

“ Nominal Return (A) of Persons attacked with Cholera in Coldbath-Fields Prison, from the 26th to the 29th instant inclusive.

NAME.	Date of Attack.	Age.	With Diarrhoea, or other Premonitory Symptoms.	Collapse without Pulse.	Remarks.
Jos. Catanach	June 26	25	Confirmed cholera	—	In relating these cases for the information of the Privy Council, I beg leave to observe, that the cholera made its re-appearance in this prison on the 3rd instant, with a degree of malignancy far surpassing the violence of the former attack; and that during the period between its arrival until the present time, upwards of 100 cases have occurred with different degrees of severity, out of which number twelve cases have terminated fatally; but I am happy to add, that the remainder are at this moment in different stages of convalescence, and that the disease appears to be gradually subsiding.
John Moore	ditto	46	Premonitory Symptoms	—	
John S. Gower	ditto	37	ditto	—	
James Sullivan	ditto	18	Confirmed cholera	—	
James Gravener....	ditto	37	Premonitory Symptoms	—	
Thomas Brenner....	ditto	16	ditto	—	
Thomas Green	ditto	19	ditto	—	
Thomas Francis	ditto	17	ditto	—	
Charles Morley	ditto	30	ditto	—	
John Brown	ditto	20	ditto	—	
Georgiana Harris ..	ditto	18	ditto	—	
Ann Morris	ditto	19	ditto	—	
William Ring	June 27	34	ditto	—	
William Thorn	ditto	16	ditto	—	
Godfrey Nokes	ditto	19	Confirmed cholera	—	
Richard Stewart....	ditto	29	Premonitory symptoms	—	
Henry King	ditto	14	ditto	—	
Henry Butcher	ditto	10	ditto	—	
Joseph Jones	ditto	27	Confirmed cholera	—	
Thomas Collins	ditto	24	Premonitory symptoms	—	
John Pratt	ditto	19	Confirmed cholera	—	
William White	ditto	21	Premonitory symptoms	—	
Caroline Thornton ..	ditto	24	ditto	—	
Elizabeth Leach....	ditto	19	ditto	—	
Mary Akerman....	ditto	29	ditto	—	
Mary Smith.....	ditto	29	ditto	—	
Elizabeth Isaacs	ditto	30	ditto	—	
Mary Bloomfield ..	ditto	22	ditto	—	
Eliza Groves	ditto	26	ditto	—	

HENRY WAKEFIELD, Surgeon.

Return (B).

Ann Smith	{ night of June 28	21	—	Yes.	{ Died half past 10 a.m. 29th instant.
Joseph Allen	June 29	32	—	Yes.	Improving.

HENRY WAKEFIELD, Surgeon.”

ON THE TREATMENT OF THE
MALIGNANT CHOLERA,

BY SMALL AND FREQUENT DOSES OF CALOMEL.

By JOSEPH AYRE, M.D., Hull.

AGREEABLY to the pledge which I gave in my last letter published in THE LANCET, I now proceed to report the result of my practice in cholera. When I first addressed you on the pathology and treatment of this disease, I had had but one case of it under my care, and when I last wrote I had had but three. They were, however, severe

cases of it, and they all recovered. Since that time I have had seventy-three additional cases, making the whole number seventy-six, of which sixty have been returned cured, five are under treatment, and four of them out of danger, and ten have died. The whole of these patients were attended at their own homes, and most of them under every possible disadvantage. The treatment pursued was the same in all, and was in strict conformity with the views of the disorder which I have advanced, and with that which I inculcated in THE LANCET as suited to it. The exclusive object sought for, has been to restore the secretion of the liver, and the means employed

for this purpose have been no less exclusive, and have wholly consisted of calomel and laudanum, given in small quantities and frequently repeated. The dose of calomel was one or two grains, and of laudanum one or two drops, given every five, ten, or fifteen minutes, according to the urgency of the symptoms, and duration of the treatment. The calomel was given alone as soon as seventy or eighty drops of the laudanum had been taken, or the purging and cramps were abated. The calomel was continued uninterruptedly until a substantial abatement of the disease was produced, and the only limit set to its use was in giving it at progressively wider intervals. In several late cases I have trusted to grain doses, with a drop of laudanum given with each, and renewed every five minutes for two or three hours, and then every ten minutes, until a decided impression was made upon the complaint, when they were repeated every twenty minutes, and afterwards every hour, until at length they were discontinued. The average quantity of calomel which I have given has been about eighty grains, and the highest quantity 176 grains. Soreness of the mouth has only occurred in about a dozen cases, and chiefly in those in whom the disease was least severe, or when it was continued after the collapse was wholly removed; for pending the continuance of that stage, no effects upon the mouth are produced by it. At the moment I am writing a patient has just come out from the collapse under this treatment, who has had a suppression of urine during fifty-eight hours, and who has taken nearly 150 grains of calomel in single grain pills, and yet without any soreness of the mouth, or any other inconvenience from it. He is now nearly convalescent. The average duration of the disease in those who recovered under this treatment has not been more than four or five days, and in a very few only were there any consecutive fever. For by the prompt and very liberal use of calomel in *small* and frequently renewed doses,—and it is, I may once more repeat, *indispensable* to their efficacy that they be small,—the secretion of the liver becomes early restored, and that inflammatory reaction in the hepatic circle is prevented, which would otherwise ensue as a consequence of its congested state. Hence, in many instances I have found the most rapid recoveries to occur in patients in whom the disease was most intense. A child (E. Soutter, of Wincombe) five years of age, who was literally “livid, cold, and pulseless” on the Wednesday morning, was walking out on the Saturday, recovered; whilst another child (E. Holdstock, of Machel-street) eleven years of age, whose attack of the disease

was far less severe, but whose treatment was at first far too inert, became affected with the consecutive fever as the result of it, and narrowly escaped after a fortnight’s illness, and after a plentiful employment of leeching to relieve it. In the former of these cases there was an early and complete renewal of the secretion of the bile, and a consequent remedy to the congestion, and the urgent symptoms which arose out of it,—in the latter the secretion was only very partially renewed, and the result was, an inflammatory state in the hepatic circle, and the consecutive fever as its effect.

There has necessarily been much variation in regard to the duration of the disease prior to my being called to it. In no instance has the disease proved fatal where I have seen it before the collapse has become established and the pulse extinguished. Many have recovered after this has happened, and some even after it has been so several hours. One half of the cases has been in women, and the other half was shared nearly equally by men and children. The most tractable cases have been of children, and the least so of men and the aged of both sexes. When the collapse is complete, and the patient is aged, or a male adult, the stomach in many cases appears insensible to every stimulus, and the calomel has no effect in any way either upon it or upon the complaint. When a favourable impression is produced under these circumstances of extreme collapse, it is generally rather two hours from the commencement of the treatment.

The characteristic marks of the disease that can alone be relied on as such, are the vomiting and purging; but especially the purging of ricey, broth-like, or gruelly motions, with an entire suppression of the urine, if the disease be not arrested. In every case excepting in young children, there have been cramps. In some the cramps were wholly confined to the lower part of the body, which was the case with all the patients that came under my care during several days. The intensity of the cramps furnished no criterion by which to judge of the intensity or danger of the disease. They will abate and be renewed whilst the patient is progressively advancing to recovery. The ceasing of the vomiting and purging of the peculiar fluids, whilst at the same time the weight above the chest is relieved and the pulse keeps up or is restored, are the best indications of the patient’s improvement. The renewal of the urine may be delayed for many hours after these signs of improvement, and the case will still terminate well.

In the cases which terminate favourably, the ricey motions become changed into those resembling tar, and these into others less

dark, until the natural faecal condition is restored. In some few cases I have had reason to believe that the motions were tar-like from the beginning, but these were of the milder form of the disease. When the disorder proves fatal, the stools before death are frequently changed from the ricey colour to the appearance of gruel of a reddish hue, and resembling the washing of recent flesh.

In conducting the treatment of this complaint, I have scrupulously avoided the admixture of other medicines with the calomel, that no error might be committed in the conclusions to be deduced from the practice. I have not exhibited a single emetic, or once employed bleeding or leeching, until after the stage of collapse had passed away, and then only on a few occasions. No inconvenience appeared to arise from an unrestrained allowance of cold water, nor any great advantage from much external warmth. I never used the vapour-bath, nor any other means of giving warmth than what the ordinary methods would supply, and indeed so directly have I aimed at restoring the secretion of the liver, and so fully and confidently have I relied on it as the great instrument for removing the whole train of alarming and distressing symptoms, that I have ordinarily neglected to resort to what have been accounted by most as the approved means for affording a temporary relief to them. When the fluid purging was excessive, I have used opiate glysters, and castor oil when the stools became black, and when no further calomel was wanted. I generally have endeavoured to see my patients every two or three hours during the period of danger, and to avoid any delay in beginning the treatment, have provided them at my first visit with a few pills, and the necessary doses of laudanum, until they could be procured from the cholera station.

I shall now detail very briefly the circumstances which appeared to lead to, or influence, the unfavourable termination of the ten fatal cases, that thus a more accurate judgment may be formed of the results of the treatment which I have recommended, and of the obstacles which prevented its greater success. The first case that proved fatal was a poor destitute woman, between fifty and sixty years of age, who had been recently and frequently affected with the lead colic, and who, from living alone, was not discovered to be in the disease until many hours after the commencement of the attack, and when she was livid, cold, and pulseless. She died in two days. The second was the mother of a large and destitute family,

who was induced from her own, or other's prejudices, to neglect the taking of her medicines when first ordered. She died in twelve hours. The third case was an infant, who was brought fully out of the state of collapse, and was in a favourable state for recovery, when the mother steadily refused to use a warm-bath and other needful means, and insisted upon its being left to its fate. The fourth was the case of a child twelve years of age, who had been declared by previous medical attendants to be in an utterly hopeless state of collapse, and *abandoned as such*, but who was fully restored from this state. On the fourth day after this collapse, the tongue had become clean and moist, the pulse calm and about 86, sleep natural, skin of a proper temperature and colour, and the secretion of the kidneys restored after seventy-six hours suppression, when an orange and some improper diet were given, and an irritation was set up in the stomach, which was soon communicated to the head, and which carried off the patient in the course of a few days. The fifth case occurred in a most destitute woman with a sick husband and a large family, who refused all assistance during many hours, and was afterwards greatly neglected. The sixth case was a young woman whom I found pulseless, and who for six hours before my visit had been treated profusely with stimulants, and with a most inordinate quantity of opium. The seventh was an old man in whom the disease operated fatally, by bringing into a morbid action some previously existing disease. The eighth was also an old man whom I first saw in the night, and in the most extreme collapse, and who had suffered long and severely from want of every kind. The ninth patient was a very destitute aged woman, who had been in the disease twelve hours, and, living alone, had concealed it. She was subject to fits of slight derangement, and was livid and pulseless, and apparently deranged, when I saw her. The tenth case was a man whom I saw only when dying, and who had been first seen in the night, and prescribed for by a medical apprentice. The poor man was subject to attacks of asthma, and appeared to be dying from an overwhelming congestion of the lungs. He died three hours after my visit.

I will not trespass upon your pages, or upon the time of your readers, by restating the views I entertain of the nature of this disease, or my reasons for the treatment which I recommend for it. Everything I have seen of the disease, and experienced in the treatment of it, serves but to confirm the opinion I had formed of both. The essence of the disease is an interrupted

secretion of the bile, and the *remedy is that which restores this secretion*. In the most intense forms of the disease, such a cause, indeed, may seem inadequate to account for its phenomena; but, like every other disease, it has its gradations of severity, and the mildest form of it maintains a resemblance to the severest, proving, as in the instance of the mild and confluent small-pox, their common origin and nature. It has been affirmed that the cases of the disease differ so much as to require a diversified mode of treatment; but the very contrary of this has appeared to me to be the fact, and the only difference in the treatment demanded to be made, is, chiefly in the frequency of the times for repeating the calomel, and the greater or less occasion for the subsequent employment of leeching and the antiphlogistic remedies. In every case there is a repressed secretion of bile, and in every case there is a necessity for calomel to restore it. Emetics and even stimulants may occasionally, and, as it should seem, by accident, restore it, and these last may sometimes even support the patient through the struggle, and thus appear to be the remedy. But their action is indirect, and their success is, in a measure, accidental, and must generally fail, whilst calomel, as possessing the specific property of promoting the secretion of the liver, is at once a medicine that claims not merely to be united with others in the treatment, but to be relied on as a specific in this complaint, and to be employed to the exclusion of all others. Such indeed has been the course I have pursued with it, and such has been the course pursued with it by my intelligent young friend Mr. Sharpe of this town, who has followed my method in every thing, and who having seen and especially attended with me nearly all the cases I have had to treat, assures me that his own experience in the result of the practice with the cases he has had privately to treat, completely corresponds with what he had observed with me, and establishes in his mind the same conviction which is fixed in mine, that calomel given in minute and frequently renewed doses, is endowed with a property of controlling and arresting it, which no other medicine, or combination of medicine, has ever had assigned to it, or will, if I mistake not, be ever found to possess.

Hull, June 28, 1832.

CASE OF

MALIGNANT CHOLERA

SUCCESSFULLY TREATED BY VENOUS IN-
JECTION.

Delivery of a Child on the 3d day.

To the Editor of THE LANCET.

SIR,—After writing to Dr. Abercrombie of Edinburgh, regarding the result of Dr. O'Shaughnessy's remedy (whom I had the pleasure of meeting in Newcastle), I have put it to the test, and have now much satisfaction in stating to you that I have been successful in my first case. It is now fourteen days since the operation, and the woman is perfectly well. I may send you the following outline.

Mary Cunningham, aged 36, and her husband, William Cunningham, both originally from Ireland, were admitted into the cholera hospital in the lowest state of collapse. I saw nothing for them but to try the transfusion; and I endeavoured to inject by means of the apparatus used for injecting subjects, but could not succeed, accordingly I left by the mail-coach for Perth, aroused Dr. H. M'Farlan about one o'clock in the morning, and obtained the loan of an injecting or transfusion apparatus for twenty-four hours. I lost no time in returning; the man was gone, but his wife was still alive. Dr. Bell saw her about half-past eleven p.m., and said she would not live much longer than her husband. He died about one a.m., and Mr. Morris, my assistant, had great doubts all night of her surviving till my return. I made an incision with a lancet through the integuments alongside the median basilic vein, introduced a short probe beneath it, then made a small aperture in the vein itself sufficient for the introduction of the small tube, and injected very slowly ℥ij of the solution, ʒi mur. sodæ, ʒi carb. sodæ, dissolved in ℥ij of filtered rain-water, heated to 110° and afterwards filtered, in the space of half an hour, keeping up the temperature all the while.

She had the following appearance previous to injecting: she lay on her back pulseless, breathing slowly and heavily, eyes sunk, glazed, turned upwards, and the eyelids half closed, and surrounded with the livid areolæ; mouth open; tongue cold and white; face collapsed and dusky; surface of body cold, and covered with the clammy exudation; hands cold, livid, and sodden, as if they had been soaked in water for a length of time; feet cold and livid; voice husky, and scarcely audible; and, in