

Froin syndrome, but a normal fluid does not exclude tumour. The author is very enthusiastic about the lipiodol test. A thick oil of iodine (*lipiodol radiologique, Lafay*) is injected into the sub-arachnoid space above and below the tumour, and its movements watched by means of the radioscope, followed later by the taking of plates which should show up the tumour quite clearly. These plates can be repeated for several months, as the lipiodol takes a long time to dissipate. In the manometer test advantage is taken of the fact that in the normal person straining efforts and pressure on the jugular veins cause a distinct rise in the pressure of the cerebro-spinal fluid, whereas in complete blockage of fluid due to tumour causes the usual rise, whereas compression of jugular veins causes no change. If the blockage is incomplete a rise in both cases is obtained in a slow and jerky manner. The fourth instrumental test described is the injection of air into the ventricles or sub-arachnoid space, but this the author considers distinctly dangerous and much inferior to the lipiodol test in the information it supplies. A chapter on differential diagnosis follows, and the author applies the results of the clinical and instrumental examinations to the diagnosis of the localization of the tumour. It is essential to determine the medullary segment involved, the corresponding vertebrae and spinous processes, and if possible whether the neoplasm is intradural or extradural, its length, and its position in the canal in relation to the spinal cord.

The last chapter deals with treatment; details of the operation are not given, but such questions as contra-indications and the best time to operate are discussed.

The author is most insistent on the absolutely definite localization of the growth prior to laminectomy. The operation is a most difficult one, with a high mortality even in the most skilled hands. He deprecates the tendency in America to perform exploratory laminectomies

Radiotherapy has been found useful in some cases to relieve pains where growths are inoperable on account of malignancy or because they are metastatic. It has also been used combined with surgical measures in certain radio-sensitive tumours.

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*A Study of Somatic Conditions in Manic-Depressive Psychosis.* Inaugural Dissertation by TORSTEN SONDÉN. Upsala: Almqvist & Wiksells Boktryckeri, 1927. Pp. 269. Many illustrations.

In his introductory chapter the author remarks that research into the somatic conditions accompanying mental diseases is not suited to "group investigations," as there is no proof that those suffering from the same mental disease are alike in their somatic conditions. He considers that this method has encouraged certain workers to report positive results and found hypotheses on flimsy grounds, and he cites some glaring examples, which could easily be supplemented. He considers that this is much less likely to occur:

where the method employed is that of "serial investigations," these being carried out on the same person over a period of time in which he exhibits different mental states.

His work has been done on 11 patients suffering from manic-depressive psychosis and has extended over 2½ years. Investigations have been largely directed to what the author calls "complete blood examinations." In some cases these have been done daily for months on end. A clinical description is given of each case, and there can be little doubt that any other psychosis has been included in the list.

No single somatic phenomenon could be demonstrated as an invariable component of any particular psychic state, which excludes such phenomena being used for prognostic or diagnostic purposes as recommended by some workers.

Entirely negative results were obtained in respect of respiratory rate as well as non-protein nitrogen and its components. In the blood-sugar investigations no tolerance tests were done, and though fasting levels tended to be high during depressed phases, no conclusive results were obtained. The vegetative nervous system was examined by means of the oculo-cardiac reflex, Loewi's reaction, and by the effect of intravenous injections of adrenalin on the blood-pressure. These tests were very unsatisfactory, especially in manic patients, but the results obtained were definitely against the French theory that this psychosis is an anaphylactic phenomenon acting on a constitutional vagotonia. He points out that recent work on the leucocytes showing great variations in the normal person due to quite physiological causes, largely discounts the work done on the leucocyte count in mental diseases, and he is not inclined to place much importance on his own findings. He found a tendency to a mild neutrophil leucocytosis both in manic and depressed phases, but especially in the former, and he faintly would correlate this with the occasional rise of temperature, increased pulse-rate and heightened blood-pressure found, as pointing to a stimulation of the sympathetic.

Better results were obtained in the investigations into the number of erythrocytes. These were increased, in some cases quite definitely, both in manic and depressed phases. As the albumen content of the serum was also increased, the author considers that there is a redistribution of the body-fluids—an outflow of fluid from the capillaries into the tissues under the influence of the vegetative nervous system.

Summing up, the author considers that his findings are definitely against a toxic origin for the manic-depressive psychoses. He assumes that an hereditary disposition is the true basis of the disease, and considers that the disease is to be found in the nervous system, and probably also in the endocrines. Considering that the book is a translation it is fairly well written, and the meaning is always clear. The book is abundantly supplied with charts and tables, and details of all the methods used are given. It is well worth perusal.

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