Original Communications.

ON THE TREATMENT OF ASIATIC CHOLERA IN THE STAGE OF COLLAPSE.

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AMID all the nostrums and theories daily thrust before the notice of the public, and claiming the usual degree of infallibility, it is cheering to find a thoughtful physician offering, as an excuse for calling attention to a remedy for cholera, "that it is in perfect accordance with every rational view of the disease." Fully coinciding with my old friend, Dr. Joseph Bullar, that the treatment to which he has called attention merits this description, I am anxious to give him, and others who may be disposed to carry out his experiments, that support and encouragement which I believe my experience is calculated to afford. If, as he says, and truly I think, a single case such as that which he relates "should lead any thoughtful physician who observed it to try the remedy again," it will be admitted that analogous treatment adopted by me in 1849, has still stronger claims on the attention of all who may be called upon to renew the struggle between medical science and a disease which has hitherto proved but too victorious. For Dr. Bullar will be as ready as anyone to acknowledge that a single successful case has, after all, comparatively little value.

In 1849, a considerable number of cases of cholera came under my care at St. Thomas's Hospital, soon after the death of my predecessor, Dr. Burton (who himself fell a victim to the disease), and when the epidemic was at its height. On first taking charge of the cholera-ward, I determined to give a full and fair trial to the following treatment. My patients, on their admission, were stripped and packed in blankets wrung out of hot water, as hot as it was possible for the nurses to use; large mustard-plasters were applied to the feet, calves, and abdomen; and the patients were then covered up with dry blankets and counterpane. This treatment, as in Dr. Bullar's case, was frequently complained of at first, and the patients would have rid themselves of it, had it been possible. Ice and iced drinks, with light fluid nourishment, were then given freely. The iced water was, for the most part, acidulated with mineral acids; and sometimes I gave small quantities of stimulants in a dilute form, or champagne; but, generally, no medicine till reaction was fairly established. Under this treatment I had, in the hospital, *sixteen consecutive recoveries*. They were, for the most part, in a state of profound collapse when brought in; but all, whatever the degree of collapse, were treated alike till reaction set in. In the subsequent stages, the treatment varied. But, after this cheering amount of success, by which I admit that I was greatly elated, there came, alas! a number of fatal cases under precisely the same treatment.

In private consulting practice, my experience was similar; that is to say, I met with a number of cases in which this simple treatment appeared to be highly successful, and others in which it failed. But the general result of my experience in 1849 was such as

to impress me very strongly with the conviction, that this sort of treatment was both the most rational and the most successful of any that I had tried, so far as regards the stage of collapse.

The *rationale* of the treatment I will not attempt to discuss; but I should like to know what evidence there is to sustain the assertion that "the rice-water secretion in the stomach is known to be a virulent poison." I know some disgusting experiments which directly negative such an assertion. Few physicians who have seen much of cholera will be disposed to deny that as yet we have very little ground for placing much confidence in any of the various specific forms of treatment that have been put forth; but there is now a considerable amount of evidence to prove that the simple treatment here described is attended by great relief to the chief sufferings of the patients, and is followed by success in many cases presenting all the worst features of the disease in its most dangerous stage. It has, moreover, the advantage of being readily and in almost all circumstances available. The hot wet blanket may be obtained even where neither a hip nor slipper bath can be had; and both mustard and cold water are easily procured.

No doubt this and all other modes of treatment will, as Dr. Bullar says, fail in those cases where, from the effects of a concentrated dose of the poison, "the disease begins with death". But this is only saying of cholera what may be said with equal truth of scarlatina, small-pox, or typhus. Most of us have seen cases of scarlatina where all remedies are manifestly as hopeless as they would be if the patient had taken a fatal dose of prussic acid or of aconite. Nor is it likely that our knowledge either of the pathology or therapeutics of cholera will be so much advanced by the study of the disease merely in this, its fully developed fatal stage, as by its careful observation in its milder phases, in the stage of premonitory diarrhoea, and in the important subsequent stage of secondary fever, as it occurs in cases that have not been complicated and aggravated by violent disturbing treatment.

In conclusion, I would beg to direct anew the attention of the profession at this time to the invaluable Reports of the Cholera Committee of the College of Physicians, as not only containing a vast amount of carefully sifted evidence on all points connected with the origin, spread, and pathology of this mysterious disease, but also as affording very important evidence corroborative of the opinion which it has been the object of these brief remarks to sustain; viz., that the simple treatment advocated by Dr. Bullar is in accordance with rational views of the pathology, and has been attended with no small amount of encouraging success.

NOTES OF CASES OF DIARRHŒA AND CHOLERA.

By G. K. HONEY PATERSON, L.R.C.P.E., L.R.C.S.E., Balbeggie, Perthshire.

DURING the past hot and dry month of September, several cases of diarrhoea occurred, of two or three days' duration, amongst young and middle-aged persons living in this country district, and who were pretty healthy previously to being attacked suddenly, without any assignable cause. All of them I have treated with either acid or alkaline mixtures and sedatives internally, with occasional sinapisms of mustard externally, according as the nature and symptoms individually seemed to indicate; each becoming well again speedily. I beg to subjoin also the following case of cholera, which happened

about the middle of September last, and may not be deemed uninteresting.

J. M., middle-aged, stout, and generally in good health, while employed in the country, and being much in the open air daily (during September last), had felt languid and more tired at evening than was usual with him, for a few days before being attacked. Previously to his supper-meal, he was seized with severe vomiting and purging. As evening came on, cramp ensued; and a messenger was sent off to summon my attendance immediately. On my arrival, he still had vomiting and purging, and was violently affected with cramp in the lower extremities. His voice was husky; the pulse feeble; the skin cold. The stools were watery and bilious-looking. I procured a warm bath with salt in it as soon as possible, and put him into it; but ere long he wished to be out of the bath, on account of the cramp seizing him; and he was put into bed. Still relief he had none; therefore I ordered ice to be got, which was fortunately soon procured from a kind-hearted neighbouring landed proprietor. The ice I applied often in a bladder to the spine of his back; but, there being no appearance or sign of speedy relief, I gave him the ice to suck internally, and also requested two individuals to take a large piece of ice in each hand and rub the parts cramped. They did so for some time, after which his suffering was much less; and also the motions from his bowels (latterly mucous) had greatly subsided. Nevertheless, as there was considerable coldness of surface, I applied sinapisms of mustard to the calves of the legs and the epigastrium, which induced a normal reaction, and he did well.

NOTES ON CHOLERA.

By R. W. WATKINS, F.R.C.S., Towcester.

[Read at the Annual Meeting of the South Midland Branch, 1859.]

[Concluded from page 416.]

3. *Treatment.* When the epidemic first commenced, I was induced by what I had read, and by what I had heard from friends who had extensive experience of the disease in large towns, as well as from the successful result of the few sporadic cases which had occurred in my own practice, to place reliance on the calomel and opium treatment. In the earlier cases, it was given in doses of two, three, or sometimes four grains of calomel, and a quarter to half a grain of opium, at intervals more or less frequent, according to the urgency of the case. Observing the rapid passage into collapse of some of these cases, I thought that calomel was too powerful a sedative; and that the specific effect of mercury—the restoration of the biliary secretion—might be produced by the hydrargyrum cum cretâ, which might have an equal effect with calomel in checking the vomiting, and which I had already found very successful in diarrhoea, both simple and choleraic. Accordingly, from August 9th to September 6th, the majority of cases were treated with hydrargyrum cum cretâ and opium. Brandy was given frequently in moderate doses; and external warmth was applied by means of hot sand, hot water, mustard plasters, turpentine fomentations, and every other available method. Cold water was given *ad libitum*, to allay the urgent thirst; and in many cases a weak solution of chlorate of potash was used as a common drink. In the collapse stage, chloric ether was given very frequently, with brandy, and occasionally port wine. In several cases, a mixture of chalk and catechu with opium was given; but in every case it was rejected almost as soon as swallowed, and its use was therefore speedily discontinued. Six cases were treated by dilute sul-

phuric acid and opium, which had been found very successful in choleraic diarrhoea; but it was much less so when cholera was fully developed.

At the end of a month, I found that fifty-one cases had been treated with hydrargyrum cum cretâ and opium, of which twenty-four had recovered, and twenty-seven died; five cases had been treated with calomel and opium, of whom two had recovered, and three died—making twenty-six recoveries to thirty deaths under the mercurial treatment with opium. In twenty-one cases, chloric ether had been given, of which twelve had recovered, and nine died. It had, however, been given in many of these cases alternately with mercurials and opium. When given with opium only, the recoveries and deaths were about equal. The hot-air bath was tried in four cases, but all were fatal; in one only did it give even temporary relief.

The result, then, of our first month's treatment, though very successful in choleraic diarrhoea, was very unsatisfactory when the third stage of cholera (to which alone the above statistics refer) had developed itself. The deaths from the commencement had been as numerous as the recoveries; and, during the last week of the four, they had exceeded them in the proportion of thirteen to nine, showing that the epidemic was increasing both in the number of cases and in severity. I had lost all confidence in the mercurial treatment, both from the unfavourable results, and from having observed that, in the recoveries from collapse, a decided improvement in the symptoms had commenced before the biliary secretion had made its appearance in the evacuations. I had also begun to doubt the propriety of using opium; for although, under the pressure of so large a number of cases of cholera and diarrhoea, we had been unable to take notes of cases (other than the brief memoranda on the prescription-cards), we had not failed to observe that a cessation of the vomiting and purging was by no means an assurance of the patient's recovery, that several cases had died in the collapse stage after the evacuations had ceased, and that some who recovered had continued to vomit and purge (though less frequently) until decided symptoms of reaction had commenced. We had already determined to abandon the mercurial treatment with opium; my assistant had commenced the use of calomel in small doses every ten minutes, as recommended by Dr. Ayre; and I was using chloric ether and other stimulants.

It was at this period that I read the first letter of Dr. George Johnson, advocating the use of castor-oil, and describing its success in the earlier cases at King's College Hospital. My previous experience seemed strongly to corroborate his views as to the eliminative principle of treatment, and I determined at once to adopt it. In the following twenty-eight cases, castor-oil was administered in twenty-one, generally in doses of two drachms, occasionally of half an ounce, in milk or suspended in mucilage; and the result was that, of the twenty-one cases, nineteen recovered, and two died. Of the other seven cases, five were treated by small doses of calomel every ten minutes, and of these four recovered, and one died; two were treated by hydrargyrum cum cretâ and opium, and both died. I also observe from my memoranda that one case, which had been treated in the second stage with hydrargyrum cum cretâ and opium for two or three days, passed into collapse; that the mercurial treatment was changed for castor-oil, and she ultimately recovered.

During the last month of the epidemic, cajeput-oil was used in a large number of cases, either with ether or with castor-oil; and it certainly had a very remarkable effect in relieving cramps, even when