CLINICAL LECTURES ON NERVOUS DISEASES.

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LECTURE II (concluded from page 420).

ANALYSIS OF ONE HUNDRED CASES OF EPILEPSY.

TREATMENT.

To tabulate the results of treatment in a limited number of cases of epilepsy, presents the greatest possible difficulty. The disease itself is so chronic, and the treatment necessarily so prolonged, that it is comparatively rare for the physician to observe the termination of the case. Hospital patients especially seek advice elsewhere if the "stuff" do not produce immediate relief. On the other hand, if the symptoms be for the time abated, they equally fail to return, fancying themselves cured; and as likely as not, if there be a relapse, visit another institution, on the principle that, if they cannot afford a "pay doctor", one hospital physician is no worse than another. Even when we succeed in following out the treatment in a certain number of cases, great difficulties are experienced in estimating its exact value in a positive and demonstrable form. How can we expect by any one plan of medication to treat (still less to tabulate the results) so erratic, so changeable, and so mysterious a disease as epilepsy, of the intimate nature of which we are so profoundly ignorant? a disease which, when it comes under our notice, may have existed for a few weeks or for twenty years, in which there may have been only one attack during a lifetime, or where there may be a dozen or more every day; in which the predisposing or exciting cause may be utterly unknown, or where it may be the obvious result of hereditary transmission or a tumour in the brain; a disease which may manifest itself by almost imperceptible feelings of faintness or vertigo, causing little or no inconvenience, or by the most violent and terrible convulsive paroxysms, resulting in the fracture of limbs and even the loss of life; in some cases existing for years without apparent injury to the intellect or general health; in others, causing a total wreck of mind and body. These and other considerations preclude a strictly statistical study of the effects of treatment, which can only, therefore, be examined from a general point of view.

There are two factors in epilepsy: 1. The essential or primary disease, the nature of which we practically, at the present time, do not know, and consequently have no indications for treating: 2. The attacks, which are only symptoms of the organic lesion, but, as a matter of fact, are in reality, as far as we know, the only characteristic manifestations of the disease itself. Hitherto, treatment has alone been directed to the suppression of these paroxysms, and, when these are totally arrested, the epilepsy is said to be cured. Whether, however, the cessation of these symptoms is, scientifically speaking, recovery from the disease, is a question too extensive and important to discuss at present.

The following statements are therefore confined to the consideration of the temporary modification by treatment of the epileptic paroxysms, either in frequency or severity, and to the various general phenomena which, as a consequence, follow.

The hundred cases of epilepsy under observation have all been treated on the same plan, in so far as the bromides have been administered to all without exception, with the object of testing the therapeutical effects of these agents in a series of successive and unselected cases. The history and circumstances of each of them having been carefully investigated, dietetic and hygienic measures were strictly put in force, if found deficient; the general health and condition of the patient was, if necessary and possible, improved; and the special derangements or unhealthy surroundings of every individual were considered, and, when practicable, corrected.

Such general measures are obviously of the greatest importance, and, without them, medication will frequently fail to relieve. Unfortunately these external conditions are often impossible to modify. For example, a woman who lives constantly in terror of a brutal or drunken husband is not in a condition to favour therapeutical treatment; or a

man with a wife and large family, who has to work fifteen or more hours a day to gain a scanty pittance for their support, is no less unfortunate. Tell him to modify his labour, and he answers with Shylock,

"You take my life
When you do take the means whereby I live."

Such adverse circumstances having been, as far as possible, removed or palliated, the bromide of potassium or of ammonium was given. The dose at first varied according to the age, strength, and general state of the patient. For an average adult, thirty grains three times a day has been the ordinary rule in the present cases. The following has been found a convenient and efficacious prescription:

R Potassii bromidi gra. xx; ammonii bromidi gr. x; spiritus ammon. aromat. ʒss; aquam ad ʒi. Fiat haustus ter in die sumendus.

The first dose was taken before getting out of bed in the morning, the second in the middle of the day on an empty stomach, and the third the last thing at night. If, in the course of a fortnight, the attacks continued, the dose was increased week by week, till there was some obvious modification in their severity or frequency; and this has been, if required, gradually increased to from sixty to ninety grains, three times a day. In the event of the first or any subsequent dose proving efficacious in warding off the seizures, it was continued for about a couple of months; that is, assuming no really dangerous signs of poisoning presented themselves. The fact of the bromide rash or moderate constitutional weakness being developed was found of no great importance, if the attacks were in abeyance. At the end of from two to three months, according to circumstances, the dose was gradually diminished, till the smallest possible amount necessary to materially modify the paroxysms was found; and this, when ascertained, was, the health remaining good, continued for many months.

Of the hundred cases treated in this way, it may be stated in general terms that, with only one or two exceptions, the bromides have had the effect of materially modifying the frequency and severity of the epileptic seizures. At the same time, opportunity was not afforded in all of these to test the efficacy of the treatment for a sufficient length of time. In the following tabular statements, the minimum period during which any patient was under observation and treatment was six months, and this may be considered ample time to demonstrate the therapeutical action of the drugs on the attacks. Therefore, in forty cases under treatment at least six months, and most of them for a longer period, the following tables indicate, 1. The average number of attacks per month prior to treatment, and 2. The average number of attacks during six months of treatment by the bromides.

TABLE.—*Epilepsia Gravior.*

No. of Case.	Average number attacks per month before treatment.	Average number attacks per month after treatment.	Number attacks during six months of treatment.	No. of Case.	Average number attacks per month before treatment.	Average number attacks per month after treatment.	Number attacks during six months of treatment.
1	180	60	—	17	4	0	5
2	120	4	—	18	4	2	—
3	60	8	—	19	4	2	—
4	30	0	7	20	2	0	0
5	30	4	—	21	2	0	2
6	16	2	—	22	2	0	4
7	12	1	—	23	2	1	—
8	12	2	—	24	1	0	0
9	8	0	0	25	1	0	0
10	8	0	0	26	1	0	0
11	8	0	4	27	1	0	1
12	8	1	—	28	1	0	2
13	5	0	0	29	1	0	2
14	4	0	0	30	1	0	4
15	4	0	1	31	1	1	—
16	4	0	2	32	1	2	—

Epilepsia Mitior.

No. of Case.	Average number attacks per month before treatment.	Average number attacks per month after treatment.	Number attacks during six months of treatment.
33	900	30	—
34	300	3	—
35	120	30	—
36	60	0	0
37	30	6	—
38	30	30	—
39	20	0	4
40	1	0	1

A consideration of these tables demonstrates the very remarkable influence of the bromides on epileptic attacks. In no less than 92.5 per cent., the seizures were either entirely arrested during the period of observation, or greatly modified in frequency and severity. In 22.5 per cent., the paroxysms were completely checked during the whole time of treatment, the minimum length of which was six months, and in most for a longer period. For example, case No 9 was that of a boy aged 12, who had suffered from epilepsy gravior all his life, having had for some time an average of two attacks per week. He was under treatment for nine months, and during that time he did not have a single seizure. Again, case No. 36 was that of a man aged 30, who had suffered from epilepsy mitior for a year, having two or three attacks

regularly every day. During six months of treatment, he had no seizure of any kind.

In 70 per cent., although the attacks were not completely arrested, the reduction in their number was in most cases very marked, as will be seen on consulting the tables. For example, case No. 2 was that of a girl aged 19, who had been subject to attacks of *epilepsia gravior* since childhood, and who for some time past had had four seizures every day. After treatment, the paroxysms were reduced to one a week. Again, case No. 33 was a girl aged 9, who had suffered from *epilepsia mitior* for five years. She had about thirty attacks every twenty-four hours. Treatment reduced this to one seizure a day. This modification of the frequency of the attacks took place in every proportion, as will be seen in the tables, in the majority of cases, however, being very remarkable. This is all the more apparent when it is remembered that, in the above general estimate, no account is taken of special adverse circumstances, such as very chronic cases, hereditary transmission, coexistence with disease of the nervous system, and other varying conditions, the accompaniments or causes of the attacks. Another point which may be mentioned is that, so far as the limited number of cases of the *petit mal* permit us to judge, the benefit derived from treatment is nearly equal to that of the *grand mal*, there being only one case out of eight which received no benefit.

This modification of symptoms, if not scientifically curative, is of the greatest possible importance, and nothing can exceed the advantage accruing both to the patient and his friends by even the relief of the much dreaded fits. Let us take, as an example of this, case 10. This was a young lady aged 12, who, while at the Cape, was supposed to have had a sunstroke when fourteen months old. Since that time, she had suffered from constant attacks of the severest forms of *epilepsia gravior*. The minimum frequency of these seizures had been two a week, but for months together she had had several every day. About every three months, she fell into a sort of *status epilepticus*, in which she had a succession of fits lasting for twenty-four or more hours. It is difficult to describe the distress, anxiety, and constant alarm produced in a private family by one of its members being in this condition. In the present instance, besides general treatment, twelve grains of bromide of potassium were administered three times a day, and the patient has taken this continuously for ten months. During this time she has not had a single seizure except during one week, when, the medicine having been discontinued, she had three attacks. The general health has greatly improved, the patient has grown stout and tall, and menstruation has occurred for the first time, and altogether she is more healthy and robust than she has been for years. This child is not cured, but it is unnecessary to point out the benefit derived both by her friends and herself from even the modification of the paroxysms.

Of the forty cases which compose the tables, in only three were there no beneficial changes on the attacks as a result of treatment. There was nothing special in any of these to indicate why the remedies should have failed, as the following notes may show.

Case No. 31 was a woman aged 25, suffering from epilepsy for six years. Attacks of *epilepsia gravior* came on about once a month; of *epilepsia mitior*, about ten or twelve times a day. She was a very delicate and nervous person; otherwise there was nothing special. Her family was healthy.

Case No. 32 was a man aged 32. He had had epilepsy for ten years; attacks of *epilepsia gravior* once a month; otherwise nothing special. His family was healthy.

Case No. 38, a man aged 37, had had epilepsy for two years. Attacks of *epilepsia mitior* came on once a day. He was a delicate, weak person. His family was healthy.

Not only do the bromides materially modify the frequency of epileptic attacks, but they often diminish the severity of those which occur. They also improve in many respects the general health, and persons who suffered from headache, nervousness, and other ailments, are often greatly relieved in these respects.

The administration of the drugs may arrest the seizures for many months, and the moment they are discontinued, the attacks at once return, indicating that it is these agents which keep the paroxysms in abeyance, and that their action is not permanent.

What effects has a prolonged use of the bromides on the general health? Of the forty cases, which for a period of at least six months were continuously under the influence of these drugs, the following gives a general idea of the results.

General health not affected ...	...	25
Symptoms of bromism ...	...	15
Enfeebled or weakened body ...	...	10
Depressed or enfeebled mind ...	...	8
Eruption ...	...	6
Died ...	...	1

It will thus be seen that, in 62.5 per cent. of cases, the prolonged use of the bromides, sufficient to ward off or greatly modify the epileptic attacks, did not produce any physiological effects, or in any way influence the general health. In 35 per cent., some symptoms of bromism were produced; namely, in 25 per cent., there were weakness and languor of body, loss of appetite, and the usual physical symptoms; in 20 per cent., there were depression of the mental faculties into dulness, apathy, tendency to sleep, and so on; and in 15 per cent., there were well-marked signs of the bromide rash. One patient died while taking large doses, but whether as a result of the remedy or of the disease it is very difficult to determine. As a rule, however, the symptoms of bromism were slight, and their effects very temporary, and rapidly disappeared on discontinuing the drug for a time.

It may be said in conclusion that, in the bromide of potassium, we possess a valuable agent for suppressing the most dangerous symptoms of one of the most terrible maladies to which human flesh is heir, and further experience may enable us, through its influence, to effect a complete cure of the disease itself.

There are other methods of treatment of epilepsy, both by medicinal agents and by derivatives such as the seton and actual cautery, which I am disposed to believe in some instances of the greatest importance, a consideration of which space compels me, at present, to postpone.

ABSTRACT REPORT OF LECTURES ON THE COMPARATIVE ANATOMY OF MAN.

Delivered at the Royal College of Surgeons of England.

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LECTURE IX.—THE ESKIMO.

THE great continental tract of land constituting what is still commonly known as the "New World", presents (irrespectively of the great changes which have taken place since its discovery by the Europeans) far less variety in the types of its human inhabitants than the old world. No representatives of the woolly-haired races, no true white people, are native to it. From near the shores of the Arctic Sea to Tierra del Fuego, the original inhabitants are light-brown or copper-coloured, have straight black hair, and show, amid considerable diversity in detail in particular regions, a far greater resemblance than can be found in any other portion of the world's surface of equal extent. One group, that which inhabits the most northern portion of the continent, stands in many respects apart from the others; and as its members are evidently quite as nearly allied to some of the Asiatic races spoken of in the preceding lectures as they are to the Americans, if not more so, they may be appropriately treated of in the concluding lecture of the present course, leaving the other Americans for a future occasion.

These people call themselves *Innuits*, which, according to the common system of nomenclature among barbarous races, signifies nothing more in their own language than "the men", or "the people". The word *Esquimaux*, as it is rendered in French, or *Eskimo*, in the Danish method of spelling, now usually adopted in this country, was applied to them by a neighbouring tribe of Indians, and is said to mean "eaters of raw flesh". They dwell in various scattered localities near the northern coast of North America and the great adjacent islands from Behring's Straits to Greenland, and on the north coast of Labrador. Like the Mongolo-Altaic races of Asia, they lead a nomadic life, modified somewhat by the peculiarities of the surrounding physical conditions, dwelling in tents in summer, and in houses of snow in winter. Agriculture being impossible in such a climate, their only means of subsistence is in hunting and fishing. The flesh of seals, cetaceans, and reindeer forms their principal food. In the pursuit of the two former by sea, they use boats which they manage with great dexterity. They train dogs to draw their sledges, but, unlike the Laplanders, do not domesticate the reindeer. They clothe themselves comfortably in dresses of skin, and employ bows, arrows, and harpoons in the chase.

In Greenland, where for several centuries they have been Danish subjects, and under the influence of Danish and Moravian missionaries, they have reached a considerable degree of civilisation, and have adopted many European customs; but even here, as among the tribes still following their primitive mode of life, their numbers appear to be everywhere diminishing.