

On the Provocation of Epileptiform Convulsions by Cardiazol (Experimental and Histopathological Investigations on Animals) [Über Provokation epileptiformer Anfälle durch Cardiazol—Experimentelle und histopathologische Untersuchungen an Tieren]. (Münch. med. Wochenschr., p. 1893, 1937.) Stender, A.

The author produced epileptiform convulsions in rabbits and cats by hypodermic injection of cardiazol. He noted that he gradually had to increase the dose in rabbits in order to provoke fits (from 0.04 to 0.1 per kg. weight), whereas cats required a much smaller increase only. Up to 32 convulsions were produced in one animal before it was killed and its brain histologically examined. The only definite findings were small subpial hæmorrhages in some of the rabbits. These were ascribed to injuries suffered during the fits. No other definite changes were observed. The author regards this as further encouragement to proceed with cardiazol treatment in man.

S. L. LAST.

Results and Remarks on the Problem of the Epileptiform Fits Artificially Produced by Cardiazol [Ergebnisse und Bemerkungen zur Frage des durch Cardiazol künstlich hervorgerufenen epileptiformen Anfalls]. (Zeitschr. f. d. ges. Neur. u. Psychiat., vol. clix, p. 582, 1937.) Wichmann, B.

This paper discusses various aspects of the epileptiform seizure which can be produced by cardiazol in epileptic and other patients. The author's aim was to find a method which would enable one to produce seizures in epileptics in order to establish a diagnosis. The author disputes the statement that one should inject cardiazol as quickly as possible. He holds the view that the seizure is produced if a certain concentration acts on the brain for a certain length of time. In order to avoid making this time too short he advocates making an injection of 3-3.5 c.c. last 15-18 seconds. This method was used in 183 experiments on 170 persons. Of 99 epileptics, 76 (76.76%) had fits. Of 29 patients with an organic lesion of the nervous system, 4 reacted with a fit. Out of a group of 42 consisting of normals or patients without an organic lesion, one only reacted with a fit. The author therefore concludes that this method can be used if one feels doubtful as to the diagnosis. An interesting observation is that the seizures produced by cardiazol are exactly like the spontaneous ones, and this applies also to the cases of symptomatic epilepsies, when the fit would show focal signs.

S. L. LAST.

The Insulin Treatment of Schizophrenic Psychoses [L'Insulinothérapie des psychoses schizophréniques]. (L'Encéphale, vol. xxxii, p. 225, Dec., 1937.) Schmid, H., and Bersot, H.

This paper contains notes on the general technique of hypoglycæmic shock treatment; on the complications commonly met with and their treatment; on indications for this form of therapy, and on psycho-physiological explanations for the results obtained. The paper also contains a *résumé* from the case-histories of 32 schizophrenics treated by the authors between October, 1935, and August, 1936. Of the 18 recent cases there were 12 complete remissions, 5 social remissions and 1 unimproved. Of the 14 chronic cases there were 3 complete remissions, 5 improved and 6 unimproved.

STANLEY M. COLEMAN.

On the Coma and Reflex Anomalies in the Insulin shock therapy of Schizophrenia [Über das Koma und Reflexanomalien bei der Insulinhocktherapie der Schizophrenie]. (Schweiz. Arch. f. Neur. u. Psychiat., vol. xl, p. 133, 1937.) Liepmann, W.

The author stresses the difficulties in defining coma and that it is desirable that everybody meant the same thing when speaking of coma. He finds the absence of the conjunctival reflex and of the pupillary reflex to light a good criterion, but seems to realize that this syndrome corresponds to a higher degree of

unconsciousness than the usual one, for he says that patients should be left in this condition for 10–20 and never more than 30 minutes. The second part of the paper is devoted to a study of other reflexes. Associated with Babinski's reflex the author frequently found Oppenheim's and Gordon's phenomenon; Rossolimo's and Mendel-Bechterew's reflexes, however, were never present. The author could not confirm Sakel's finding that pyramidal symptoms are more frequent on the right side. The grasp reflex was frequent, especially during the stage of marked motor excitement $2\frac{1}{2}$ – $3\frac{1}{2}$ hours after the injection. Half of the cases showed an eccentricity of the pupils which usually was of short duration; but sometimes of such a high degree that the whole of the pupil moved into the upper nasal quadrant of the iris.

S. L. LAST.

Results of Insulin Shock Treatment in Schizophrenia [Ergebnisse der Insulinschockbehandlung bei Schizophrenie]. (Zeitschr. f. d. ges. Neur. u. Psychiat., vol. clix, p. 704, 1937.) Marzynski, M., and St. Witek.

The reports from the University Hospital, Vilna, have not been as favourable as from most other hospitals where large numbers have been treated according to Sakel's method. Satisfactory results were only obtained in cases of less than 6 months' duration. Of 43 patients, 24 (55.8%) showed complete or social remissions. Of 27 cases of 7–12 months' duration only 4 (14.8%) had satisfactory remissions, and these were obtained in 3 (5.2%) cases of more than a year's standing. The latest modifications of technique suggested by Sakel did not make any difference to the more chronic type, but seemed to increase the number of good results in recent cases.

S. L. LAST.

Reports on Subjective Experiences in Hypoglycæmic States [Selbstbeobachtungen im hypoglykämischen Zustand]. (Zeitschr. f. d. ges. Neur. u. Psychiat., vol. clix, p. 417, 1937.) Wiedeking, I.

This is a very interesting study carried out on three medical students who had insulin given them in the same way as patients treated according to Sakel's technique. They described marked hunger, which varied during the experiments; however, they did not experience thirst. Headache was not rare. Heaviness of the limbs and weakness was regarded as very characteristic. They were tired and wanted to be left alone. They had a feeling that they could not concentrate or even think. The mood was one of apathy; when somatic symptoms developed there was an irritability with desire for quietness. On waking, euphoria and a feeling of having been saved from a danger were very marked. Consciousness also varied in phases, the students becoming clearer for short periods and then becoming increasingly clouded. A feeling of blankness developed out of a difficulty in thinking. Disorders of sensation were frequent. Entoptic phenomena and pseudo-hallucinations of sight occurred often. When they were very drowsy these subjects still felt pain, but often they could not localize it or did not seem to react to it. The author included some experimental tests like Bourdon's attention and the word-association test. These showed, with small doses of insulin, a parallelism between mental impairment and the falling blood sugar. With high doses, however, there was a continuous drop in efficiency.

S. L. LAST.

Clinical Remarks on the Precomatose Period in the Course of Treatment of Schizophrenia by Insulin [Remarques cliniques sur la période précomateuse au cours du traitement des états schizophréniques par l'insulinothérapie]. (Ann. Méd. Psych., vol. xcvi, p. 66, Jan., 1938.) Porcher, Y., and Leconte, M.

Report on two schizophrenics, sisters, treated by hypoglycæmic shock therapy. In both, remissions occurred when the dose of insulin reached the neighbourhood of a hundred units; this was short of the coma dose. On their experience the writers question the necessity of invariably proceeding to the coma level.

STANLEY M. COLEMAN.