

patient; it sometimes requires one or two months of experimentation." Unpleasant bromism has been produced by very small doses in one case, while others can bear nearly half an ounce daily without any evil results.

He states that little children bear much larger doses proportionately than adults. Children from two to six years will need 40 to 60 grs. daily to arrest the attacks; and take these quantities without bromism.

Organic cardiac disease or feebleness of heart decreases the ability to withstand bromides. Acue is no guide to the dosage of bromides. It depends a great deal upon the peculiarities of the patient, as, for instance, an unhealthy skin, etc.

Dr. Seguin prefers the sodium salts and gives it alone, and advises it to be given largely diluted in slightly alkaline waters.

How the bromides act is not satisfactorily known, and possibly will be only theoretically surmised until we know more about the pathology of the disease. It is supposed that the morbid state in epilepsy is essentially an instability of the resistance in the cells of the cortex of the cerebrum. Like an electric battery, there is a discharge from the cells. Now the bromides are supposed to act by increasing the stability of this resistance, and, if they effect cure, they produce nutritive changes rendering the cell energy more stable.

Until recent years all that was done with the epileptic insane in asylums was to prevent them from doing acts of violence, destroying clothing, furniture, etc. They were looked on as among the most dangerous and troublesome of lunatics. Many of them spent most of their time in straight-jackets, muffs, strapped in chairs securely fastened to the floor, or tied in bed. When I first entered the asylum service this was the condition with some of these unfortunates, but the writings of Bennett, Gowers, Clouston, and others, on the efficacy of the bromides and the harmlessness of their continued use in most cases, have revolutionized affairs.

The epileptic, like all other insane in the asylums, is no longer in restraint. (And I might here add parenthetically that the word restraint will soon be unknown in these institutions. It is practically unknown in the Ontario asylums.) Thanks to the bromides, many of

the epileptic insane who formerly were most dangerous and maniacal are now quiet, industrious inmates, some of whom, remaining fairly well mentally, are allowed to go home to their friends. The trouble is, when they get away from the asylum care and routine, they are apt to neglect their medicine, live more or less irregular lives, and soon have to be sent back. Many of them are among the useful patients in the asylums, working steadily, and can be trusted by themselves. I know several epileptics in the Kingston Asylum who are working steadily, some in the carpenter shop, others on the farm, etc. Should these same refuse to take the bromides, as occasionally they do, fancying there is poison in the dose, then the epileptic demon bursts forth in fury and for a few days has full sway of his victim.

The medicine must be taken as regularly as the food, or it will fail. I know patients in Kingston Asylum who have taken one to three drachms of bromides daily for years, and their bodily health is just as good now as it was when they began treatment, and their mental condition, if anything, is better. Dr. C. K. Clarke, superintendent of that institution, informed me of two patients who had taken bromides for years, went home recovered, and have remained well for four or five years. A very pleasant old gentleman (a farmer) was admitted to the asylum while I was there on account of epileptic seizures. He was afraid of himself and was anxious to be placed in restraint. It so affected him that he would sit down and cry like a child. We put him on the bromide treatment. He had no more fits; in six months went home, and, I believe, has remained there since, keeping well and taking his medicine regularly. Occasionally he sent a letter to the superintendent, informing him how happy he was. I could go on citing cases, but I am sure I have wearied you. But I hope what I have stated will encourage you to persevere with your epileptic patients. For if so much benefit can be effected to the epileptic insane, how much more should be effected with the epileptic who still has his "right mind."

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To prevent bromism in epileptics, Huchard recommends the use of diuretics, and especially of milk.