

the cases studied there was a decrease of the uric acid—these cases being mostly inactive, with poor peripheral blood circulation. (3) In 47 per cent of the cases there was an increase of the amount of the blood-sugar. (4) The average deviation of each constituent of the patients' blood is higher than that of the normal, suggesting an unstable metabolic activity.

R. G. GORDON.

TREATMENT.

- [197] **The arrest and cure of dementia præcox.**—BAYARD HOLMES.
Med. Record, 1921, c, 231.

It is pointed out that notwithstanding the histopathological destructive lesions in the central nervous system demonstrated by Southard, Gurd, Mott, Monakow, and others, occasionally cases of dementia præcox not only spontaneously recover after decades of deterioration, but these recoveries are marvellously complete. It has, however, been stated that the pathological changes found are not uniformly proportionate to the gravity or duration of the mental symptoms. Holmes believes that the acceptance of his theory that the disease is an intoxication will render such recoveries explicable. His theory places the production of a toxic molecule in the cæcum, which molecule, by a selective action, acts upon the brain to produce the mental symptoms and later the histopathological lesions. These symptoms are at first produced by a simple cell intoxication, which may go on to the destruction of brain-cells. The first symptoms noticed in most cases are suggestive of cerebral irritation, but a careful inquisition generally develops evidence of an antecedent period of depression. The sexual excitement of dementia præcox patients is of uncertain genesis. Ceni has shown that the molecules of cerebral neuroglia are toxic to the spermatogenesis of the testicle when liberated by cerebral concussion in animals. It seems probable that the genital symptoms are secondary to the destruction of cerebral cells and the liberation of cerebral molecules.

The author advocates its treatment by daily irrigations of the cæcum with large quantities of water five hours after the last meal of the day, in order to endeavour to terminate the production of the toxic amine. For more than one reason irrigation is best carried out through an appendicostomy. This therapy offers hope to the oldest and severest cases.

C. S. R.

- [198] **An effective treatment of epilepsy: phenylethylmalonylurea or luminal** (Un traitement efficace de l'épilepsie).—GASTON MAILLARD. *L'Encéphale*, 1920, vii, 455.

SCPTICISM as to the efficacy of any new method of treating epilepsy is allowable when one considers the disappointments which have usually resulted; and as a rule it has been necessary to revert to the use of bromides. After extensive use of luminal, however, the author thinks he is justified in speaking eulogistically of its value.

Luminal belongs to the same chemical group as veronal. It differs from it only in the substitution of a phenyl group for an ethyl one; and it

is this phenyl constituent that gives it efficacy in epilepsy. It is essential that the luminal should be of recent preparation; otherwise it may have a toxic effect. There is no hard-and-fast rule as to dosage: it must vary with the individual. The daily dose should be given in two portions—morning and evening—in the form of cachets or tablets. The ordinary procedure is to give 20 cgrm. daily to an adult, and this may be raised to 30 to 40 cgrm. daily. In the early stages the patient may be very somnolent by day as well as by night, though in some cases there is excitement and euphoria. Even if it is thought necessary to discontinue the treatment, the drug should not be stopped abruptly.

The effect on the fits—minor attacks also—is noticeable a day or two after commencing the treatment. They cease, and then only recur at lengthening intervals, or even disappear completely. It seems possible to diminish the dose until only 10 or even 5 cgrm. are given daily without the fits returning.

In the early stage of treatment the psychic disorders—in contradistinction to the fits—are exaggerated, but this is only in patients who have exhibited such symptoms previously. Even these can be controlled by increasing the dose; and eventually they also disappear. The usual psychic condition of the patient is also ameliorated. Instead of progressive mental enfeeblement there has been in some instances so marked an improvement that the patients have been able to return to their work. The physical condition, so often impaired by persistent administration of bromides, is amended.

The author asks if these results are likely to be lasting, and answers the query hopefully. Other speakers in the discussion which followed the reading of his paper also recorded beneficial results from the use of luminal. Rogues de Fursac mentioned cases in which the fits ceased, but where very troublesome psychic symptoms supervened. Large doses had not, however, been given. It was generally agreed that the patients became more tractable and more fitted for social life.

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