

PRACTICAL MEDICINE.

CLINICAL LECTURE ON EPILEPSY.

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It is difficult to give a correct definition of epilepsy, as different types of it are met with: it will be better, therefore, to lay before you a typical sketch of the disease, and then show how it varies. The affection is made up of a series of paroxysms which occur at irregular intervals. Each attack begins with an *aura* starting in some distant part of the body, as in one of the fingers or in the foot, and extending upward: when it reaches the head, a loud shriek is given, and the sufferer falls unconscious; as he falls, the face becomes deadly pale, and the body rigid, being in a state of tonic spasm. This condition lasts but a few seconds, and is hence overlooked. The convulsion next becomes clonic,—that is, muscles are forcibly contracted and relaxed in rapid succession; the face is now turgid and distorted, the head, trunk, and limbs are jerked about with violence, the tongue is protruded and wounded by the teeth, and blood-stained saliva runs from the mouth. The clonic spasm rarely continues over six minutes, and usually not more than three or four. Paroxysms of such character and duration may either be single or a number of them may occur in quick succession; when they are over, there is total unconsciousness of what has happened, and very often deep sleep; on waking from this the attack is ended, to return again after a longer or shorter time. At first the mind is clear during the intervals, but grows less so as the disease advances. These points are well illustrated by the case before you. The patient is thirty years of age, a bar-tender by occupation, and for the past six years has been intemperate and excessively addicted to venery. Although much exposed, he has never had any venereal disease. Three or four years ago he began to have epileptic attacks coming on during sleep: these occurred frequently, sometimes once every night, at other times only once in two or three weeks, and were often accompanied by seminal emissions. At present, according to his own statement, he copulates from once to four times daily, and drinks in the same proportion; he has never had an attack during coition, but on several occasions some hours after the act. The paroxysms being with pain in the stomach, and a sensation in the ring-finger of the left hand like that produced by the faradaic current: this quickly passes over the whole hand, and then up the arm, which is moved about violently during the passage; when the *aura* reaches the head he becomes unconscious. The duration of each fit is short, and as soon as it is over he falls into a heavy sleep, from which he wakes with a severe headache. The attacks can be stopped by grasping the left wrist firmly or by rubbing the left hand when the *aura* is first felt: this he always does in the daytime; at night, however, he rarely wakes up soon enough, for after the *aura* has passed the wrist it cannot be arrested. On this account the great majority of the paroxysms have taken place at night.

The word *aura* means air, and is used because the sensation which precedes the epileptic seizure

sometimes resembles that produced by a draught of cold air running up from the part first affected towards the cerebral centres. There are three forms of *aura*: the sensory, the molar, and the stomacic. The first, so called from its being manifested by some abnormal sensation, as heat, cold, or formication, is very rapid in its course. The feeling of a cold breath creeping through the system, from which the term *aura* is derived, belongs to this class, but it is hardly ever met with. The second variety of *aura* is distinguished by either convulsive movements or paralysis, starting in distal portions of the body and extending upwards; while the stomacic form consists of pain or other unusual sensation beginning at the pit of the stomach, exceedingly swift in its transmission, and most frequently observed in females. If the *aura* can be checked in its course, the paroxysm is prevented; at the same time, it must be remembered that it is often far too quick in its passage for this to be done, and that there are many cases in which *aura* does not exist. In the man before you the *aura* belongs to the sensory class, and is probably of centric origin. This question of origin, whether central or peripheral, is a curious one, and one upon which proper treatment depends: care should therefore be taken to investigate it, though such investigations are by no means always successful.

Epilepsy may be due to hereditary tendency: so universally is this accepted that Frank reports that it was an old Scotch custom to castrate all epileptics, in order that the race might die out. Nervous diseases—for example, hysteria, epilepsy, and insanity—are very closely related, and often alienate in successive generations. Other causes are acute diseases, exposure to the sun, and organic diseases of the brain, or it may arise spontaneously, apparently without cause. In this patient it is evidently due to excessive venery. The first indication in treatment is to remove the cause, when it can be determined: until this is done, little benefit may be expected from medicines. In bromide of potassium we have a valuable remedy: its mode of operation is to lessen reflex actions and the excitability of the nerve centres; but in order to accomplish this it must be given in full doses (3j t. d.) and increased until some effect is produced,—that is, until the blood has, as it were, become super-saturated with the salt. Notice should be taken of the fact that bromide of potassium is useful in proportion as the paroxysms are frequent, violent, and fully developed, being much less so in the various modifications of the disease. Next to the bromide in point of utility may be mentioned belladonna and nitrate of silver,—the former being given in sufficiently large doses to produce slight dryness of the throat, and the latter in doses of one-fourth to one-half a grain, continued for some time, always bearing in mind the danger of producing discoloration of the skin: this may be avoided by discontinuing it for several weeks after it has been taken six or eight weeks, especially if iodide of potassium is used in the interval.

The man before you has his attacks in the night, but only because in the daytime he always arrests the paroxysm. There is, however a form

of epilepsy—"night-epilepsy" so called—in which the paroxysms occur only at night: they may be violent, when they are easily recognised; they may be so insidious as not to be suspected by the sufferer, and only to be discovered by the physician after the most careful search. When however, in an adult, complaints are made of a feeling of apparently causeless malaise, with confusion of thought and headache in the morning, always be on your guard, and if the tongue is bitten and the urine voided in the bed at night, an almost certain diagnosis of "night-epilepsy" can be made. Of course the diagnosis of epilepsy should not be given hastily, as the prognosis is so frightful; yet though you hold your peace, never be deceived in these cases, especially since very frequently a full dose of bromide at bedtime every night will arrest the disorder.

Wetting the bed at night is one of the most characteristic symptoms of this form of epilepsy, and its presence or absence should influence very greatly your decision. Not long since I was consulted by a distinguished practitioner, who feared that he was suffering from this affection, but in whom I was able to make a more favourable prognosis, which so far has been verified. Some years before, he had broken down from overwork, and, although he had in great measure recovered, had never regained his normal mental vigour and power of work. He had noticed for some time that his tongue was bitten on getting up in the morning, and he was partly conscious of the fact or had the idea, that the injury occurred just at waking. He had never wetted the bed, had never suffered from any mental disturbance or malaise after biting the tongue, had never suffered from "petit mal" or any form of diurnal epilepsy. I therefore told him I did not believe he had nocturnal epilepsy. Still, the fact of the bitten tongue remained. Knowing that he had suffered at the time of his break-down a slight paralytic stroke, I suggested that perhaps one side of the tongue had remained less sensitive than the other, and that, lacking this guide to its movements, it sometimes got between the teeth and was bitten, especially in the first movements of waking, when the senses are all benumbed with sleep. Examination showed this to be the case; and he also stated that the injury was always on one side of the tongue,—namely that in which the sensation was impaired. Now, if these two points had escaped observation, much doubt might have been felt as to the nature of the case.

(To be continued.)

THE IMMORALITY OF TYPHOID.

A "milk epidemic" of typhoid is announced on a small scale at Maidford, near Towcester, Northampton. "Milk epidemics" of typhoid naturally and rightly arrest attention. It ought, however, never to be forgotten that a milk epidemic of typhoid is in truth a milk-and-water epidemic, and that every case of typhoid might be prevented if we were careful first to protect our water-supply from excremental pollution. Failing this we might still protect ourselves by disconnecting our cistern waste-pipes from the sewers into which they commonly run, and by