correct diagnosis. In the case of every patient who would formerly have been called neurasthenic, hysterical or psychasthenic, the thyroid function should be most minutely investigated, in order to ascertain whether this is not the cause of the existing neuro-endocrine disturbance. M. HAMBLIN SMITH.

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4. Neurology.

An Improved Method of Encephalography. (*Bull. Neur. Inst. N.Y., vol. ii, p. 75, March, 1932.*) *Davidoff, L. M., and Dyke, C. G.*

The routine is as follows : The evening before the day on which the procedure is to take place the patient is given sodium amytal, gr. iij, in order to ensure a restful night. This dose is repeated at 8 a.m. At 8.45 a.m. an injection of morphia is given (adults gr. $\frac{1}{6}$ to $\frac{1}{4}$, children gr. $\frac{1}{16}$ to $\frac{1}{8}$) and no breakfast. At 9 a.m. the operation is performed in the X-ray department. The patient sits on a bench with forehead resting against a vertical Potter-Bucky diaphragm, and lumbar puncture is performed under novocaine anæsthesia. On occasions when general anæsthesia is advisable, the same position of the patient is used during injection of air. To allow for the expansion of the air, an initial 10 c.c. of cerebro-spinal fluid is removed and replaced by 5 c.c. of air. Thereafter 5 c.c. of air are introduced for every 5 c.c. of fluid removed. The fluid is removed by attaching a 10 c.c. syringe to the lumbar puncture needle by means of a length of rubber tubing. Atmospheric air for injection is sucked into the syringe through many thicknesses of sterile gauze to exclude bacteria. Both removal of fluid and injection of air is done slowly, and the fluid is not sucked out, but allowed to fill 5 c.c. of the syringe " against the weight of the plunger with the syringe in a horizontal position ".

Details as to amount of air to be injected and indication for greater or less volume are given together with details of radiographic technique. Stereoscopic films from four sides are taken in every case. The symptoms likely to arise during and after the procedure are given, and include headache, nausea, vomiting, cyanosis, pallor, perspiration, chilliness, drowsiness, restlessness and poor pulse. This procedure had been in use for two years in over 300 cases at the time of writing.

J. L. FAULL.

The Demonstration of Normal Cerebral Structures by Means of Encephalography. (*Bull. Neur. Inst. N.Y., vol. ii, p. 331, July, 1932.*) *Dyke, C. G., and Davidoff, L. M.*

(1) *The Choroid Plexuses.*

This is the first of a series of studies upon the appearance of normal cerebral structures as demonstrated by the method of encephalography previously described by the authors. They claim to have demonstrated that certain defects in the bodies of the lateral ventricle and the roof of the fourth ventricle as outlined by air are caused by the choroid plexuses. The presence of such defects depends on the size of the choroid plexuses, and does not appear to be associated with any particular condition.

(*Bull. Neur. Inst. N.Y., vol. iii, p. 138, June, 1933.*)

(2) *The Corpora Quadrigemina.*

A group of one hundred encephalograms was reviewed to determine the frequency with which the corpora quadrigemina could be demonstrated. They were visible in 71% of the cases. This identification of these structures is possible by their size and shape and their fixed relation to other known structures of the brain that are easily recognized in the encephalogram.