, neither preceded nor followed by other neurological symptoms, are the most characteristic feature. Any one of these attacks may prove fatal. Associated clinical manifestations of disturbed functions of the diencephalon may be present. Details of methods of diagnosis by ventriculography and encephalography are given and the technique of operative cure is discussed.

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*The Nitrite of Amyl Test for the Differentiation of Tumours of the Brain from Vascular Inflammatory Lesions.* (Bull. Neur. Inst. N.Y., vol. iii, p. 513, March, 1934.) Hare, C. C.

The amyl nitrite test for the determination of changes in pressure of the cerebro-spinal fluid is based on the fact that the inhalation of this drug produces a dilatation of the intracranial blood-vessels, with a consequent forcing of the cerebro-spinal fluid from the cranial cavity into the subarachnoid space of the vertebral canal. The test was applied to 18 cases of cerebral tumour, 22 cases of vascular lesion, 18 cases of chronic inflammatory disease, and approximately 50 cases free, as far as was known, from organic disease of the brain. In 89% of cases of cerebral tumour the rise of the fluid in the manometer was above the 320-mm. level. In 86% of the cases with vascular lesions the inhalation of amyl nitrite caused a rise to less than 320 mm. In 89% of the cases with chronic inflammatory lesions (encephalitis, lues) the rise was to less than the 320-mm. level. In the central group the readings were about equally distributed in the region of the 320-mm. level. The author considers that the test is of value as a diagnostic aid in differentiating between expanding lesions and inflammatory or vascular lesions. It is not of value as a method of differential diagnosis between pathological and normal conditions in the brain.

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*The Demonstration of Normal Cerebral Structures by Means of Encephalography. IV. The Subarachnoid Cisterns and Their Contents.* (Bull. Neur. Inst. N.Y., vol. iii, p. 418, March, 1934.) Dyke, C. G., and Davidoff, L. M.

The authors have already described the appearances of the choroid plexuses, the corpora quadrigemina and the cerebral convolutions and sulci as seen in encephalograms. The present article deals with the appearance of the subarachnoid cisterns and the structures bordering on or contained in them.

The cisterns are cisterna magna, pontis, interpeduncularis, chiasmatis, lamina terminalis, fossæ Sylvii and ambiens. It is claimed that it is possible not only to identify all the cisterns but, by examination of stereoscopic films, to study the actual size, shape and position of these spaces and their relationships to neighbouring structures. In many instances it was possible to identify nerves, blood-vessels and portions of the brain contained within or projecting into the cisterns.

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*The Ætiology of Headache. (1) Headache Produced by Injection of Air for Encephalography.* (Bull. Neur. Inst. N.Y., vol. iii, p. 519, March, 1934.) Elsberg, C. A., and Sutherland, R. W.

The various theories of the production of headaches are discussed—the stretching of dura mater, transient obstruction of one or other foramen of Monro or iter, variations in secretory activity of choroid plexuses, etc. The possible anatomical paths are also discussed, and the nerves of the cerebral membranes and of the brain and its blood-vessels. It is suggested that the optic thalami may be the seat of the pain and that, as these structures form part of the walls of the lateral and third ventricle, any change in the conditions of pressure in these cavities would be readily transmitted to the structures which form their walls. Sudden changes of pressure in the ventricles can be produced in a number of ways, such as