

TINCTURE OF DIGITALIS AND CHLORAL HYDRATE IN
DELIRIUM TREMENS.

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HAVING, in the course of twenty odd years, seen numerous cases of delirium tremens under various kinds of treatment, it is with peculiar pleasure that I record the following very remarkable success as a result of chloral hydrate in conjunction with tincture of digitalis.

Mr. B., a Scotchman, aged 35, accustomed to army life, was for many years connected with the Indian service in the west. During this time, he acquired the habit of using alcoholic drinks, which has followed him till a few months ago, when he was induced to reform. He got on very well for a time, when the old appetite was aroused in him by the thoughtless use of some light beer which he made and sold in connection with his other business, and in which there was a free amount of Sanford's ginger. Strong drink was now called for, and, becoming incapable of carrying on his business, "he went on a time." Alcohol became more and more the substitute for his food, till his system became poisoned, his tongue parched and swollen, his face congested, his breath foetid and he could neither eat nor sleep. When I first saw him, he had neither taken food nor slept for nearly a week, and rejected everything which was put into his stomach; his mind was greatly agitated, and his whole muscular system was in a state of continual unrest. His pulse was feeble and frequent, amounting to 120, and could not be counted at the wrist on account of the commotion among the tendons. He had taken bromide of potassium, without effect, before my visit. A strong mustard plaster was applied to the pit of his stomach; when well under way, fifteen grains of chloral were given, and, in twenty minutes, twenty drops tincture digitalis. These were both retained and had a favorable effect upon the tremors. Ten minutes after the digitalis, a dose of thirty grains of chloral soon brought on a sleep of three hours, when he awoke with relief to his trembling and in a much better state of mind. A raw egg and some milk were then given with another portion of digitalis, and, in a short time, thirty grains more of the chloral. From this time, he passed off into a sleep of many hours and awoke refreshed. The digitalis was given three times a day for several days, partly to moderate the pulse which remained at a hundred, but mainly for its eliminating effects upon the kidneys; and small doses of the chloral as occasion required. An infusion of quassia with a return to solid food, as his appetite required and his stomach would bear, completed the cure, which, taken all in all, was the most satisfactory that could have been desired.

This was not a case caused by leaving off his cups, but the direct result of their excessive use. From the moment he came under

treatment, he was not allowed another drop, except what was in his digitalis. That he would have recovered without treatment is quite doubtful, since he was then in a gradually sinking condition and had not for days taken a mouthful of food which he did not instantly reject, even a teaspoonful of milk being as quickly rejected as it was swallowed, though it is possible that he might have been sustained by nutritious injections till the alcoholism wore away. Opium was obviously contra-indicated by the parched mouth and foetid breath, for whatever advantage might have been hoped for from sleep, which it might be expected to give, would have been more than offset by the increased retention of the alcoholic poison and other effete matters which required to be eliminated. The chloral then to produce sleep and to quiet the nervous agitation, and the digitalis to reduce the frequency of the heart's action and to promote elimination by the kidneys, was evidently the rational indication, which the results fully justified. The mustard over the pit of the stomach and a small dose of chloral at first were necessary, in order that the first dose might be retained and prepare the way for a full dose which could not have been given at once. Moderate doses of chloral, to be repeated as circumstances justify, are all that any case of delirium tremens is likely to require, since, as Dr. Murchison thinks, there are grounds to believe that the existing impurities of the blood in such a case favor the action of the chloral by its more speedy conversion into chloroform.

FRACTURES OF THE INTERNAL EXTREMITY OF THE CLAVICLE. By Dr. E. DELENS (*Archives Gén. de Méd.*, May, 1873).—The study of these fractures has been hitherto somewhat overlooked. They are not very rare, though the number of recorded cases is not large. The whole number given by Dr. Delens, including eight of his own, is only twenty-eight.

The fracture is almost always oblique, without much over-riding of the bones, and, consequently, with little shortening. Mobility and crepitation are less marked than in fractures of the shaft of the bone, and this, without doubt, in connection with nearness to the articulation, is the reason why they must have been confounded often with luxations. Tumefaction and deformity are much more prominent in fractures produced by muscular contraction than in those by external violence, as by a fall upon the shoulder, the most ordinary cause. On the other hand, mobility and crepitation, while frequent in the latter cases, are seldom present in the former. The direction and state of the fragments are obscured usually in fractures by muscular contraction, but are more easily made out in other cases. Pain on motion is not a constant symptom; but pain on pressure is sometimes an important aid to correct diagnosis. Consolidation takes place in about the usual time. Treatment requires no special directions. Mayor's scarf, or Sayre's bandage, for its simplicity, may be used when immobility seems increasing.