

to those in England, 3 per cent. ; the preponderance in Martha's Vineyard, the commune of Batz, and among the Jews and Quakers.

17. The facts do not warrant us in supposing that there is a specific degenerative effect caused *ipso facto* by consanguinity.

17. Consanguineous marriages, no other objection being present, should not be opposed on physiological grounds.

THERAPEUTICS OF EPILEPSY.

If one may be permitted to be aphoristic on subjects like this, I would express my views regarding the therapeutics of epilepsy as follows :

I. Diet, exercise, and proper hygienic treatment, including baths, rank above all other single therapeutic measures.

If I had to choose between them and bromides even, I would select the former. On the whole, I fear that the reign of bromides has made the condition of epileptics more miserable than it was before, and has done our patients an actual harm. At the best, not more than five or ten per cent. of epileptics can be cured, while the majority are reduced by bromides to a state of physical enfeeblement and distressing mental hebetude. Besides, physicians now fly to the bromides, and trusting to them, neglect the searching inquiry into the exciting cause, or the careful direction of the patient's habits, which are so essential.

All medical experience unites in ascribing benefit to judicious regulation of diet and exercise. The only difference of late years is that we do not now believe epileptics should be starved.

Epileptics should live on plain, easy digestible diet, containing a preponderance of fat. A special meat diet, or milk diet, or farinaceous diet, is not injurious nor curative. It all depends upon the patient. A meat diet may be best if the patient is lithæmic or has a fermentative dyspepsia. A milk diet is especially useful for children and erythritic women. The meals should be small, and, in case of voracious appetite, four, five or six light meals a day should be given. No heavy meal should be taken within four hours of sleeping. Indeed, no heavy meal should ever be taken by epileptics. Special diets have often to be rigidly laid down simply as a matter of discipline, since patients will not follow any general directions. I believe that the urine and digestive functions should be carefully studied, and that thus we shall find indications for selecting the right kind of food.

II. The bromides take the second rank in the treatment of epilepsy.

All bromides act alike in this disease. If one does not cure, another will not. Occasionally changing and mixing reduces the attacks for a time, and benefits the stomach.

III. The best bromides are those of potassium, sodium, ammonium, and hydrogen (hydrobromic acid) ; possibly we may add nickel.

Bromide of potassium is the most trustworthy.

Bromide of sodium is more agreeable to the taste, less irritating to the stomach, and milder in its effects, but is eventually just as depressing as other forms.

Bromide of ammonium has a brief stimulant effect on the circulation.

Hydrobromic acid is useful in those cases in which there are indigestion and phosphaturia, and an alkali is contra-indicated. It produces acne less readily than the alkaline bromides.

IV. Bromides should be given in daily doses of 3 j, increased gradually until the attacks are suppressed, or the dose reaches 3 iv to 3 j daily. Few patients can tolerate more than this latter dose. Thorough bromidization should be always tried if necessary to stop the fits, and it may be occasionally repeated. But bromidization is sometimes injurious, even making the disease worse, and it must always be employed with caution.

V. When the fits are suppressed the bromides should be carefully reduced, but never entirely stopped for at least two years after the last fit.

VI. In most cases, and especially in nocturnal epilepsy, an extra large dose of bromide should be given at night.

VII. It is very important that bromides should be chemically pure, and their use should be continued a very long time, and that their depressing effects should be offset by tonics and all possible roborant measures.

VIII. The best non-specific adjuvants (drugs) to the bromides are potassium iodide (in syphilitic epilepsy), potassium bicarbonate (in lithæmic and rheumatic states), carbonate of ammonium, the hypophosphites, arsenic, iron, and quinine.

IX. The other chief adjuvants to the bromides are diet, exercise, a regular life, hydrotherapy, counter-irritation on the neck, and, in the line of drugs, zinc, belladonna, strychnine, valerian, and the nitrites. Combinations of bromides with the other drugs mentioned will lessen attacks when bromides alone will not.

Other drugs which sometimes help the bromides are digitalis, Cannabis indica, ergot, conium, chloral, the salts of copper, picrotoxin, and borax. None of these do any permanent good alone, and their value as adjuvants is not uniform or generally conceded.

X. The best substitute for the bromides when these do no good or do harm, are belladonna, zinc, strychnine, glonoin, borax, and alteratives.

XI. Bromides stop the fits in from five to ten per cent. of cases, oftener if given early in the disease, if given to young children, and if given in cases that develop after twenty-one.