NOTES ON THE TREATMENT OF CURABLE DISEASES.*

BY W. S. OKE, M.D.,

*Extra-Licentiate of the Royal College of Physicians, Physician to the
Royal South Hants Infirmary, &c.*

THIS paper, excepting the cause of obstruction from inflammation, was read before the Southampton Medical Society, April 6th, 1852.

OBSTRUCTION OF THE INTESTINAL TUBE.

Intestinal obstruction, whether considered as to the frequency of its occurrence, the severity of its symptoms, the peril in which it at once involves life itself, or the anxiety felt for its result, is perhaps one of the most interesting subjects in pathology.

It may be caused—

- 1st. By inflammation.
- 2ndly. By spasmodic action.
- 3rdly. By over-distension.
- 4thly. By incarceration.
- 5thly. By impassable bodies.
- 6thly. By organic disease.†

I.—Inflammation.

Obstruction of the intestinal canal may be caused by inflammation, when either its peritoneal or muscular coat is involved, as in both cases the vermicular action must often be arrested—first, probably by the congested condition of the part involved; and, secondly, by the deposition of fibrinous lymph. An inflamed state of the mucous coat is not so apt to involve the muscular and arrest the peristaltic action, but, on the contrary, to increase it, and produce mucous diarrhoea.

The exciting causes of idiopathic enteritis are damp and cold, intemperance, constipation, acrid secretions, &c; and the predisposition to this disease is greatly increased by functional disorder of the liver, either exposing the alimentary canal to the effect of acrid secretions, or interrupting the hepatic circulation, so as to produce a congested state of the portal veins, and consequently of the intestinal capillaries. The part of the canal most liable to inflammation is the termination of the ileum, which is situated in the right iliac region. The following is a sketch of the symptoms:—Severe griping pain, which is constant, although it may vary in degree, and the pain may be acute also if the peritoneal coat be much involved. More or less tension of the abdomen, which is intolerant of the slightest pressure. Constipation and vomiting. Sometimes also there will be a local thickening of the parietes over the seat of the disease, from the deposit of plastic lymph upon the peritoneum. The pyrexia will be of the middle kind, tending to asthenia; the tongue furred,

and often somewhat brown along its centre; and the pulse will be small, hard, and 120 in the minute.

Should the disease be inadequately treated in its incipient stage, the obstruction will soon become more complete, with an aggravation of all the symptoms, which in so delicate a structure as that of the intestinal canal, is soon followed by the loss of its vitality, indicated by cessation of pain, subsidence of the abdominal tension, a sunken aspect, imperceptible pulse, and a coldness of the extremities. On the other hand, the disease will often yield to early and judicious treatment. Blood should be at once taken from the arm, to the amount of twelve or fourteen ounces. We are not to be dissuaded from the use of the lancet by the smallness of the pulse; and if it should rise after bleeding, and the pain remain undiminished, the venesection ought to be repeated. At the same time, looking at the asthenic tendency of the febrile action, caution will be required not to take away so large a quantity of blood as shall cripple the reparative power of the system; and if a second bleeding be deemed inadmissible, the seat of pain is to be covered with leeches, and their bites encouraged to bleed by hot stupes of scalded bran in flannel bags, which may be kept afterwards applied as a fomentation. In this stage medicine also will be found of the greatest use in removing the cause of obstruction. Five grains of calomel and one of powdered opium, in the form of a pill, are to be given at once, and at intervals of two hours a pill containing two grains of calomel and half a grain of opium is to be repeated till the pain and vomiting have subsided. Then, and not till then, we may venture to give two or three doses of either of the following mild aperients (1 and 2) every four hours till the bowels are acted upon:—

1.—R. Olei Ricini Opt.

Aque Cinnam;
Aque Pluvialis, sing. dr. iij.
Tincturæ Digitalis, m. xv.
Misturæ Acaciæ q.s. ad benè miscendum.

Fiat haustus quartis horis sumendus donec operaverit.

2.—R. Magnesiae Sulph., dr. iij.

Tincturæ Digitalis, m. xv.
Syrupi Zingiberis, dr. j.
Aque Menthae Pip., dr. ix.

Misce. Fiat haustus eodem modo sumendus.

The digitalis is added as a relaxant; and I have known it to conduce greatly to the effect of an aperient. But should these medicines be rejected after two or three doses they must be discontinued, and the calomel pill (3) steadily persisted in till the bowels are relieved. If ptialism be produced, success will be almost certain.

3.—R. Hydrarg. Chloridi., gr. ij.

Pulv. Opii., gr. 1-6th.
Confect. Rosæ., q.s.

Misce. Fiat Pilula secundâ quâque horâ sumenda.

Case.—A gentleman's son, five years of age, was seized with severe enteritis, accompanied with constipation and vomiting. Bleeding with leeches, aperients, injections, and the warm bath, having been adopted without effecting any movement from the bowels.

* Continued from page 139.

† Organic obstruction cannot, of course, be considered a curable disease. It has been added to render the subject more complete.

Calomel was persisted in at short intervals, with a view to set up a mercurialism in the system. In about twenty-four hours pytalism happily took place, when the obstruction yielded, and the boy rapidly recovered.

II.—*Spasmodic Action.*

In this case it would appear that there must be an excess of one of the forces of the vermicular action, for if the circular and longitudinal fibres were equally involved, the result would be, increased propulsion and not obstruction; but, on the other hand, when the nice balance between these forces is disturbed, and one of them is in excess, then the vermicular action must be arrested, and obstruction be the result.

Amongst the causes of this kind of obstruction are, saturnine poison, crude indigestible food, such as shell fish, uncooked food, acrid secretions, &c.

The severity of the spasm will depend, in great measure, upon the degree of disproportion which exists between the two forces of the vermicular action, and the saturnine poison appears to be capable of producing this disproportion in the greatest degree.

The symptoms are, vehement paroxysms of twisting pain about the umbilicus, obstinate constipation, vomiting of a green bilious fluid, and retraction of the abdomen towards the spine. The patient is often found in a bent position, pressing the seat of pain with his hands, to mitigate its severity. The tongue is not much furred, the temperature of the skin normal, and the pulse is generally under 100 in the minute.

Painters are frequently suffering from this kind of obstruction, from their being constantly employed in the use of the carbonate of lead; hence it has been called "*colica pictorum*."

This disease, so long as it does not exceed the limit of spasmodic action, generally terminates favourably; but if it should have assumed the character of inflammation, then the prognosis will be governed by such an aggravation.

The indications of cure are:—1st, to relax spasm; 2nd, to restore the normal peristaltic action. The first will best be fulfilled by a full bleeding, opium, and the warm bath. The second by purgatives. Fourteen or sixteen ounces of blood should be immediately taken from the system, followed by a pill, containing two grains of opium, and, if the continuance of the spasm render it necessary, one grain is to be repeated every three or four hours. This treatment will usually succeed in subduing the pain and vomiting, and sometimes act as an aperient also; but if it should fail of the latter effect, the pill (1) is to be taken every hour till the bowels are acted upon:—

1.—*R. Hydragryi Chloridi*, gr. j.
Extr. Coloc. Comp., gr. iv.
Olei Caryoph. q. s.

Misce fiat pilula omni horâ sumenda donec operaverit.

The warm bath may be used at this period—the temperature 100°, and the patient be immersed twenty minutes, taking care that the temperature be not diminished.

Sometimes the symptoms of saturnine colic are met

with in persons not employed in the use of lead. In such a case the gums are to be inspected, and if there be a blue line along their margin, we may be sure that the patient has been in some way or another exposed to the deleterious influence of this poison; and should he have no recollection of being so exposed, then the water he is in the habit of drinking and using for culinary purposes, is to be examined by proper chemical tests; for, however bright and tasteless it may be, if it contain a free acid, and be kept in leaden troughs, or conducted through leaden pipes, it will decompose the lead, hold it in solution, and become a saturnine poison. It is the free carbonic acid—which, in fact, makes the water wholesome, sparkling, and refreshing—that acts upon the lead; and this quality of water is found not only in various districts of Great Britain, but of every other country; and if persons residing in such districts, not having made themselves acquainted with this fact, reserve such water in leaden tanks, or conduct it through leaden pipes, they have to blame only themselves for having converted a wholesome and delightful beverage into one that is deleterious. I have myself seen, in several districts of Hampshire, the deleterious effects of lead held in solution in super-carburetted water, which appeared to be, and of itself was, of the finest quality. A gentleman, resident in one of those districts, was displeased with my opinion, that the water in his well was impregnated with lead, (although it was manifest one of his family had been long suffering from it,) because, forsooth, many in his neighbourhood were in the habit of resorting to his far-famed spring, from, as he supposed, its superior purity. A farmer, who lived in the middle of the New Forest, consulted me a few years ago for severe colic and constipation, and as several of his relatives from time to time had been attacked with the same disease, and eventually had fallen victims to it, it was supposed to be hereditary. Suspecting that they had been exposed to the deleterious effects of lead, I tested the pump-water used by his family, and found it holding a large quantity of the carbonate of lead in solution. This at once indicated the cause of the disease, and the means of preventing its recurrence.

Some practitioners have called in question the ordinary tests of lead-water, asserting that neither bichromate of potass nor sulphuretted hydrogen, can be relied upon; but when a patient is suffering from the symptoms of colic, when the margin of his gums show the blue line, and when the water he has been accustomed to drink is shown, by either of the above tests, to contain the solution of lead, there cannot surely be any reasonable doubt as to the cause of the disease, or the efficacy of the test.

The blue line along the margin of the gums was first noticed by Dr. Burton, and a most valuable discovery it is, not only on account of the accuracy of its diagnosis, but because it appears to give early information of the carbonate of lead being absorbed into the system. I could adduce numerous instances in my own practice, to show its diagnostic value, but two brief examples will suffice:—

In the summer of last year I was requested to visit a small tradesman, residing in the country, who was suffering severely from intestinal obstruction. As the attack could not be accounted for by any ordinary exciting cause, the gums were inspected, and a well-marked blue line was observed along their margin. As he had not been in any way meddling with paint, the water he was in the habit of drinking was examined by the bichromate of potass-test, and it was found to be largely impregnated with the carbonate of lead. Under a modified degree of the above treatment he recovered, and by avoiding the saturnine causes, the disease will probably never return.

The following case is one of the secondary effects of lead, and I shall mention it in this place, as it showed the blue line in a very remarkable manner:—I was requested to visit a publican and his wife, residing near Otterborne, in Hampshire. The woman had been long confined to her bed, from paralysis of the lower limbs. The husband could manage to walk about the house, as his loss of power was chiefly in the upper extremities. On inspecting his gums there was not only a distinct blue line along their margin, but also a corresponding blue line, as deep as indigo, upon that part of the membrane of the cheek which came in contact with the line upon the gums.

It is almost needless to add, that the water, which they had been accustomed to drink, and which was conveyed through a leaden pipe from a well at some little distance, was found to be saturated with the saturnine salt.

When, from other exciting causes, there is produced a less amount of disproportion in the vermicular forces, although enough to obstruct the bowel, there is a manifest difference in many of the symptoms. Instead of a retraction, there may be a fullness of the abdomen. The pain is more of a persistent, aching character, than returning in vehement paroxysms; and there is less vomiting, indeed sometimes there is none at all.

The curative indication in this case is much the same as in the last,—viz., to subdue the action in excess, and to restore the normal vermicular function of the intestine. If purgatives have failed, they ought not to be persisted in, as they will rather increase the spasmodic action than remove the obstruction. Blood should be taken from the system, and by leeches from the epithelium of the rectum. Opium and calomel are to be given in such doses, and at such intervals, as the degree of pain may require; and this kind of colic will generally be governed by more moderate doses of opium than those prescribed for the "*colica pictorum*." It will be sufficient to commence with one grain of opium, and three of calomel, and this dose may be repeated in an hour, if it should have given no relief, after which it may suffice to give two grains of calomel, and half a grain of opium, every two or three hours, till the pain has ceased. In this case, also, these means will sometimes act as a purgative, as the following case will show:—

A man, of middle age, and married, who had lived in the capacity of a groom in Hertfordshire, came to

Southampton, and took a beershop in one of its close streets. He soon became ill from a disorder of the hepatic function, which resulted in intestinal obstruction. The medical gentleman in attendance had given him purgatives of different kinds, with calomel and opium, but without any effect upon the bowels. As he had been constipated for some days, I was requested to see the case in consultation. There was severe pain of the abdomen below the umbilicus, which was somewhat full, and dull under percussion; there was not much vomiting; his tongue was furred; his urine high-coloured; his pulse not much above the normal number; and his aspect good. I advised that fourteen ounces of blood should be taken from the arm, and that one grain of calomel, and half a grain of opium, should be steadily persisted in every two hours, without any purgative; the following morning I found that he had passed a quiet night, but had had no stool. The blood was not buffed. The pills were ordered to be persisted in every three hours. Early the next day he had a copious discharge from his bowels, of a bilious character, and he was speedily convalescent.

If, however, the bowels should remain inactive, they may be gently solicited; and it will be far better to do this by emollient glysters than by purgative medicines, as by the latter there will be the risk of bringing back the vomiting, and aggravating the spasmodic pain.

Case.—A gentleman, from having been studiously occupied in a warm close room, became bilious, costive, and low-spirited. These symptoms resulted in pain and obstruction of the bowels; the pain was of a severe aching character, situated below the navel, and this part of the abdomen was full, but not tender under pressure. There was no vomiting nor febrile disturbance to any amount. The tongue was furred, and the urine high coloured; various purgatives were taken at intervals, without the slightest effect, and he was bled from the arm to fourteen ounces, and afterwards every effort was made, both internally and externally, to bring him under the salivary action of mercury, but in vain. Drastic purgatives were next tried, and were kept down, but instead of acting upon the bowels they greatly aggravated the pain. Leeches also were applied to the epithelium of the rectum. As all these remedies afforded him no relief, and as he had been constipated several days, he resolved, as a last resource, to give himself, every three hours, a glyster of the muriate of soda, olive oil, and gruel, with Reid's syringe. This treatment he continued till his strength was almost exhausted, when he had the satisfaction to feel the obstruction give way. The faecal discharge was partly clay-coloured, and partly black, accompanied with a quantity of venous blood, the result probably of a congested condition of the mucous coat of the intestine. Evacuations of a dark colour, mixed with blood, were frequently passed for several days, when the secretions improved, and he slowly recovered.

Disorders of the hepatic function, as in the two last cases, are often the predisposing cause of this kind of intestinal obstruction also; and when overcome, the faecal discharges are sometimes observed to be of the

colour of tar; but this appearance does not represent what has been termed *melæna*. The difference is this, that in the former the base of the colour is bile, in the latter blood.

During the period of convalescence it is of great importance to make choice of mild unirritating aperients, avoiding all drastic purgatives. The best will probably be Nos. 1, 2, 3, or 4.

1.—R. Olei Ricini Opt.

Aquæ Cinnamoni, utrq., dr. ij.

Syrupi Zingiberis, dr. j.

Aquæ Destillatæ, oz. ss.

Misturæ Acaciæ q.s. ad benè miscendum. Fiat haustus mane pro re natâ sumendus.

2.—R. Mag. Sulph., dr. ij.

Tincturæ Hyoscyami, m. x.

Tincturæ Card. Comp.

Syrupi Zingiberis, utrq., dr. j.

Pulv. Tragac. Comp, ser. j.

Aquæ Anethi. ad., oz. iss.

Misce. Fiat haustus.

3.—R. Pilulæ Hydrarg., gr. iij.

Extracti Jalapæ Aquos, gr. iv.

Divide in pil. ij. omni alternâ nocte sumendas.

4.—R. Hydrargyri cum Cretâ, gr. iij.

Pulv. Rad. Rhei., gr. v.

Syr. q.s. Misce et divide in pilulas duas pro re natâ sumendas.

But when the obstruction has been caused by the poison of lead, the dilute sulphuric acid is to be combined with the aperient, as recommended by Liebig, with the view of converting the soluble salt of lead, that is acting as a poison in the system, into the sulphate, which is insoluble, and therefore harmless. I have found No. 5 very beneficial in patients suffering from the secondary effects of saturnine poison.

5.—R. Magnesiæ Sulph., oz. ss.

Acidi. Sulph. Dil., dr. j.

Syrupi Zingiberis

Tinct. Cinnamoni Co., utrq., oz. ss.

Tinct. Hyoscyami, dr. j.

Aquæ Pimento, os. iv.

Misce cap. quartam partem, omni mane et meridie.

III.—Overdistension.

Obstruction from overdistension may be caused by large evolutions of gas or by fæcal accumulation; but although the former may occasionally obstruct the bowel, *per se*, by inflating it beyond the power of contraction, such inflations are more commonly the effect rather than the cause of the obstruction, as will be hereafter shown under another head; the latter, therefore, will be principally considered in this place.

Obstruction, occasioned by fæcal accumulation generally occurs in some part of the large bowel, and it is probably produced in this manner. The patient, from sedentary habits and a torpid state of the hepatic function, becomes costive, and every day or every other day has a dry insufficient stool. This goes on for some time; but as he is free from pain, does not feel ill, and has his usual appetite, he takes no particular notice of this state of his bowels, and does not deem it necessary to have recourse to any aperient, till at length,

from the gradual accumulation of the fæces in the colon, he can pass no stool at all, and is seized with pain, vomiting, and all the symptoms of intestinal obstruction.

The diagnosis in this case will become sufficiently plain from its history; and by tracing carefully the course of the large bowel from the rectum to the cœcum *caput coli*, we shall rarely fail to detect at what part of the canal the accumulation has taken place, where there will be fulness, tenderness, and dulness under percussion; but sometimes, doubtless, the diagnosis may be in some measure obscured by the inflation of the bowel.

The treatment of intestinal obstruction from this cause has to be conducted upon principles directly opposite to those indicated in the former. There the indication was to relax spasmodic action. Here it is to excite the action of the bowel.

When we have, by a careful examination of the symptoms, put ourselves in possession of the true nature of the case, it will be at first far better to endeavour to act upon the bowel through the rectum than the œsophagus. A good-sized, smooth, elastic tube, and well oiled, is to be gently carried up into the sigmoid flexure, as recommended by O'Beirn, and through it a copious enema of yellow soap and water, is to be pumped into the colon, when the tube is to be withdrawn. It is necessary to use a full-sized tube, with a smooth bulbous end, which I would advise every general practitioner to keep ready for such a purpose. It will pass up the winding curve of the canal much more readily than a small one, and be less likely to perforate or damage the bowel.

I have seen many instances of the success of this practice, of which I will briefly relate one. A few years ago I was requested to visit the proprietor of a yacht, in Cowes' Roads, who was suffering from obstructed bowels. He was of middle age, and had been living incautiously. Mr. Davids, the medical gentleman in attendance, had adopted many judicious remedies for his patient but without the desired effect. There was aching pain of the bowels and vomiting, and no stool had passed for two or three days. The abdomen was full, dull by percussion, and tender under deep pressure; but there was not much disturbance of the system. In consultation it was decided to throw up a copious enema into the sigmoid flexure by means of a long tube. Fortunately he possessed a capital one, which passed up admirably and conducted the glyster into the gut. The remedy was crowned with success, and the patient recovered. Sometimes our proceedings are stopped *in limine* by the rectum being stuffed with hard masses of fæcal matter. If so, they must be removed by some convenient instrument, till room be made for the tube to pass. A few hours after the colon has been injected in the manner above recommended, a purgative is to be given, and its kind must be governed by circumstances. If there is reason to think that the obstruction has been washed away, it will be sufficient to give four grains of the watery extract of aloes and three of calomel, in two pills every four hours, till they act; if not, the croton oil will be the best purgative,

of which one or two drops may be given in sugar or honey every two hours. If these means should fail to restore the action of the bowels, electricity and the sudden application of very cold water to the surface of the abdomen have been recommended. Of the former I cannot adduce any evidence from my own experience, although it would appear to be a most valuable remedy. The latter I have known to succeed.

H. R., a laundress in a gentleman's family, and unmarried, who had long been affected with valvular disease of the heart, was attacked in August, 1850, with sub-acute peritonitis, which was subdued by suitable remedies and by a very profuse hæmorrhage from the nose. On the 11th of September she was seized with severe pain of the abdomen accompanied with constipation and vomiting. As the symptoms were urgent, I was requested to meet her medical attendant from Christchurch, in consultation. I found her suffering severe pain on the left side of the abdomen, a little below the line of the umbilicus, where there was a fulness, painful under pressure. She was frequently sick, and the bowels still were obstructed. Her monthly secretion was present. There was no fever. It was agreed that two grains of calomel and half a grain of opium should be given every two hours, that a glyster (composed of half an ounce of the oil of turpentine, two drachms of the tincture of assafoetida, one ounce of castor oil, and one pint of tepid gruel,) should be thrown up the rectum every four hours, and that six leeches should be applied over the seat of pain. All this was attentively done and various other extemporaneous means tried; but although the pain and vomiting had considerably subsided under this treatment, no relief was obtained from the bowels, which had now been constipated five days. By this time the abdomen had become somewhat inflated, there was hiccup, the pulse flagged, and her recovery was almost despaired of. Her medical attendant, Mr. Davies, supposing that the peristaltic action of the bowel might be suspended by over distension, suddenly dropped upon the abdomen a towel saturated with very cold water, twice following, and then covered it with warm flannel. At the end of an hour the same thing was repeated. This was succeeded by frequent discharges of wind from the rectum, when the inflation subsided, and in a few hours the canal was copiously evacuated. In this case it is probable that the intestine first lost its vermicular power from faecal accumulation, and that it was afterwards still further incapacitated by the pressure of gas evolved from it. Such loss of power, the sudden application of cold in the above ingenious manner, was well calculated to restore, and it appears to have admirably succeeded.

Southampton, April 27, 1852.

[To be continued]

Provincial Medical & Surgical Journal.

WEDNESDAY, JUNE 9, 1852.

At the approaching Anniversary Meeting to be held at Oxford, Dr. COWAN has given notice that he shall propose, that in future the *Journal* shall be published and edited in London, weekly, instead of once a fortnight. Now, we think that so grave an alteration in the mode of conducting this organ of the Association, requires a little calm consideration beforehand, and we have therefore thought it right to place the matter before our readers at once, together with some of the objections which may be adduced to such a change of plan. There can be no doubt that a weekly journal is preferable in every way to a fortnightly one, if the difference of cost can be borne by the funds of the Society; but we can see no way of affording this alteration unless by an increase of subscription, or by the sacrifice of the volume of "Transactions," to both of which courses many of our Associates strongly object; and we are afraid that even Dr. COWAN's eloquence will scarcely convince his hearers of the desirability of the change, unless he can suggest some other means of effecting his object. With regard to the change of place for the publishing and editing the *Journal*, we may not perhaps be considered disinterested advocates, but we have a right to call upon Dr. COWAN to show some advantage to be gained by his proposition, and upon this ground we are ready to join issue, and to maintain in the first place, that it cannot be brought out in London so cheaply, if printed as at Worcester by a general printer, and certainly not so cheaply as it might be done in the country if printed by the Association itself, having its own office, &c., since rent and wages are considerably higher in London than in the provinces.

In a commercial point of view then, we repeat, that we are ready to show that no gain, but rather a loss, would be sustained by the change. Now, as to the Editorial department, it must be borne in mind, that this journal is the organ of a *Provincial* Association, and as such, would lose its distinctive character if conducted by a metropolitan Editor. It never has competed, and never can be made to compete, with the *Lancet* or *Medical Times*, which are purely