Original Communications.

REMARKS ON OBSTRUCTION OF THE BOWELS: WITH CASES.

By EDWARD COPEMAN, M.D., M.R.C.P., F.R.C.S., Physician to the Norfolk and Norwich Hospital.

AMONG the multifarious subjects which both interest and perplex the medical practitioner, not the least important are those of *constipation* and *obstipation* of the bowels; by the former of which terms I mean costiveness and difficulty in evacuating the bowels, and by the latter, the total inability to perform the act of defecation. My own experience assures me that either of these affections may terminate fatally, and that the latter is one of the most unmanageable diseases we have to contend with. Case after case defies the most attentive observation of the physician to detect the precise cause of the symptoms, and case after case proves the utter uselessness of his most strenuous and persevering efforts to afford relief. After death, the cause of the difficulty is in many instances disclosed; but so far from the cause being always of the same nature, it is found to be subject to the greatest variety, although the symptoms are always very much the same; and it appears to be next to an impossibility to predicate during life what a *post mortem* examination will discover. Neither, in any given case can we tell with certainty at its commencement, whether it will turn out to be *constipation* merely, or *obstipation*; and this uncertainty precludes, and very properly too, our entertaining, at so early a period of the case, any mode of treatment which may risk the life of the patient. On the other hand, if we allow the case to go on so long that we have been able to convince ourselves of the impossibility of overcoming the obstruction by medical means and appliances, we shall generally find that a state of disorganization of some of the abdominal viscera will have supervened, which, in all probability, will render surgical interference nugatory and inefficient. In no instance can it be shown that a correct diagnosis of disease is of more vital importance, and in none can this be more difficult to attain. Another great misfortune in regard to these cases is, that a defective diagnosis, or a wrong one, may lead to treatment that materially aggravates the danger; and when once the error has been committed, it can scarcely with any probability be rectified. For instance, should any given case of obstipation be considered, and treated, as one of simple impaction, and purgative medicines be freely administered, the attempt thus to urge on the contents of the bowels aggravates the mischief which is going on at the seat of the obstruction, and hastens the fatal issue. I believe, however, that in all cases, whether of simple impaction or of organic constriction, it is unsafe to persevere in the exhibition of purgative medicines; and that in cases which are curable, we shall attain our end more satisfactorily by allowing time for the action of moderately powerful medicines, than by too great an anxiety to "force a passage" by active and vigorous measures. The early symptoms in all these affections, are of a very similar nature, and there is generally a similar previous history connected with them. The patient is usually of a costive habit, and refers to several instances in which more than ordinary difficulty had occurred in getting the bowels relieved. Then suddenly there comes on a pain in some part of the abdomen, sufficient at first to cause sickness; and perhaps vomiting occurs once or twice, followed by temporary amendment. Some aperient medicine is then taken; but as it is not found to answer, a medical man is sent for, who gives perhaps a full dose of calomel followed by salines and senna, and probably by enemata, either simple or medicated. The result of this will most likely be either an evacuation of fluid matter from the bowel without relief to pain, or no evacuation at all; and then follow other symptoms which, to an experienced practitioner, give rise to serious apprehension. The abdomen becomes distended, tympanitic; the countenance looks anxious; there is a feeling that nothing but relief from the bowels can do any good, and the patient will make repeated attempts without success. The pulse becomes more feeble, but as yet there may be no great degree of sympathetic fever; the tongue may be clean, or very little furred, and the pulse not much increased in frequency. This is the most anxious and important period of the complaint;

now is the time when treatment will be successful or otherwise; the next stage is one of peritoneal inflammation or intestinal disorganization, and then scarcely a hope will be left of saving life. Should it be a case of impaction only, it is possible that clearing the rectum of hardened fecal matter if it be found there—persisting in the use of plentiful soap and water injections sent through a long tube as far as possible into the colon, applying warm fomentations and poultices to the abdomen (and leeches, if there be much tenderness); a strict adherence to a liquid diet, and the exhibition of mild unirritating or oleaginous aperients combined with henbane or conium, may be followed by satisfactory evacuation of hardened lumpy scybalous faeces, and security, for the time, to the patient. If a careful management of the bowels, and the frequent use of gentle medicine, as small doses of watery extract of aloes and rhubarb, or ox gall, be afterwards ensured, there may perhaps be no recurrence of the symptoms.

But should it be a case of obstipation, what then? It may be caused by a stricture of the rectum; by stricture of the ileum from a band stretched across or around it, either congenital or the result of a former attack of inflammation; by disease or displacement of the sigmoid flexure of the colon; by the escape of fecal matter into the *appendix vermiformis* with subsequent inflammation and sloughing of that extraordinary part of the animal economy; by intussusception of some portion of the intestine; by peritoneal inflammation; by a foreign body impacted in some portion of the intestinal canal; and there may be other causes, such as cancerous and other abdominal tumours. All these I have myself observed, and with respect to their fatality, there is but little to choose between them. Still, were it possible to arrive at a correct diagnosis, there cannot be a doubt that surgery might, in many instances, step in as an auxiliary or handmaid to medicine; and, if resorted to in good time, save the life of the patient. In the case of stricture of the rectum, opening the colon might afford time and opportunity to treat the stricture, and if not malignant, with success. And here I venture to state my opinion, that it is not from malignant stricture that fatal obstruction generally occurs; for the process of ulcerative degeneration which takes place in such diseases has a tendency to keep the canal pervious, and the patient dies of the cancerous cachexia and repeated losses of blood. In the case of stricture caused by a band passing over or around the intestine in any part of its course, if it could be ascertained, an operation would, in all probability, be now and then successful; for it does not appear from the experience of military surgeons, that cutting into the peritoneum is so dangerous a proceeding as civilians have generally considered it. But how is it possible to ascertain this state of things before death? Nothing can be more difficult; but in the absence of stricture of the rectum within reach of the finger, in the absence of bulging in the left lumbar region, with distension of the coils of the small intestines, and with pain between the umbilicus and spinous process of the ileum, I should be greatly inclined to advise an incision being made external to the epigastric artery, and an exploration of the bowel near the seat of the termination of the ileum in the caecum, with the hope that any discoverable cause of strangulation there might be successfully overcome. Inflammation of the *appendix* from the presence of fecal matter must be fatal unless nature chanced to save life by the formation of a fecal abscess; and the same may be said, I think, of intussusception, unless nature accomplish the removal of the invaginated portion of intestine by causing sloughing and separation of the strangulated part into the canal which includes it.

But suppose an operation determined upon for the relief of stricture of the rectum, or suspected stricture anywhere else, with bulging in either loin; where should it be performed? Is it better to open the descending or the ascending colon? At first sight it would appear preferable to make the opening into the bowel as near as possible to the termination of the canal; but, on reflection, I am not inclined to coincide in this opinion. In a case which occurred recently under the care of my colleague, Dr. Ranking, the stricture was in the rectum near the promontory of the sacrum, and was sufficiently dilatable to admit of the passage of an oesophagus tube both before and after death. All treatment, however, failed; and on examining the abdomen after death, there was no general peritoneal inflammation, but the *caecum* and *ascending colon* were in a state approaching perforation from sloughing; and if the descending colon had been opened by an operation in the left loin, it must have been entirely useless, for there was no great accumulation there, and the opposite side was the seat of the secondary mischief. Now it is my firm conviction, that whenever obstruc-

tions occur in the course of the large intestines, the accumulation will take place in the cæcum whether from inflammation or paralysis of that portion of the bowel, or from regurgitation; for the effect of obstruction lower down would be, during peristaltic action, to cause the contents of the colon to regurgitate until they were stopped by the ileo-cæcal valve, and they would necessarily accumulate in that portion of the gut which is not only the most capacious of the large intestines, but that in which its contents would have to encounter the opposing force of gravitation. I am inclined, therefore, to think that whenever the colon is opened, unless a large hard mass of fecal matter can be felt on the opposite side, it would be better to operate on the *right* side, and this for several reasons. 1. The operation is not at all more difficult on this side than on the other. 2. Here it is that accumulations and inflammations most usually take place. 3. An artificial anus in this situation would not be so inconvenient as on the left side, because the contents would neither be so fecal, nor so offensive at the commencement, as they would at the termination of the large intestines.

The following interesting case occurred at the Norfolk and Norwich Hospital, in a patient admitted under my care; and never was there a more striking example of the difficulty of forming a correct diagnosis during life—of the strong efforts to live on the part of the courageous sufferer—and of the inutility of the most anxiously conducted treatment, accompanied, as it was, by the most unrestricted opportunities of carrying into effect whatever means could be devised by the whole staff of the Hospital to rescue the poor man from an untimely death. The condition of things brought to light by the *post mortem* examination, shewed how impossible it was to have given relief by the remedies used, or perhaps by any others; and teaches the great and valuable lesson that we ought never, in a conjectural science like that of medicine, to be vain in our own imagination, nor unduly impressed with our own powers of judgment and discrimination. It teaches us also to pay all proper respect to the opinions of those who differ from us, and to persevere humbly and steadily in our attempts to unravel the mysteries and difficulties which continually beset our path. I will venture to affirm that no practitioner is disposed to take a more humble view of his own capability, than he who has had the longest and best opportunity of witnessing and treating disease; the effect of long experience and study generally being to dispel much of the assurance we possessed as tyros in our profession, when we were led to jump at conclusions which subsequent practical knowledge has shewn to have been premature and untenable.

CASE I. Constriction of the Ileum by a Fibrous Band: Operation for Artificial Anus; Death. Thomas Gibbs, aged 36 years, a shoemaker, living in Norwich, now of temperate habits; but about ten years ago, being then a soldier, he used to drink freely. He was one of three children; his father died of what was said to be abscess in the kidney; his mother was still alive and healthy. He was admitted into the Hospital, November 24th, 1855. His countenance was pale and anxious. He was not emaciated, but said he had lost flesh within the last few days. Fifteen years ago, he had a severe attack of small-pox; and some other kind of fever about twelve years ago, whilst cruising in the Pacific. Since that time he had had two or three attacks of severe pain across the epigastrium and abdomen, but no constipation. On the previous Thursday morning, he found that on attempting to pass a motion he had great difficulty; and was attacked soon afterwards with pain, more or less severe, in the abdomen, with almost continual vomiting. Medical advice was called in; and purgatives, castor oil, etc., and injections were administered, but he kept getting worse, and came to the hospital on Saturday afternoon. When admitted he had a warm bath, and in the evening, injections of warm water and olive oil. He said the last time he had a proper motion was on Tuesday. On examination by the finger, no feces were to be felt in the rectum; but on forcing the finger as far as possible, what appeared to be an incipient stricture might be felt. A middle sized tube was then passed and appeared to enter the stricture. An injection was thrown up, and afterwards some olive oil; and this was repeated several times with no better result than the bringing away a few *débris* of fecal matter. To all appearance the tube did not bend. A draught composed of chloric ether and laudanum was given every hour or two; and turpentine stupes were applied to the abdomen, which was very hard and tense, as well as somewhat swollen. The pain was increased by pressure, but the pulse did not indicate peritonitis, 100, feeble and small. The tongue was white and slightly furred, but

moist. He was passing urine freely; was troubled with flatus; but had no hiccup.

Nov. 25th. Another injection was given, but with no good result. The pain was not increased; his general condition was much the same as yesterday.

Nov. 26th. By manipulating the abdomen, fecal matter mixed with fluid might be heard, "rumbling." He vomited frequently; several pints of warm water were thrown up through a tube; after which, several small lumps of feces came away, accompanied with flatus. He afterwards took some wine and kept it down.

Nov. 27th. He had a bad night, rejecting almost everything he had taken; and this morning he stated that both the matters vomited, and the flatus escaping from the stomach, were very disagreeable and offensive. Pulse nearly imperceptible. The countenance was anxious. Attempts were made this morning to inject fluid, but it entered only the pouch of the rectum, and returned as injected. Fluid mixed with air could be felt and heard in the situation of the cæcum, and there was a general fulness in the course of the descending colon also.

7 P.M. He had been vomiting all day, the ejecta having a very fetid smell. The pulse was very small and indistinct. A consultation of the medical staff was now held; and, after careful deliberation, it was determined to open the descending colon in the left loin. The operation was performed by Mr. Norgate, by making an incision about four inches in length, midway between the last rib and the crest of the ileum. The abdominal parietes being divided, and a portion of fat removed, the bowel was reached and opened, but no feces escaped. The bowel was secured to the sides of the wound in the usual manner; some lint was put over the opening, and the man removed to the ward. One ligature only was required, the hæmorrhage having been very slight. A little chloroform was now and then administered during the operation, but not enough to produce insensibility. He was vomiting nearly all the time of the operation.

Nov. 28th, 4 A.M. He was sick about half an hour after the operation, but not since. Warm flannels had been constantly applied to the body.

11 A.M. Vomiting recommenced at eight o'clock. He had taken nothing but a little bread and milk. No fecal matter had passed either from the anus or from the wound. The pulse was stronger and better. The tongue was cleaner, and he said he felt better. The abdomen was as much swollen as ever. Warm water was injected through the wound, but only a few small pieces of feces came away.

9 P.M. Injection was again used through the wound and by the rectum. Water injected downwards by the wound, came out at the anus. Sedative mixture was ordered to be given occasionally.

Nov. 29th. He was weaker and vomited stercoraceous matter. What appeared to be the transverse colon was greatly distended and filled with fluid and air. A tube was passed in at the wound as far as it could be safely pushed upwards, (about six inches) and touched fecal matter, but when an injection was thrown up, no motion came away. A current of electro-galvanism was passed through the body as a *dernier ressort*, but with no good effect.

10 P.M. He was much the same. Another fruitless attempt was made to empty the colon by injection.

Nov. 30th. He was restless all night. He had passed some *air per anum*. There had been no vomiting from 10-30 till six A.M. He was evidently weaker, and his cheeks were flushed. He stated that when the galvanism was applied, he felt "something turning over inside his bowels;" and several times in the day he felt air moving about in the bowels.

11-30. A.M. His tongue was quite clean this morning, and his pulse not worse than yesterday; indeed, better than before the operation. The countenance was not unfavourable, but no feces escaped through the wound. The urine still passed freely. He was galvanised again this morning.

Dec. 1st. He was sick twice during the night; the quantity ejected was but small. He had taken two biscuits, five ounces of sherry in water, and a jelly, in the night, and some bread and milk for breakfast, which he retained. The tongue was clean; the pulse 120, more feeble than yesterday. The urine was high-coloured. He said he had no pain; but his countenance was again anxious, and he appeared to be gradually sinking.

Dec. 2nd. He had been vomiting stercoraceous matter all night. The pulse was weaker. The tongue clean. The upper part of the abdomen was very much distended, and a question arose as to what portion of the canal presented such an amount

of distension in the epigastrium. Two were of opinion that it was the transverse colon; another, that it was the small intestine; and two others, that the swelling was caused by wind in the stomach. To clear up the last point, it was suggested that an œsophagus tube should be introduced into the stomach; but on doing this, the swelling neither diminished in size, nor did any flatus escape. A liniment, composed of olive oil, laudanum and turpentine, was rubbed upon the abdomen. At six P.M. another consultation was held, at which it was determined that no further operative proceeding should be attempted, as the patient was evidently in a dying condition. Shortly afterwards he passed urine; also several scybala, of the size of walnuts *per anum*. In the night he died, and the nurse informed me that just after death, a large quantity of fluid fecal matter escaped by the wound.

POST MORTEM EXAMINATION made on December 3rd, about twelve hours after death. On opening the abdomen, it was found that the great protuberance across the body from the left to right hypochondrium was occasioned by distended coils of small intestine, adhering to each other by recent lymph. A large quantity of fluid, similar to that which had escaped through the opening in the left loin immediately after death, was found in the peritoneal cavity, from which cavity the above mentioned fluid had escaped through the wound, and not from the bowel itself. In the right iliac region, under where a blush of redness and some œdema had been discovered before death, there was evidence of considerable inflammation and sloughing of intestine; and a large quantity of fecal fluid had collected in the right lumbar region between the cæcum and abdominal wall, as if nature intended to form a fecal abscess there. The fatal lesion was in the ileum, about five inches from the ileo-cæcal valve, where it had been constricted by a band passing over it, apparently from the mesentery to the brim of the pelvis; several inches of this part of the ileum were in a sloughy condition and its coats had given away so as to allow its contents to escape into the peritoneal sac, the immediately surrounding parts being also in a sloughy condition. The cæcum and its appendix were healthy; and the termination of the ileum for about three inches from the valve was also normal. The ascending and transverse colon were empty or nearly so, and lay concealed and collapsed under the distended coils of small intestine. There was no stricture or impediment in the descending colon or rectum, but each contained a small quantity of fecal matter of the consistence of putty. It was attempted to pass a tube by the anus into the sigmoid flexure, but without success, as it was impeded by the curve of the sacrum, and would not take the turn of the bowel in that direction. We also tried to pass the same instrument into the transverse colon through the wound in the left loin, but it was found as impracticable after death as it had been before; and it was clear that more forcible attempts would have perforated the bowel, as there was a portion of the colon at about the distance from the wound to which the finger and instruments had been fruitlessly passed before death, which seemed to have very little more than its peritoneal coat to prevent its being opened into the cavity of the abdomen. The dissection was rendered very difficult and tedious by the extent to which disorganisation had taken place, but was most carefully and effectually accomplished by the assistant surgeon (now surgeon) Mr. Cadge, whose anatomical knowledge and experience in dissection are well known and appreciated.

CASE II. Fatal Case of Obstipation from Constricted Ileum.

Mr. —, aged 32, an active healthy man, chiefly employed as a shepherd, had been labouring under obstruction of the bowels several days, when his surgeon requested me to see him. I visited him in consultation on March 1st, 1854, and found him suffering from peritoneal inflammation in an advanced stage. There was redness of the integuments, as well as some œdema, over the situation of the ileo-cæcal valve, with dulness on percussion, indicating serious mischief within. He had been leeches, and treated with calomel and opium freely, but there had been no relief from the bowels since the commencement of his illness. He had now some colocynth and henbane pills, and a dose of castor oil.

I did not see this patient again until the evening of the fifth, when I found him in a state of collapse, moribund. There had been no relief from the bowels, the redness and œdema remained, and there was evident fulness in the right iliac and lumbar regions. A question was raised as to the propriety of opening the cæcum, but his depressed powers forbade the performance of any operation. He died the next morning; and, on examination after death, it was discovered that the termination of the ileum was the seat of destructive inflammation,

the bowels being glued together and to the omentum, under which there was a considerable quantity of serous fluid, causing the dulness and fulness in the lumbar regions. The cause of all this fatal mischief was a membranous band encircling the ileum, and constricting it so tightly as to cause complete strangulation, and almost sphacelus to the extent of several inches. The cæcum and colon were empty and collapsed; showing how totally unavailing must have been any such operation as that at one time contemplated, even had it been performed at an early period of the disease!

[To be continued.]

SCROFULOUS DISEASES OF THE EXTERNAL LYMPHATIC GLANDS:

THEIR NATURE, VARIETY, AND TREATMENT.

By P. C. PRICE, Esq., Surgeon to the Great Northern Hospital; the Metropolitan Infirmary for Scrofulous Children at Margate; &c.

III.—TUBERCULOUS DISEASE OF THE EXTERNAL LYMPHATIC GLANDS.

[Continued from p. 915.]

Mercury. Long before iodine was used as an antiscrofulous agent, even in the form of burnt sponge and various calcined sea-products, mercury had enjoyed an unequivocal reputation. From the earliest period it had been prescribed, with universal consent; and we have only to look back a few years into the history of medicine, to see how unconditionally this mineral was administered for all kinds of glandular enlargements. At one time it was exhibited in its pure state, as quicksilver; but with what advantages, the writings of ancient authors fully acquaint us. As calomel, it obtained most unenviable reputation as a specific for all kinds of glandular affections, and was oftentimes used in the same reckless way as for syphilis. As might be expected, this potent drug, in the hands of the inexperienced and ignorant practitioner, constantly did more harm than good; and the less inclined the glandular affection seemed to yield to the efficacy, or rather to the inefficacy, of the remedy, the more strenuously was it pushed, in the vain, but, alas! strongly implanted hope, that resolution would in time be effected. It was no uncommon event for individuals in a state of advanced tuberculous disease not only of the glands of the neck and other parts, but also of the lungs, to be salivated, not once, but frequently, in the belief that the sure virtue of the mineral would sooner or later be established.

But calomel was not the only salt of mercury that was in use. The bichloride, or what was formerly termed the submuriate, introduced by Van Swieten, was supposed to possess even stronger control over scrofulous affections, and especially those of tuberculous formation. Wiseman prescribed enormous doses of this salt, which were administered at night-time, and continued for an indefinite period. A single grain was not an uncommon dose for a child, which, as admitted by an able writer, acted "forcibly on the bowels of children, and often on the stomach too; sometimes producing a very distressing languor for the whole of the following day."

There can be no doubt that such practice tended greatly to diminish in the estimation of intelligent surgeons the reputed virtue of this and other preparations of mercury; and therefore it is not astonishing to find the same author, from whose works I have just quoted, stating that "in scrofula as a constitutional disease, these and all other preparations of quicksilver are very much less useful than they are commonly reported to be; nay more, unless I am very much deceived, the incautious use of them will remarkably aggravate such scrofulous affections as are present, and even give rise to others, which possess all the characters of scrofula, and yield to anti-scrofulous remedies." (Henning, *op. cit.*)

This salt was used generally in the light of a deobstruent; and, although we have freely acknowledged the injudicious way in which it was very commonly employed, still it is satisfactory to be able to admit that now, in some instances, it is employed with good effect. Perhaps, the late Dr. Plummer was greatly instrumental in procuring its moderate administration by associating it with guaiacum, sulphur, and antimony. When mercury is now administered, it is generally in the form of this pill, or as the liquor hydrargyri bichloridi (*Phar. Lond.*). My own experience militates against the acceptance of the drug as an active and trusty agent in the resolution of glandular en-