

addition to feebleness commencing paralysis of the lower extremities, tremors, coldness, anorexia and diarrhoea, loss of intelligence and memory, and sometimes delusions, hallucinations, headache of an intense kind, and dilatation of the pupils. He quotes Le Gendre as having seen instances in which the bromides in overdose caused in epileptics symptoms simulating typhoid fever.

Laborde (*Gazette Medicale de Paris*, 1886) has seen sexual excitement follow the bromides, and Winters has reported visual hallucinations (*New York Medical Journal*, 1883). Alexander also quotes Kiernan and Monroe (*Medical Standard*, 1887 and 1891) as having met with cases of aphrodisia from this drug.

One conclusion seems certain beyond doubt, that in many cases of epilepsy the bromides are very capable of causing grave injury aside from the general depressing influence which they excite in all persons if given in full doses for any length of time.

In other instances in non-epileptic patients the use of the bromides has produced aphasia and apyrexia. Thus Lockhart Clarke has recorded an instance of a patient who said "contraction" for "subscription," and E. H. Clarke one who called a buckwheat cake a comb, and a comb a buckwheat cake.

With the idea of gaining additional information about such important variations from the usual manifestations of the bromides the writer addressed the following letter to a number of well-known neurologists, and to physicians in charge of insane asylums:

DEAR DOCTOR,—Within the last few months my attention has been called to the fact that the administration of bromide of potassium to certain persons, either sane or insane, produces a mental alienation, or influences unfavorably the manifestations of insanity already present. I am trying to find out whether the experience of one or two gentlemen has been duplicated by others having such a wide experience as you must have had. I enclose a set of questions designed to elucidate this point, and shall feel personally obliged to you if you will be good enough to answer as fully as you feel inclined the questions that I enclose.

The questions were as follows:

1. Have you noticed in your practice that the administration of the bromides in full doses ever produces mental alienation or true delusions?
2. If so, have the symptoms of the patient been those of sedation or excitement?
3. Has a single full dose ever produced such symptoms?
4. Do you think that such untoward effects of the bromides are more commonly met with than is generally thought?

The answers I have received are as follows as to Question 1:

Dr. H. M. Bannister, of the asylum at Kankakee, Illinois: "I have seen epileptics who were rational and quiet made violently maniacal. This was directly induced by the bromides. I have also seen pronounced hebetude and mental depression caused by their use. As regards the production of true delusions by the bromides I cannot speak definitely any further than to say that I believe the causeless violence and the deep depression are both probably attended with false conceptions."

Dr. John B. Chamberlin, of the Pennsylvania Hospital for the Insane, Philadelphia, answers Yes; that he has seen mental alienation and true delusions follow the use of bromides, and in an article by this author read before the Association of Medical Superintendents of American Institutions for the Insane in 1891, he records a number of cases closely allied to those