early in the first stage, it counteracts the cause of the disease before it has time to produce serious mischief, and in such case the cure is both speedy and complete; if it be delayed to the later stages, it renders other appropriate remedies more effectual, by itself subduing the first exciting cause, which otherwise might tend to the perpetual reproduction of fatal mischief. The efficacy of musk over the cause of cholera, would appear indicative of its spasmodic nature; but theory is not necessary for the support of facts, nor are the latter sufficiently numerous to enable us to speculate profitably on the probable pathology of this disease. It may suffice to say, that I have found by experience that musk exercises a notable influence over the cause of cholera, be it what it may, and that a single dose of it, when early administered, leaves little or nothing else to do. The following case I am at liberty to allude to as one of this description; and I the more willingly select it, in consequence of its having been witnessed by another medical authority to whom the patient may refer.

Mrs. L., aged 51, of industrious and sober habits, living at 12, Smith's Gardens, City Road, in the vicinity of the Regent's Canal, was seized at nine in the evening with sudden prostration of strength, numbness and cramps of the legs and arms, and nausea; these symptoms continued to increase until twelve o'clock, at which time I saw her. I found, in addition, the pulse at the wrist feeble, and the temperature of the skin below the natural standard; all the appearances were those of a person in incipient Asiatic cholera. A medical gentleman, who was about to treat the case as one of the severest he had witnessed, resigned it into my hands. The medicines which had been prepared were consequently laid aside, and a dose of musk was substituted. Within five minutes every symptom of the cholera vanished; the skin became warm, a profuse perspiration made its appearance, and the patient described her sensations to be comfortable, and herself to be quite well; she rapidly convalesced without other medicines of any kind, save a few common aperients on the two subsequent days. It may be well to add, that there were at the time many fatal cases of the disease in the immediate neighbourhood.

It has been suggested that it is useless to propagate the knowledge of this remedy, since the quantity obtainable is not commensurate with the demand that would be established for it, and that, consequently, its price would soon place it beyond the reach of all but the affluent; the unpropitious circumstances attending an English winter, may probably make this latter re-

mark pertinent, but it offers no argument that we should refuse the protection which even a limited supply is capable of affording. I therefore recommend to those who wish to possess themselves of an antidote, that fifteen grains of musk rubbed into a powder with a lump of sugar, should be kept ready to be mixed in a wineglassful of cold water, and be taken on the first approach of any unusual symptom bearing resemblance to cholera; I have given it to a great extent, and never knew it under any circumstances do mischief.

I am, Sir, yours, &c.,

R. LAMING, Surg., &c.

48, Finsbury Square, Oct. 5, 1832.

Since writing the above, I have had occasion to employ musk in the case of a member of my own family, in whom the symptoms of cholera were making rapid progress. Within a few minutes after taking the dose, the nausea and alvine action ceased, the leaden hue and coldness of the skin gave place to a more genial appearance and warmth, the pulse rapidly rose, the few cramps which had been experienced were not repeated, and nothing remained to be done but to moderate the restorative action by the most common means.

R. L.

TREATMENT OF THE MALIGNANT CHOLERA

AT

LIVERPOOL,*

AT THE CHOLERA HOSPITAL.

In the Form of Bilious Diarrhœa.

WE have found it best to take blood from the arm, following this by the administration of submuriate of mercury, in doses not exceeding five grains (varying according to age), and combined with opium, the maximum quantity being one grain and a half, this combination repeated, or not, as appeared necessary. When pain or uneasiness has been felt in the chest, mustard cataplasms were applied to the abdomen. In a few hours after taking the powders, a moderate quantity of castor oil, with a few drops of laudanum in peppermint water, generally afforded relief. It will be sufficient to state, in proof of our success with this practice, that out of 200 persons attacked in the Refuge house, it was requisite to remove only sixteen to the hospital, of

* The five documents subjoined were all communicated, in a rather longer form, by the Central Board of Health.

which number four died, thus leaving 184 cases of recovery from the first stage, and twelve recoveries out of sixteen cases in which the disease was fully formed; in all, 196 cures without consecutive fever. Of the four who died, three were in a state of collapse a very short time after the illness commenced, and before the medical attendants saw them; the other died of the cerebral affection so frequently accompanying consecutive fever. The twelve who recovered from the second and third stages, had neglected informing us when they first felt unwell, or in all probability they would have been cured without going beyond the first stage.

In that of Rice-Water Evacuations.

When the evacuations had assumed the peculiar character, if the patient complained of pain, or a sense of weight and uneasiness in the chest, bloodletting has been clearly indicated, whatever the state of the pulse may have been; and we have found, that when the pulse was even so feeble as scarcely to be felt, it has generally improved under the abstraction of blood, which at first flowing slowly, and appearing nearly black, has gradually become more fluid and florid. But when the evacuations have been very numerous, and we found the pulse did not soon improve under bleeding, it was necessary to check the flow, to prevent complete and fatal collapse. The remainder of our treatment consisted in exhibiting small doses of calomel, with minute quantities of opium frequently repeated, with the view of producing mercurial action in the system (and we have not lost a single patient on whom the mercury acted, to the extent of causing *ptyalism*, however slight); mustard cataplasms to the abdomen; when the purging was excessive, enemata, consisting of laudanum and starch-water; the vomiting and thirst combated by saline effervescing draughts in small quantities; the cramps and spasms of the muscular parts relieved by liniments composed of camphor, mercurial ointment, opium, and spirits of wine or turpentine; coldness of the extremities removed by the application of heat, and the patient allowed to drink repeatedly of *hot tea* and gruel. By this practice, our successful cases were carried through the worst stages of the disease. When mercurial action was first excited, there was no consecutive fever whatever. In some cases, however, the fever existed *previous* to the use of mercury and opium, and those cases terminated successfully *only* when the combination alluded to affected the system. We have beneficially used various preparations of the mineral so often mentioned, keeping one object in view, that of causing *ptyalism*, which, with

the affection of the mouth in some peculiar constitutions, were the most troublesome symptoms we had to remove, after succeeding in our principal endeavour. It has been said, that when a patient lived long enough to have his system mercurialised, he would have recovered under any treatment, but there is more ingenuity than sense in that remark. We have seen *ptyalism* produced in a very few hours.

In the Stage of Collapse.

We have seen some cases of this description relieved by bleeding, which must be resorted to with extreme caution. The most beneficial course has been the exhibition of calomel and opium in small, frequent, stimulating doses; the internal use of small quantities of camphor dissolved in very moderate portions of brandy (the free internal use of stimulants is decidedly injurious in any stage of the disease), using the most powerful external irritants, applying heat to the surface of the body; administering enemata composed of stimulating ingredients, as spirits of turpentine and decoction of oats, or spirits and starch-water; and allowing gruels, tea, &c., as *hot* as the patient can bear to drink them. The majority of cases reported by us to the Board, as enumerated in the annexed report, were in the stage just under review. Nineteen out of twenty of these patients received in the earlier period of our attendance in the hospital, had passed the stage of "*rice-water evacuations*." Two-thirds of the cures, stated in the official report, had been collapse cases.

We have tried every mode of treatment, from the "*saline remedies*" to the allowance of cold water *ad libitum*, and have been compelled to discard them in favour of the plan of which you have an (imperfect) outline, and with which we commenced our practice in this hospital. It is probable that, at some future period, a more particular and detailed account of our treatment will be made public. We have the honour to be, Sir, your obedient servants,

W. W. SQUIRES, M.D.	} Hon. Phys.
J. HUNTER LANE,	
J. BERAN, Surgeon,	} Res. Surg.
W. TURNER, Surgeon,	
Cholera Hospital, Liverpool,	
Sept. 24, 1832.	

IN THE PRIVATE PRACTICE OF MR. BANNER.

I have had 186 cases of cholera under my care since its first appearance here; 72 in the first stage; 91 in the second stage, and 23 in the third stage. Out of these cases 12 have died.

My first object in the treatment of this disease has been to allay the irritation of