ON THE TREATMENT OF TETANUS BY WOORALI, CALABAR BEAN, AND CHLORAL HYDRATE.

By LAWSON TAIT, M.R.C.S., &c.

THERE is a characteristic of medical literature which is a painful one, and which must greatly retard the development of our art into a science—the small percentage of failures which are published in ratio to the published cases of success, both of operations and of the administration of remedies. It is very natural to suppose that men do not like to make known their failures; but if they were more frequently made public, I am quite sure much more would be learned from them than would compensate for the trifling uneasiness their exhibition would give rise to. One hears every now and then of a case having occurred in such and such a hospital, where some peculiarity in the case—say of ovariectomy—rendered it unsuccessful, through no fault of the surgeon's; and yet we too seldom get accounts of these valuable cases. Perhaps there is no disease about which men rush more ardently into print than tetanus; a single case often constitutes a paper, and from it other practitioners are led to use the vaunted remedy, only to meet with disappointment, and few record it. It has been my misfortune to see a good deal of tetanus, and I have tried many remedies, but always with the same result. If the patient lives over the twelfth day of the disease, he is almost certain to recover, whatever be the treatment. The acute cases terminate in from twenty-four hours to three days, and nothing seems to help them in the least; except perhaps that chloral hydrate gives them an easier death than they have without it. The last three cases of acute tetanus which I have seen I have treated severally by woorali, Calabar bean, and chloral hydrate. The results have been unsatisfactory as usual, and in the first case I believe that death was, if anything, hastened by the treatment. In these cases elaborate notes were taken of temperature, pulse, &c.; but as they reveal nothing not already well known, they are omitted.

CASE 1.—Roger P—, aged fourteen, five days ago had one of his little fingers crushed by machinery, and amputated on the third day after the accident.

March 18th.—Indications of commencing tetanus. From 4.20 P.M. subcutaneous injections of a solution of woorali were repeated at intervals of ten minutes, beginning with one-twentieth of a grain, and ending at 5.15 with a dose of two-fifths of a grain, without any effect having been produced.

19th.—10.15: Symptoms more severe; half a grain injected. No effect having been produced in fifteen minutes, another half-grain was injected, and five minutes had scarcely elapsed before a violent tetanic convulsion affecting the arms and muscles of respiration destroyed the patient. It is impossible to say how far the drug had acted in producing the last and fatal convulsion; but if it is to produce a good result in tetanus, and according to its physiological action, it ought to have a different effect.

CASE 2.—James C—, aged forty, on December 10th had his hand drawn into a hay-cutting machine driven by water power; and before the machine could be stopped, the hand was slowly chopped off, in lengths of about a quarter of an inch, as far as the basis of the metacarpal bone. There had been no bleeding, and the stump was placed in a carbolic bath.

On the evening of the 18th he complained of his throat being stiff, and of slight difficulty in swallowing.

Dec. 19th.—10 A.M.: Distinct trismus. Injected half a grain of the extract of the Calabar bean.—11.15 A.M.: Injected two-thirds of a grain.—1 P.M.: Injected half a grain, as he felt his jaw less stiff. My supply of the bean was now exhausted, and I had to wait till the

20th, at 9.45 A.M., when I injected one grain of the extract. He was suffering much from opisthotonos, and from the profuse diaphoresis so often seen in acute tetanus. At 1 P.M. the muscles of respiration were much affected, and I injected a grain and a half. At 3 P.M. he was no better, and I injected two grains. He died at 5.30 P.M. from sudden spasm of the respiratory muscles.

CASE 3.—Jude B—, aged thirty-two, was attacked by acute tetanus on the 28th of April, six days after amputation of the thigh.—8 A.M.: Gave him thirty grains of chloral hydrate, which had no effect, and was repeated at 9 o'clock, after which he went to sleep almost immediately. He awoke at 12 o'clock, when some nourishment was administered, and the dose of chloral repeated. The nurse was ordered to repeat the dose as often as the effect passed off, after administering what food and wine the patient could take.—4 P.M.: Nurse reported that when he awoke the difficulty of swallowing was very great.—At 9 P.M. I saw him awake, and found opisthotonos well marked. The treatment was continued during the night.

At 8 A.M. on the 29th he was much worse, and evidently sinking. At noon, when he awoke, it was quite impossible to get him to swallow anything, and the opisthotonos was very severe. A nutrient enema, containing forty-five grains of chloral, was therefore administered. I saw him at 4 P.M., when he was partially conscious, and he gradually sank till he died at 5.30.

In these cases it cannot be said that the treatment was of the slightest use, except that in the last case the chloral saved much suffering both to the patient and his friends. This could be formerly done with chloroform, but with much more trouble, and with no more satisfactory result. I fear that even chloral is not to prove of the value in the treatment of this terrible disease which some of the members of the French Academy recently predicted for it. The other two drugs are still more useless.

Wakefield, Aug. 1870.

NOTES OF A CASE OF HYSTERIA, ILLUSTRATIVE OF ITS MORAL TREATMENT.

By CHARLES J. CULLINGWORTH, M.R.C.S., &c.

THE following case is placed on record, not on account of there being anything new in the plan of treatment adopted, but simply because it presents such striking evidence of the value of moral influence and persuasion in dealing with the class of hysterical cases of which it may be taken as a fair type—the class, I mean, which is mainly composed of delicate, sensitive girls, who are constitutionally prone to develop the very diseases of mal-assimilation which their cases often simulate, and whose treatment consequently has to be conducted with caution and gentleness as well as great firmness.

Eliza C—, aged twenty-six, residing with her mother in Kirkgate, Leeds, was placed under my care in March, 1864. She had been delicate from birth, though never seriously ill up to the time of her going into service, at the age of sixteen. The work of a servant proved too much for her strength, and in October of the following year she gave it up, and came under the care of the late Mr. Radcliffe, the Poor-law district officer. At that time (October, 1855) she was suffering not only from great debility, but also from constant headache, and from paroxysms of pain at the stomach, frequently accompanied with vomiting, and occurring at all hours, without reference to the times of taking food.

The history of the next nine years is just the history of the ineffectual treatment of a confirmed invalid for supposed ulcer of the stomach. Leeches, blisters, and issues in abundance to the epigastrium, repeated change of air and change of doctor, rigid dieting, and drugs innumerable, were tried, until finally the case was given up in despair, and for the two years previous to my seeing her she had scarcely received any treatment at all.

In March, 1864, she was transferred to my care, as being at that time senior pupil to Mr. Beardshaw, Mr. Radcliffe's successor. Her condition was as follows:—She was pale, thin, and delicate, with a resigned and languid expression. She had been confined to bed for five years, and for three years had been unable to step on the floor. During the day she sat up in bed reading or sewing, and was occasionally taken out of doors in an invalid's chair. She was scrupulously clean and tidy both in her person and her surround-

ings, and received much sympathy and attention from the clergy of the parish church and their lady visitors. The lavish decoration of the walls with illuminated texts bore witness to the frequent visits of the latter.

There were no physical signs of disease in the organs of the chest and abdomen. She complained of pains in the epigastrium and left hypochondrium, variable in character, and fitful in their duration and time of appearance. There was constant nausea, with frequent vomiting. On some days she rejected everything, and on other days she did not vomit at all. At each catamenial period all these symptoms were aggravated. The bowels were confined; appetite poor; menstruation regular and somewhat profuse.

At first I took for granted the diagnosis of her many previous advisers, and proceeded to treat the case accordingly, with the effect of shaking my faith in the efficacy of every remedy I tried. On June 17th, when she had been under my care for three months, she first complained to me of peculiar creeping and pricking sensations along both arms, and aching of her finger-joints, with a sensation of choking sufficient sometimes to prevent her from swallowing her pills; and then it was that I was led to see clearly the true nature of the whole case. I now confidently assured her that she would certainly recover if she would but second my efforts.

The first thing to be overcome was the vomiting. I ordered her the following draught every four hours, and told her it would have so speedy an effect upon the vomiting that in a few days the medicine would be invariably retained:—Dilute hydrocyanic acid, two minims; tincture of valerian, thirty minims; aromatic spirit of ammonia, fifteen minims; water to half an ounce. In a week she was able to take her medicine without its causing sickness, and the pain in the left side was much less.

I daily cheered her with fresh assurances that certain articles of diet would now be found to cause neither nausea nor vomiting, that old-standing pains would gradually leave her, and that new ones would be short-lived. The stomach symptoms abated, and on July 15th I desired her to be dressed and to sit up for a short time, remaining up rather longer each succeeding day; and I ordered her the following pill three times a day: Sulphate of iron and disulphate of quinine, of each one grain; extract of lettuce, two grains. She received at first a little help in dressing, but presently I told her that she was now strong enough to dress herself, and she managed to do so. I then gave my attention to her walking powers. I desired her to stand upon the floor, encouraging her at first by allowing her to take hold of my hands, next time of my fingers, and then of one finger only, until she summoned courage to stand without help at all. The next step was to urge her to try to walk across the room, which was accomplished gradually, like the former lesson. Day by day I went to put my patient through her exercise, and day by day I was rewarded by being able to note a gain in her strength of will.

August 10th (nearly two months after commencing the treatment).—Vomiting occurs but very seldom, and without premonitory pain. She is strong, dresses herself daily, and sits up all day. She is now able to walk across the floor, lightly holding one's hand.

Sept. 13th.—She has gained flesh, and looks quite cheerful and hopeful. She can walk slowly across the room by the aid of a walking-stick. I ordered the prussic acid mixture to be discontinued, and a table-spoonful of Griffith's mixture to be substituted for the pills.

Gradually the walking-stick was thrown aside, by allowing her at first to carry it in her arms ready for an emergency, and so convincing her that it could at length be dispensed with.

Nov. 1st.—My note-book says: "She can now walk erect, and without any assistance, slowly across the room; and has walked up and down stairs with no other aid than the balusters. She has gained flesh, and lost all pain and sickness."

Dec. 7th (nearly six months after commencing treatment).—The record states that "she takes a little walk out of doors every day without help, and to-day has walked a distance of at least a mile."

Soon after this time I left Leeds, and my next note occurs after an interval of more than three years.

May 1st, 1868.—"I have seen Eliza C—to-day, and find her earning her own livelihood. She finishes woollen

shirts at her own home. She is well and in good spirits, and very grateful for what has been done for her."

July 9th, 1870.—I sought out my old patient, who is now living at the Armley School-house, near Leeds, having been provided with rooms there through the kindness of the vicar. She still maintains herself by sewing. She is extremely active and light-hearted, and looks stouter and healthier than I have ever seen her.

Such is a brief account of a case which, I think, may be safely left to point its own moral. I may just remark that I only regarded the administration of medicine as a useful auxiliary, and as a help to the patient's faith. Her complete and permanent recovery was due, above all, to the gradual imparting of my own confidence to her, so that the weakened will was, little by little, brought under her control again. Of course, such a plan requires of the attendant an immense expenditure of time and patience. But this cannot for a moment be weighed against such a result. Is it not indeed worth a far more serious sacrifice to rescue a patient from a cheerless and purposeless existence to the enjoyment of a life of healthful activity and independence?

Manchester, Sept. 1870.

NOTES OF A FATAL CASE OF METASTASIS TO THE DURA MATER OF THE BRAIN DURING ACUTE RHEUMATISM.

By HENRY PRIESTLEY, L.R.C.S. EDIN. &c.

CEREBRAL METASTASIS, though a universally recognised termination of rheumatic fever, is yet, I think, sufficiently rare to warrant me in recording a case which has just come under my observation in private practice.

On the 18th August I visited for the first time Mrs. W—, a pale, anæmic, delicate-looking woman, aged twenty-seven, who complained of severe pain in one knee, with exacerbations at night. On examination, it was found to be somewhat hotter than natural, and slightly swollen. Inquiry elicited no history of exposure to damp or cold, or of any previous attack. The pulse was soft, and about 90; no great thirst, and no acid perspirations. The case looked like one of idiopathic synovitis, being confined to one knee; but rheumatism was suspected, and the patient put upon five-grain doses of iodide of potassium three times a day, with a one-grain opium pill at bedtime, and the joint ordered to be enveloped in cotton wool and oiled silk.

According to expectation, the disease developed itself unmistakably in a few days, attacking the other knee and then the ankle-joints. The heart did not become implicated, and the fever was of a mild type. The patient was seen daily up to the 23rd August, and, no unusual symptoms presenting themselves, a favourable prognosis was given on that day in answer to inquiries from the patient's friends.

At 6 o'clock on the following morning I was summoned in great haste, and on my arrival, to my surprise, found my patient comatose and *in articulo mortis*. Her husband told me that up to 3 A.M. his wife had been very restless; that the pain had then suddenly left her joints, which she stretched out in corroboration of her statement, and expressed her belief that she should soon be better; she then dropped off to sleep, and though he noticed that she snored loudly he did not think anything of it until, at daybreak, he saw her ghastly death-like features and fixed eyes, when he hurried off at once for me.

No autopsy was permitted, therefore we can only surmise what was the state of affairs within the cranium. I hope that the history of the above will be of interest and service to young practitioners, and caution them to be wary of the prognosis they give in apparently uncomplicated cases of acute rheumatism.

Glossop-road, Sheffield, Sept. 1870.

A WOMAN named Cooper, housekeeper to Mr. W. Boyce, at Newmarket, was sitting near a table on which were some poisoned papers for the purpose of killing flies. A fly was seen to go to one of these papers and then to alight on the woman's nose, which was slightly scratched. The wound speedily became inflamed, in a short time her whole system became affected, and in about twenty-four hours she died.