ON
DELIRIUM EBRIOSUM,
WITH
ACUTE CUTANEOUS PAIN SIMULATING
PLEURISY.

AND ON THE PROGNOSTIC SIGNIFICATION OF EPILEPTIFORM CONVULSIONS IN THAT DISEASE AND THE TRUE DELIRIUM TREMENS.

By MARTIN H. LYNCH, M.D.

The delirium ebriosum of Darwin—that is, an affection somewhat like delirium tremens, and produced by the abuse of spirituous liquors which have been freely drunk up to the supervention of the disease—is now very generally known to differ considerably from the true delirium tremens, although usually described as a variety of it. Well informed medical men are aware that delirium ebriosum, having many of the characteristics of delirium tremens, from the withdrawal of stimulus, presents, however, some symptoms peculiar to itself, and requires a slightly modified treatment. The following cases illustrate the usual symptoms and the appropriate treatment, whilst they exhibit some peculiarities at once curious and capable of furnishing some hints for practice:—

June 6, 1832. I was summoned to the assistance of Mr. —, aged twenty-nine, a student of medicine, and finding, on inquiry, that the symptoms were formidable and unusual, I procured the attendance of Professors Alison and Christison, who arrived at four, p.m.

The patient, a pale-faced young man, of low stature but robust figure, has been for years habitually intemperate, but during the week preceding the visits has surpassed all his former excesses, having spent the days and a great part of each night in drinking, and only enjoying a couple of hours uneasy sleep in brothels. Yesterday, continuing this dreadful course of vice, and able to walk without staggering, but much excited by drink, he (as we were informed) complained of headache, and his face was flushed. Shortly afterwards he fell down in a fit of epileptiform convulsions, which have recurred every two or three hours until the present time. During the greater part of the intervals between the fits he has been delirious, but pretty manageable.

The following are his present symptoms:—Headache; face flushed; carotid and temporal arteries pulsate violently; the conjunctivæ are injected; his bowels have not been freed since he has been carried home; the abdomen is full and tense; tongue white; pulse 102, full, and strong; he complains of a most excruciating pain of the right side of the thorax; the slightest pressure of the integuments against the ribs elicits exclamations of pain and makes him writhe; the skin covering the arm (from the acromion almost to the elbow) is painful on being touched or gently pressed between the fingers, but not to the same extent as the skin of the chest; the pain prevents the application of the stethoscope to the right side of the chest, and on the left nothing abnormal can be discovered; he can hardly be said to have a cough; when not roused he talks to himself incoherently, but when roused appears to recognise Dr. Alison and myself, and answers questions, although drowsily and stupidly. Shortly before the visit, one of the convul-

sive paroxysms occurred; his landlady says that he has not been “insensible” after the fits; she cannot say whether he has taken any medicine; and a fellow student and intimate friend, who was the companion of his revels, ashamed to appear before the professors, has concealed himself and cannot be found. He has not slept since he came home. To be bled to four ounces, and to have fifteen drops of Battley’s solution every four hours, and thirty drops at the usual hour of retiring to rest; head to be shaved, and cloths dipped in cold water to be kept constantly applied; a strong purgative enema to be immediately administered, and repeated until the bowels are well freed.

Seven, p.m. Bowels have been freed; pulse 100, softer; headache less; cutaneous pain continues; several convulsive paroxysms, like the epileptic, have occurred, and some have been witnessed of which the duration and intensity have been nearly the same as in epilepsy, but the stupor succeeding the paroxysm of the latter disease can hardly be said to exist. At the request of Dr. Alison, I have, since the last visit, made particular inquiries as to his ever having had epilepsy, and the result of my inquiries has corroborated the patient’s own denial. Cold to head to be continued; also Battley’s solution.

June 7, eleven, a.m. Has had some hours of sound sleep; the cutaneous pain has vanished; the skin is bathed in a warm and general perspiration; the convulsions and delirium have ceased; pulse 90; slight headache; thirst; urine scanty and high colored. Let him be purged freely by calomel and compound extract of colocynth. Mild febrile symptoms, the treatment of which need not be detailed, continued present until the 13th of June, when he became perfectly convalescent, and returned home a few days afterwards.

The following case, reported by Carter (“American Journal of Medical Sciences,” vol. VI.), bears a striking analogy to that which I have related, although it did not yield so readily to treatment.

Robert Peacock, aged thirty-five, had *mania a potu* once; has been drinking very hard for the last month, and slept out nearly every night; admitted May the 6th. The symptoms, on admission, were those of acute pleuritis, connected with epileptic convulsions (for the first time in his life), which were relieved by cupping, blistering, purging, shaving the head, and constant application of cold water, with the occasional use of the following:—

Assafœtida milk, six ounces;

Tincture of acetate of opium, two drachms;

but sleep not succeeding on the third day, mania a potu became developed.

9. Is very wild; constantly imagines that there is a rattlesnake running across the room, and persons with guns endeavouring to shoot it; occasionally jumping up and getting into the corner, in order, he says, to avoid the shot which are fired at the snake. Head feels heavy; skin rather dry; pupils contracted; complains of pain about the umbilicus; pulse is full, with some force, 80 per minute. Ordered cups to the seat of pain and to the temples; four grains of opium every two hours.

Afternoon: Is still very wild; face greatly flushed, covered with profuse perspiration; has only taken four

grains of opium. Ordered cups to the head to be repeated and opium continued.

10. Took only four grains, went to sleep very shortly after; the cups were applied and he slept nearly all night, and on waking was more quiet and rational; bowels not open for two days past. Ordered ten grains of calomel and one grain of opium and a large bottle of porter; ten drops of the acetated tincture of opium in each glass.

Evening: Bowels not open; complains of slight pain in the head; other symptoms the same. Ordered cups again to the head, injection of senna and salts, and twenty drops of the *acetum opii* every hour.

11. Took 100 drops of the *acetum opii*; slept about four hours; bowels opened three times; complains of nausea and pain in the epigastric region. Ordered cups to it and the following:—

Calomel, four grains;

Opium, two grains, every second hour.

Evening: Has taken twelve grains of calomel; bowels once opened; head excited; pulse has rather more force. Omit powders and apply cups to the head.

12. Slept some last night; head is still a little flighty; says he saw twenty persons last night, and is now occasionally talking to persons whom he imagines present, although, when spoken to, he answers very correctly; other symptoms are diminished. Ordered cups to the head.

13. Slept some towards morning; still flighty; head hot, with some uneasiness. Cups to the head.

14. Is now asleep, and slept nearly all last night.

15. Slept to day and yesterday; says he never felt better. Soon afterwards he was discharged cured.

Leviellè relates the case of a man who had drank hard for some time. After a Bacchanalian excess he had an epileptiform attack; he was leeches, and delirium tremens came on. He recovered in a few days under the ordinary treatment.—*Med. Chir. Rev.*, Aug., 1826.

REMARKS.

Epileptiform convulsions are by no means uncommon in the true delirium tremens—that which follows the withdrawal of the stimulus—but in this disease (if we are to judge from facts accurately recorded, and not from simple assertions) the epileptiform convulsions occur only towards the close of fatal attacks, and are justly considered by most practitioners as the harbingers of death. The value thus attached to convulsions of an epileptic character in delirium tremens might lead to some serious errors in practice. A young practitioner, aware that patients affected with the true delirium tremens often die in epileptic convulsions, and having never seen histories of cases like these we have related, might, if charged with the treatment of such, give a decidedly unfavorable prognosis, and hence the relatives might forbid all further treatment, on the grounds of not troubling the patient with useless remedies—a kind of interference not unusual after a decidedly fatal prognosis.

It is a curious circumstance that the only cases we can discover of recovery after epileptiform convulsions are these alluded to in this article; and that of these, one (that related by myself) is an unequivocal instance of delirium ebriosum.

The case related by Carter presented, for the first

three days, a state of the system very similar to that which occurred in the instance of the Edinburgh student. Carter gives his case at considerable length, but certainly without much clearness or precision. Nevertheless, as it is asserted that Peacock had been drinking hard for the previous month, and no mention is made of his having ceased to drink, it may fairly be concluded that the occurrence of symptoms of acute pleuritis, connected with epileptic convulsions was not preceded by any abstinence from the accustomed stimulus. It is my belief that there was no pleurisy whatever, and that the notion of its existence arose from a cutaneous pain similar to that noticed in the case observed by myself.

My view is confirmed by the report; for had the disease been acute pleurisy, symptoms must have arisen that could not escape mention by a physician relating the case at such length as Carter.

If my opinions be correct, severe cutaneous pain with epileptiform convulsions, and a state of the circulation and system at large very like that exhibited in the case treated in Edinburgh existed for the first few days in the case of Peacock, and probably sleep would have been enjoyed and recovery established on or before the third day, had not blistering been resorted to and steady treatment by the acetated tincture of opium been omitted. 'Tis true the tincture was prescribed, but the mixture contained but twenty drops per ounce and was only "occasionally administered," which may, perhaps, signify two or three times in twenty-four hours.

All authors agree that pain is an extremely rare occurrence in delirium tremens; and that when patients affected with pleuritis or other painful diseases are attacked by delirium tremens the pain disappears to return again, when the mania a potu has disappeared. The recollection of this circumstance may assist the practitioner in distinguishing the real nature of such pain as that observed in the two first cases.

In the Edinburgh case the quantity of the tincture administered was by no means great; at half past four, fifteen drops; at half past seven, fifteen drops; at half past ten, fifteen drops; and at a quarter before one, thirty drops; altogether seventy-five drops; but its sedative effects were assisted by (as we conceive) the tranquillising operation of purgatives, and not counteracted by the irritation of blistering. In my opinion, however, such cases will generally require fuller doses.

In Carter's case some errors, it appears to me, were committed in the treatment after true delirium tremens supervened on the state nearly resembling the delirium ebriosum. Even when the patient is affected with decidedly asthenic delirium tremens, it is better to give the salts of morphia along with a very moderate portion of the accustomed stimulus than to give crude opium as Carter did at first. Again, the administration of purgatives was improperly omitted during the first few days of the delirium tremens. Many, agreeing with Coates, imagine that the bowels cannot be moved during the free administration of opiates; it is difficult to move them, but by no means impossible; and Blake, very properly, lays great stress on the exhibition of purgatives, even croton oil, in cases where such a step is not forbidden by the previous existence of dysentery or some such disease.

One venesection to the extent of fourteen or sixteen ounces practised at the commencement would have been preferable to the repeated draining by cupping. Peacock was cupped ten times, and four ounces may be taken (on the average) as the quantity drawn on each occasion, making altogether (independent of trickling) forty ounces, a quantity which I cannot consider as called for by the symptoms. Indeed, Carter himself shows that the pulse had been reduced to a feeble state than desirable, employing (on the 11th) the words, "the pulse has rather more force."

According to Coates, convulsions are rare. Carter says, that convulsions, distinct from those preceding death in the true delirium tremens, are infrequent, occurring about twelve times in one hundred cases, and he does not tell us whether they are a fatal symptom or not, neither whether they occur solely in the delirium ebriosum alone, or in the true delirium tremens also. I hope these points may be determined by the experience of those who may chance to see this paper.

From the cases related in it, I conclude a strong presumption is raised that epileptiform convulsions are not a fatal symptom when they occur in the delirium ebriosum, and are accompanied by a pulse, moderate in strength, and not exceeding 104 in frequency. Indeed, Blake says that the most favorable circumstances in the true delirium tremens are—1st, the disease not having occurred previously; 2ndly, the pulse being of good strength and not beating more than 100.

7, Delahay-street, Westminster,
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ON THE PREVENTION

OF

PHOSPHATIC DEPOSITION IN THE ANIMAL ECONOMY.

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Every medical man familiar with the treatment of urinary disorder must confess, that among the most puzzling cases he encounters are those characterised by a deposition of the earthy phosphates; and that while it is an easy matter to render acid urine alkaline, it is by no means so easy to render alkaline urine acid.

M. Rayer, in his recent elaborate work on Diseases of the Kidney, has given, under the head of "Néphrite Simple Chronique" (tom. I., p. 372), the reports of eight cases of individuals, in whom the urine was alkaline and depositing phosphates. Out of these eight we find no less than five in which the remedial means resorted to effected no change in the qualities of the urine; in one, great improvement ensued; two only were cured, each of whom was under thirty years of age.

In a paper of mine, published in vol. XXIV. of the "Medico-Chirurgical Transactions," it was stated that when benzoic acid or a benzoic salt is administered internally, hippuric acid is formed, and may be discovered in the urine. It was, moreover, suggested that the therapeutic application of the above fact might prove beneficial in the treatment of certain forms of gravel and in disordered conditions of the renal secretion connected with a gouty habit. Some interesting

particulars, in corroboration of these views, have been since recorded by Dr. Walker, of Huddersfield,* and by Mr. Soden of Bath.† These gentlemen, however, exhibited the benzoic acid in union with balsam of copaiba. The following case, which has been attentively watched along with me by my intelligent friend, Mr. Farquhar, of Albemarle-street, will, it is hoped, serve to illustrate the pure *dynamic* effects of the remedy in a clear manner:—

H. H., aged thirty-seven, of spare make and sedentary habits, consulted me on the 9th of May, 1842, relative to a disorder of the urinary secretion. He said that about ten months previously he noticed, for the first time, a whitish deposit in his water, which, ere long, concreted on the chamber-pot, forming a hard grey crust, most difficult to remove; the urine had a very offensive odor, and varied occasionally in appearance, presenting sometimes a greenish, at other times a brownish color; at the above date it was slightly opaque and of a pale yellow hue, emitting a pungent ammoniacal smell, alkaline to litmus, and effervescing briskly upon the addition of a few drops of hydrochloric acid; almost as soon as discharged it threw down a white flocculent sediment, consisting of phosphate and carbonate of lime; it did not afford any uric acid; its specific gravity was 1.023; it was voided without pain or difficulty, and in a full stream; there was little or no increase of the mucous secretion, and no albumen. The patient's appetite was good, his tongue clean, and he slept well; but he was pale, complaining of general lassitude and languor, and of a sense of weakness across the loins; his bowels were generally confined.

1000 grain measures of the above urine, evaporated to dryness by a water bath at a temperature not exceeding 160° Fah., left only thirty-six grains of dry extract, and exhaled, during the process, a great quantity of ammonia, as proved by a slip of moist red litmus paper held over the dish becoming instantaneously blue.

He was directed to take an aperient dose of rhubarb and ten grains of benzoic acid, twice in the day, and to live well, but plainly.

May 12. Has taken the medicine without suffering the slightest inconvenience. He says that the urine, within a few hours after the first dose, became clear, and ceased to deposit any chalky sediment. It is now natural in all respects; acid to litmus; specific gravity 1.022.

After six days longer he discontinued the use of the benzoic acid. Towards the end of the month the urine became again alkaline, and I was induced to try him with the usual routine of medicines recommended in cases of this description, in order to see whether the urine could be brought to a permanently normal state. He was accordingly directed to take nitric acid in full doses thrice a-day, and an opiate at night. These, after a sufficient trial, produced no change. Hydrochloric acid, sulphuric acid combined with sulphate of iron, bark, tartaric acid in conjunction with sal-ammoniac, were each in turn freely administered, but to no purpose, for the urine continued alkaline and loaded with white sabulous matter. He

* Provincial Medical Journal, Feb. 1842.

† Ibid, Aug., 1842.