

suspected during life, and would probably have never been known at all, but for the post-mortem examination. It often happens, that simple stricture of the rectum goes on to a most extraordinary extent, and the patient ultimately dies, not from the affection in the rectum, but from some other disease, which is the consequence of it.

In malignant contraction, however, there are characteristics by which you can always discover the disease in its early stages; in fact, no man who has a malignant affection in the rectum ever fails mentioning it; his suffering is so acute, that he is compelled to seek the advice of his surgeon, and that at a very early period; whereas common diseases of the rectum are often kept by patients to themselves. They do not experience much pain from them, and they would rather bear that than what they are pleased to call, expose their complaint. But in malignant affections of the rectum, you have the most intense pain in the part, even in the very earliest stages of the disease; a smarting is felt in passing the stools, which patients will describe as feeling as if they had so many cuts over which you were passing a hot iron, or as if there were something grating the part with sand. Every now and then you have gushes of blood from the bowel as portions of it ulcerate, and in the latter stages of the disease you will have a most offensive discharge, just such a discharge as you usually see accompanying carcinomatous affection of the uterus. Large portions of the mucous membrane frequently come away in the stools, and in conjunction with these local symptoms of irritation, the constitution equally suffers. The patient soon becomes emaciated and weak, and exhibits those fatal signs which a man who is an observer of diseased action, knows will generally be followed by death.

For these reasons you may easily discriminate malignant disease, but according to my experience, I confess to you that I do not believe malignant contractions of the rectum are so common as has been apprehended. You will read of scirrhus contracted rectum, but I have never seen many instances of what I should call *true* scirrhus of the rectum. I have shown you many cases of simple stricture of long standing, in which there was great thickening from deposition, but I think there is a distinctive difference between these appearances and those of true scirrhus. I mention this fact, in order that you may not set down all cases of stricture which may come under your observation in their early stages as being of malignant character, even though they are within reach of the finger, nevertheless you must not suppose that you will not have malignant disease beyond the

reach of the finger, because, though it usually occurs near to the anus, recollect it may take place at any other portion of the rectum.

Such is the morbid anatomy, such are the causes, and such the symptoms, that occur in the progress of stricture of the rectum, whether it be simple or malignant. I will not detain you on the present occasion by going into the treatment of the disease, because it would occupy much more time than you would now be willing to spare. I will, therefore, defer it till the evening of our next meeting.

INJECTION OF SALINE SOLUTIONS

IN EXTRAORDINARY QUANTITIES INTO THE
VEINS IN CASES OF

MALIGNANT CHOLERA.

Communicated to the EDITOR *from the* CENTRAL BOARD OF HEALTH, *London.*

LETTER I.

SIR,—I conceive it to be my duty to let you know, for the information of the Central Board of Health, that the great desideratum of restoring the natural current in the veins and arteries, of improving the colour of the blood, and recovering the functions of the lungs, in Cholera Asphyxia, may be accomplished by injecting a weak saline solution into the veins of the patient. To Dr. Thomas Latta of this place is due the merit of first having recourse to this practice. He has tried it in six cases, three of which I have seen and assisted to treat. The most wonderful and satisfactory effect is the immediate consequence of the injection. To produce the effect referred to, a large quantity must be injected, from *five to ten pounds* in an adult, and repeated at longer or shorter intervals as the state of the pulse and other symptoms may indicate; whenever the pulse fails, more fluid ought to be thrown in to produce an effect upon it, without regard to quantity. In one of the cases I have referred to, 120 ounces were injected at once, and repeated to the amount of 330 ounces in 12 hours. In another 376 ounces were thrown into the veins between Sunday at 11 o'clock a. m., and this day (Tuesday) at 4 p. m., that is, in the course of 53 hours, upwards of 31 pounds! The solution that was used, consisted of two drachms of muriate, and two scruples of carbonate, of soda, to sixty ounces of water. It was at the temperature of 108 or 110.

The apparatus employed for injecting

was merely one of Reid's common syringes (the fluid being put into a vessel rather deep and narrow) with a small pipe so fitted that it might easily be introduced into an incision in the vein of the usual size that is made in bleeding. It may however be well to keep in mind that, in the event of the operation being frequently repeated, it may be advisable to inject by different veins.

I forbear at present to enter further into particulars; nor have we had sufficient experience to speak decisively upon the subject. I may however mention, that the idea of having recourse to the remedy in cholera occurred to Dr. Latta, from being convinced (which I am also) that the evacuations upwards and downwards, are in reality the serum of the blood; that it is the duty of the physician to replace it as speedily as possible, by injecting a fluid as similar to the serum as can be formed artificially, directly into the veins, which has been done here with wonderful, and so far as we can yet judge, excellent, effect. An immediate return of the pulse, an improvement in the respiration and in the voice, an evolution of heat, an improvement in the appearance of the patient, with a feeling of comfort, are the immediate effects. The quantity necessary to be injected will probably be found to depend upon the quantity of serum lost. The object of the practice being to place the patient in nearly his ordinary state as to the quantity of blood circulating in the vessels.

I have, &c.

(Signed) ROBERT LEWINS, M.D.,
Fellow of the Royal College of Physicians,
and Member of the Leith Board of Health.

Leith, 6, Quality-street, May 15, 1832.

To W. Maclean, Esq.,
Secretary Central Board of Health.

LETTER II.

SIR,—I did myself the honour to address a letter to you lately, on the effect of injecting a saline solution into the veins of a patient labouring under cholera. We have not frequent opportunities now of trying this, which I denominate admirable remedy, as the disease is decidedly less frequent here: but I have seen it employed in two other cases in the course of the last two days, with the same excellent effect. Sixty ounces are generally thrown in at once, and repeated at the end of three or four hours. In a case to-day where I saw fifty-eight ounces injected (being the third time of performing the operation), the patient's pulse at the commencement was 180, very small and very feeble. She was excessively restless, with a feeling of great weakness and tormenting thirst. Before twelve ounces

had been injected, the pulse began to improve; it became fuller and slower, and it continued to improve, until, after 58 ounces had been injected, it was down to 110. Before I left the patient (a woman), her condition was altogether amazingly ameliorated. There was a fine glow, and a slight perspiration on her face; the veins on the back of her hands were well filled; the restlessness was removed, the feeling of excessive weakness gone, and the thirst had ceased! The pulse was under 100, and full, free, and soft! Verily, Sir, this is an astonishing method of medication, and I predict will lead to wonderful changes and improvements in the practice of medicine.

I have addressed you upon the subject, as the organ, from your high official station, of most speedily and effectually disseminating a knowledge of the extraordinary facts referred to. It will of course give me great pleasure to enter further into particulars upon any particular point on which you may require information, in reference to the cases that have come under my observation.

I have, &c.

(Signed) ROB. LEWINS.

6, Quality-street, Leith,
May 18, 1832.

In the hands of a man of ordinary dexterity, the common injecting apparatus alluded to in my last will be found to answer the purpose perfectly well; but if the practice I recommend is, as I hope it will be, generally adopted, it will, I conceive, be expedient to advise that a regular and perfect transfusion apparatus be used: at all events, to warn those who inject to beware of allowing air to get into the vein. The tubes, of course, must be filled with fluid as well as the pipe in the vein before commencing, and considerably more fluid than it is intended to use ought to be in the vessel from which it is pumped.

R. L.

ARSENIC IN ANGINA PECTORIS, &c.

To the Editor of THE LANCET.

SIR,—I am not aware that arsenic has been given, or recommended, in the very formidable complaint termed "Angina Pectoris," and having some time ago given this powerful medicine to two patients labouring under alarming attacks of that disease, who had been under an ineffectual plan of treatment for some time previous, with great apparent advantage, I am induced to make the profession acquainted with the fact through the medium of your excellent journal.