

The bromide is undoubtedly an anemiant; Sakokoski, Samola, Sezutzki and all the experimenters are unanimous on this point. By exciting, in the vaso-motor centre the constrictor nerves, the field of the circulation becomes restricted, particularly that of the bulb and the encephalon; it is known that anemia of the medulla oblongata is an experimental character of epilepsy. How are we to reconcile with this fact the beneficial action of the bromide? The reply is easy. The epileptic fit begins with anemia, resulting from the excitation of the vaso-constrictor nerves; against this transitory phase the bromide is powerless, but the fit continues and it ends in a hyperæmic process which provokes vaso-dilatation. It is by its antagonistic and vaso-constrictor action that the efficacy of the bromide is explained; but this is not all: it possesses, as we shall show, a strongly depressive power, or as we might say, a destructive one, over the reflex excitability, alike over the brain cortex and the bulb; consequently it impedes the attack and may also restrain the evolution of the disease.

Well now, is there a single vascular medicament that can be compared to it? Not one. The ergot of rye, which is a vaso-constrictor, visibly excites the reflex power of the medulla; belladonna, which is a vaso-dilator, excites the reflex excitability; as to curare it meets no requirement whatever, by paralyzing the vessels it operates lethally; as to the nitrites of amyl and soda, they have but an ephemeral effect on the fit and the vertigo, and they are, so to say, impracticable because of their toxic action. It now remains for us only to prove the depressing property of the bromide on the excito-motor system.

*The Bromide Represses the Exaggerated Excito-motility in Epilepsy.*

Hurette and Rames, in 1850, recognized in the bromide the anti-excito-motor property which readily explains the insensibility of the pharyngo-laryngeal mucous lining, under the influence of large doses. Laborde has studied this special faculty, which acts also on the genital innervations. Since my first investigations in 1858, when my attention as well as that of Brown-Sequard, was given to the hypnotic, or better to say the sedative effects, which in no respect resemble narcotism, and consist above all in a diminution of the impressionability by external influ-

ences, the bromide, taken to the extent of three or four grams nightly, has procured the most tranquil sleep, leaving no vestige of heaviness or pain in the head, such as follow the action of opium. I have utilised this sedative potency of the bromides from the outset of the megrim, which aborts, or is in a certain way shortened.

All these clinical facts ought to leave not the least doubt; an experimentation of late by Albestoni, lauds a physiological proof that seems to me irrefutable, and applies marvellously to epilepsies of cortical origin. By electrising the cerebral cortex, after laying it bare with the trephine, Albestoni produced partial, and often general convulsions; when he previously administered to the animal under experiment two or three grams of the bromide, the electro-excitability of the cortex diminished considerably, and so much the more the longer the action of the bromide was kept up. The medicine, in a certain dose, impedes the electricity in producing convulsions; it appears that resistances are formed in the bromidised encephalon, or this propagation of the excitation to the psycho-motor-centres is prevented. There is then produced a true excito-motor-paralysis, which is all the more curious as the voluntary movements continue unaffected. In proportion to the suppression of the bromide, this state of the encephalon disappears; it recovers its prior excitability, and the electric excitations acquire their convulsive potency.

It is impossible, in this ingenious experiment, to ignore the proof of the depressing power of the bromide over the excitability of the brain. In comparison, Albertoni met with nothing analogous in belladonna or atropia, nor in curare; all these poisons increased or exaggerated the reflex sensibility; nothing further then is to be expected. The bromide is the unique vascular medicine, and at the same time a real anti-excito-motor.

*Grave Bromism.*

It now remains for us to point out the inconveniences, frequently the dangers, of an intense and continued bromidation.

When it is prescribed without the precautions we have indicated, permanently in six grams or more, the patient is exposed to grave alterations in the skin, the mucous membranes—principally the respiratory—failure in the heart's action and