ORIGINAL COMMUNICATIONS.

A CASE OF INTESTINAL OBSTRUCTION
ARISING FROM INTERNAL STRANGULATION: WITH A TABLE OF CASES.

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THE increasing importance of that class of diseases commonly styled Intestinal Obstruction, and the large mortality which still attends these disorders, must be my excuse for occupying the time of this branch of the Association by the brief detail of a solitary case. Still, as isolated cases may yet contain some facts leading to the more successful treatment of the disease, I would direct attention to the case itself, and to the remarks appended to it.

CASE. About six months previous to the fatal attack, W. P., aged 16, a collier, suffered from an attack of constipation, attended by serious symptoms of inflammatory action in the cæcal region. These symptoms were relieved by leeches, calomel and opium, etc., the opium being exhibited freely.

On the night of Monday, October 1st, 1852, having had a slight motion during the evening, he went to bed in perfect health, but was roused during the night by a sudden attack of severe pain in the bowels, and almost immediately he vomited. He took some brandy, without relief; and early in the morning his mother came to my surgery, requesting some aperient medicine, which my assistant gave her. Recollecting his old attack, I called; and finding that the aperient had not acted, but that the vomiting had rather increased, I ordered it to be immediately discontinued. The boy's appearance was anxious; his tongue was coated, and already becoming dry; and his pulse was quick. The abdomen was tense, and slightly tender in the cæcal region, which appeared, if anything, more prominent than on the opposite side; there was no dullness on percussion, but rather resonance. Mustard poultice, followed by poppy fomentation, was applied to the abdomen. And

R_x—Pulveris ipecac. compositi gr. x.

Hydrargyri chloridi gr. ij.

Ft. pulvis omni horâ sumendus.

Sumat olei ricini ʒij mane.

I will not detail the progress of the case. Suffice it to say, that under the plan mentioned, he improved in every respect. The vomiting abated and disappeared; the tongue became moist; but although the oil was not rejected, it did not act. On the following day, I ordered him three grains of solid opium; and, about three hours afterwards, an injection of castor oil, with eight or ten drops of croton oil, was given. This speedily returned, bringing with it a very large, bulky, feculent motion, giving great relief, which lasted throughout the day. Small doses of opium were continued.

During the following day, October 20th, partial motions, less copious, and one containing blood (as reported), followed the use of injections; but towards evening, pain returned slightly, and although he did not vomit, his countenance was more anxious, and his tongue drier. From this time he gradually became worse. Opium was given freely whenever he was in pain, and relieved him for a time. Purgatives were omitted, and the vomiting did not return. Croton oil, tartar emetic, and other injections were employed without avail. The abdomen was more tense; the quantity of urine passed was scanty. On the fifth day of the attack, seeing that he did not improve, I began seriously to think of an operation, and expressed my opinion plainly to the parents, who consented to let me perform any operation I chose. The next morning, therefore, I sent for my friend Mr. Scott, of Newport, determining that, if his view of the case in any way coincided with my own, I would hesitate no longer. I found my patient considerably worse

on that morning; much weaker; delirious at times; and before Mr. Scott arrived, death terminated my hopes.

EXAMINATION OF THE BODY. On the day after death, I opened the abdomen, as I had intended doing during life, by an incision about nine inches in length, from above the umbilicus to the pubes. The distended intestines immediately filled up the opening; and among the convolutions I noticed one considerably darker than the rest. Having, however, determined to search for the healthy contracted intestine below the obstruction, I turned the convolutions on one side, and soon found the colon contracted, and white. I endeavoured to trace it backwards, but the distended small intestine interfered. Returning, therefore, to the dark convolution, I found that it was a portion of small intestine, about eight or ten inches in length; and on turning it aside from the others, the disease was easily exposed. A thin band of membrane ran from the termination of the appendix, and appeared attached to the cæcum. On gently touching it with a bistoury, it was divided, and the intestine released, and the strangulated bowel was directly filled with the gaseous contents of the intestine above.

REMARKS. *Diagnosis.* Without discovering the character of the obstruction, our diagnosis is incomplete. I am not going to enlarge upon this most important topic, but shall merely notice those symptoms which appear to direct us towards a class remediable, with very rare exceptions, by operative interference alone. For practical purposes, internal strangulation, intussusception, and twist or malpositions of the intestines, resemble each other in symptoms, especially in the character of the attack. In all it is *par excellence* sudden. Health and disease closely approach each other: the past has been health, its future a state of extreme suffering. Thus many cases resemble strangulated hernia; and, in fact, the diseases are often the same. Not only is there a change perceptible to the patient, but vomiting, as in the case related, may occur at the very moment of seizure, showing that some of the actual consequences of the disease supervene immediately: and vomiting generally is an early symptom. From my own limited experience, added to the examination of reported cases, I am compelled to think that the period when vomiting presents itself in the course of the attack, depends not, as some have supposed, upon the height of the obstruction in the alimentary canal, but upon the character of the obstruction itself; that when the disease consists in one of the three alterations just mentioned, there it is pre-eminently the early symptom, and *vice versa*. The reason is perhaps uncertain; but may it not be accounted for by supposing that, in these alterations, the vermicular action is arrested at once; and that, this returning upon itself, vomiting ensues? As ileus, the disease most likely to be confounded with these, is, if I may be allowed the term, a constitutional disorder, the symptoms altogether, and vomiting especially, are less sudden. In the table will be found a few cases where vomiting appeared early; but they do not belong to this class. Such are cases 118 and 136; but the previous history shows that the cause of its early appearance was rather connected with disordered stomach than obstruction of the bowels. A few other instances of sudden attack will be found in the table, but generally with some distinguishing feature denoting their character.

The history is an important help in diagnosis. Here inflammatory action had existed previously at the same spot; and it is very probable that membranous bands were then formed. The urine was scanty. By some this is supposed to denote the height of obstruction in the canal; but even allowing this, it does not inform us of the situation where the obstruction exists, and hence is of little value. The previous history, the prominence, and the pain, all pointed to the cæcal region. The latter symptom, however, cannot be relied on. In strangulated hernia, for example, how frequently is the pain referred rather to some point in the abdomen than to the hernial protrusion. In some cases, as No. 15 in the table, the pain has even existed on the opposite side to the seat of obstruction; and in opera-

ting, it is now generally considered that the pain should not lead us to prefer one part of the abdomen to another.

The sex of the patient has been considered to have some weight in the diagnosis of membranous bands; it being thought that the female sex are more exposed to their formation, from the mobility of the contents of the abdomen. Of forty-two cases mentioned in the table, thirty were males, only twelve females.

There is another important point in the case, which certainly misled me in the prognosis for some hours: I mean the copious action of the bowels, which followed the administration of the croton-oil injection. I am well aware that, in intestinal obstruction, the bowels are frequently relieved, the inferior portion alone evacuating its contents; but the relief, if any, is transient. It will be found by reference to the table, that where mention is made of the bowels, it is rather the exception than the rule that they should remain unacted on; but that relief does not attend their action. Here, however, relief was most marked. It was far from transient, lasting over twenty-four hours; and the motion was so copious, that it led me to hope that the obstruction was removed. Further, several less copious motions followed. The *post mortem* examination proved how fallacious had been the hope. From this, may we not deduce the general rule, that, when the relief following an evacuation in intestinal obstruction is not permanent, the disease is probably still unremoved; and that our treatment has been hitherto unsuccessful?

Treatment. Purgatives were omitted, experience daily proving this the more rational plan. Opium was freely given, and from it alone did the patient experience much relief. The vomiting diminished after the omission of purgatives; nor does it generally appear to be urgent where these are avoided. When it is so, total cessation from swallowing anything in bulk, so that the stomach may not be excited to action; the free exhibition of opium; ice, on which two or three drops of dilute hydrocyanic acid may be placed, with an occasional mustard poultice to the epigastric region,—appear to be the plans which meet with the greatest success. All kinds of aperients must especially be omitted, and all attempts at moving the bowels be confined to the lower portion of the canal. On the various remedies which have been adopted, and which from time to time have been successfully (?) employed at this portion of the tube, I will not enlarge. All the different remedies, from tobacco to simple warm water, have had their advocates. Of the depressing class, tartar emetic is the safest and most easily managed, having all the advantages without the deadly effects of tobacco. The gradual injection of large quantities of warm water has often relieved the patient; but still, in the successful cases, it is not always easy to determine the character of the obstruction. Nor should this portion of the tube be forgotten as a receptacle for nutriment, in the shape of strong beef-tea injections; sufficient opium being added to prevent their return. They may be given at regular intervals of a few hours, according to circumstances.

If we can be in some measure certain as to the diagnosis of these cases, the proposed operation appears to offer the sole rational grounds of success; and in this case I regret that it was delayed so long. As the *post mortem* examination proved, the diagnosis was correct; the case was comparatively easy. In performing the *post mortem* examination, I acted as if operating. The contracted intestine, though easy to discover, was difficult to trace backwards. Here, however, it would not have been necessary; for the strangulated intestine, being large, was easily brought into view, and its dark colour distinguished it at sight. In less favourable cases, the only guide to be depended upon is the collapsed intestine, which must be carefully and patiently traced until the obstruction is reached.

The following table contains a brief outline of the histories of 137 cases, collected from various sources. In all, either the disease was discovered by *post mortem* examination, or was otherwise evident. The exceptions to this are

the case of Mr. J. Soden's, No. 60, which, as he was present, I thought he might explain his own impression; and No. 61, a case of my own, in which I state my own impression. I may also state that many cases are not mentioned, which are elsewhere reported, merely because the character of the symptoms is so indistinctly portrayed in the author's remarks. The cases are arranged for convenience in three classes:—1. Cases in which the obstruction arose from causes exterior to the intestine; 2. Cases where the intestine itself formed the obstruction; 3. Cases in which obstruction was produced by faeces or foreign bodies within the intestine.

These cases may also be divided into those in which the symptoms appeared suddenly, and those in which the disease came on gradually. Of the sudden cases, no less a number than sixty-nine were cases of intussusception, internal strangulation by peritoneal bands or adhesions, or malposition; and many of the remainder have the sudden attack explained by the remarks appended. Of the gradual cases, nine belong to the class mentioned, but many are scarcely cases of obstruction.

Abstract of the Table.

	Internal strangulation.	Ileus.	Intus- sus- ception.	Ente- ritis, etc.	Stric- ture.	Scir- rhus.	For- eign bodies.	Total.
Sudden	49	4	20	2	2	3	4	86
Gradual	7	5	4	2	22	7	6	51
Total	56	9	24	4	24	10	10	137

Of the cases of ileus, three, Nos. 57, 58, and 59, reported by Dr. Abercrombie, have an indistinct history of the attack; and it appears to me that he has described their condition when he was called in to see them, not the history of the attack. No. 54 had nothing to distinguish it. Of the four cases of foreign bodies, one, No. 133, was attended by jaundice; the others, Nos. 134 and 135, were accompanied by paroxysmal pains, as in the passage of biliary calculi. No. 136 might probably have been diagnosed by attention to the history. Of the cases of scirrhus, etc., No. 118 owed its sudden nature to food swallowed unmastered; in No. 123, the disease could be felt; No. 99 had hernia also; while Nos. 117 and 122 were not to be distinguished.

Of the gradual cases, those of invagination were remarkably chronic; while of the five cases of strangulation, No. 114 had stricture of the rectum also, possibly the cause of death, while some of the others might also be distinguished.

In concluding these hasty remarks, I would ask, Is not the treatment of hernia most applicable to these cases? Release the intestine, and you destroy the disease. True it is, we may not destroy its consequences; but do not these frequently, if not constantly, arise from the delay? Such is the conclusion at which I have arrived; and, were I in the position of the patient, I would say, "Defer not that operation; call it not a *last resource*; for it is not so much its intrinsic danger as its tardy adoption that renders it worthy of this name." There is no longer that intense objection to opening the abdominal cavity which formerly existed. Women recover from operations for ovarian disease, and after the Cæsarean section, in which an important viscus is also wounded: why should they not also recover from operation for intestinal obstruction? Nor has success been altogether denied to those who have thought it expedient to give the patient the benefit of this *anceps remedium*. Case No. 19 is a case in point; a case in which the operator considered it less injurious to puncture the intestine in three different places, than to continue the manipu-

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Table of Cases of Intestinal Obstruction, shewing the Character of the Symptoms and the Nature of the Obstruction.

A. OBSTRUCTION FROM CAUSES EXTERNAL TO THE INTESTINE.

No.	Sex and age.	Character of symptoms.	Action of bowels.	With or without relief.	Cause.	Result.	Nature of disease.	Duration.	Authority.	Treatment: and remarks.
1	F. 50	Gradual: attack sudden.				D.	Obturator hernia.	4 wks.	Mr. Stanley, Lancet, May 1851.	History indistinct. While coughing, felt sudden descent of hernia in left groin. Operation without relief.
2	F. 55	Sudden.				R.	Obturator hernia.		Mr. Obré, Med. Chir. Soc., June 24, 1851.	Oper. in femoral region: reduction of strang. bowel.
3	F. 49	Sudden.	Yes.	No.		R.	Obturator hernia.	4 days.	Mr. B. Cooper, Med. Times, Jan. 20, 1853.	Explor. oper. in femor. reg.; accidental reduct. during exam. Died subsequently of bronchitis.*
4	M. 74	Gradual: attack sudden.			Fall.	D.	Diaphragmatic hernia.	9 days.	Mr. Erichsen, Lancet, Feb. 9, 1850.	Health ailing since fall; but attack sudden.
5	M. 14	Sudden.			Wnd.	D.	Diaphragmatic hernia.	2 days.	Med. Times, Feb. 5, 1853.	Usual remedies.
6	M. 27	Sudden.	No.			D.	Mesocolic hernia: jejunum and ileum between layers of left mesocolon: ileum constricted 2 inches above ileo-cæcal valve, by sharp edge of mesocolon.	41 hours.	Dr. Peacock, London Journ. of Med., Oct. 1849.	Usual remedies to procure action of bowels and relieve vomiting. The hernia evidently of long standing.
7	F. 24	Sudden.	No.			D.	Mesocolic hernia: mesocolon falling over and strangulating jejunum.	2 days.	Mr. Charlton, Med. Gaz., Sept. 12, 1851.	Aperient enemata. Had several attacks.
8	M. 25	Sudden.	No.		Fall.	D.	Strang. of jejunum in slit of mesentery.	2 days?	Mr. Bailey, Prov. Med. and Surg. Journ., April 14, 1852.	Bleeding, opium, etc.
9	M. 15	Sudden.				D.	Strang. of ileum through rents in mesentery.	10 days.	Dr. Biaggini, Lancet, June 5, 1847.	
10	M. 21	Sudden.	No.			D.	Strang. of ileum by mesentery and bands.	9 days.	Mr. Robinson, London Journ. of Med., July 1851.	Calomel and opium, etc.
11	M. 22	Sudden.	Yes.	No.	Indigestion	D.	Omentum partly strang. ileum.	6 days.	Mr. B. Phillips, M. Gaz. Aug. 8, 1851.	Bleeding, leeches, cal., and opium.
12	M. 32	Sudden.	Yes.	No.		D.	Ileum twisted and strang. by omentum: hernia also.	4 days.	Mr. Paget, Med. Times, Sept. 18, 1852.	Explor. oper. in inguinal region without relief.
13	M. 58	Sudden.	No.			D.	Growth of omentum round knuckle of ileum.	3 days.	Mr. Robinson, London Journ. of Med., July 1851.	Aperients: enemata.
14	M. 50	Sudden.	Yes.	No.	Blow.	D.	Partial hernia: one side of intestine undiscovered.	30 hours.	Mr. Hey, Med. Gaz., Oct. 26, 1849.	Bleeding, leeches, etc.
15	M. 42	Sudden.	Yes.		Strain.	D.	Intestine strang. by appendix. Pain on left side.	7 days.	Mr. Gay, <i>Ibid.</i> , Aug. 29, 1851.	Castor oil enema: calomel: explor. oper. in median line, div. of band, and release of intest.: d. in 22 hs.
16	F. 17	Sudden.	Yes.			D.	Intestine strang. by appendix.	5 days.	Dr. Abercrombie, Dis. of Stomach, etc.	Usual remedies.
17	M. —	Sudden.	No.			D.	Intestine strang. by appendix.	4 days.	Mr. Hancock and Mr. Willing, London Journ. of Med., March 1851.	Cal. and opium. Oper. was proposed, but refused.
18	F. 24	Sudden.	Yes.	No.		D.	Diverticulum of ileum twisted round intestine, and attached in right iliac fossa.		M. Bouvier, Gaz. Méd. de Paris, April 12, 1851.	Old adhesions: acute peritonitis after delivery: death.
19	M. 30	Sudden.	No.			R.	Portion of ileum strang. by small intest.		M. Reali, <i>Révue Méd.-Chir.</i> , Janvier 1851; Prov. M. and S. Journ. June 11, 1851.	Oper. in med. line: div. of stricture with success.
20	M. 25	Sudden.	Yes.	No.		D.	Portion of ileum strang.	5 days.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies.
21	M. 28	Sudden.	No.			D.	Portion of ileum strang. Diseased mass also existed in abdomen.	3 days.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies.

No.	Sex and age.	Character of symptoms.	Action of bowels.	With or without relief.	Cause.	Result.	Nature of disease.	Duration.	Authority.	Treatment: and remarks.
22	M. 78	Sudden.	No.			D.	Hernia strang. high up. Blighted testis.	4 days.	Dr. Turley, Prov. Med. and Surg. Journ., April 15, 1851.	Opium. Refused explor. oper.
23	M. 30	Very sudden.	No.		Supper.	D.	Internal strangulation by band.	14 days.	Dr. Oke, <i>Ibid</i> , July 7, 1852.	Opium: beef-tea injections: bleeding, etc.
24	F. 50	Sudden.				D.	Intern. strang.: umbilical hernia.	24 hours.	Mr. Paget, Med. Times, July 31, 1852.	Explor. oper. at umbilicus without relief.
25	M. 16	Sudden.	Yes.	No.		D.	Intern. strang. by band at cæcum.	6 days.	Mr. Hintor, Present paper.	Cal. and opium: aper. injections.
26	M. 11	Sudden.				D.	Internal strangulation.	14 days.	Dr. Druitt, Med. Chir. Soc.	Oper. in med. line: bowels gave way during manipulation. D. in 2½ hours.
27	F. 19	Sudden.	Yes.	No.		D.	Internal strang.: band from mesent. to fundus uteri.	20 days.	Mr. Fergusson.	Oper. in median line: relief of strict.: but death in 17 hours.
28	M. 20	Sudden.				D.	Internal strang. of ileum by small intest. and membranous band.	13 days.	Dr. Bird, Mr. Hilton, Med.-Chir. Trans., vol. xxx.	Oper. in median line: d. in 10 hours. Attack very distinctly marked; but sympt. not urgent, vom. appearing on 5th day.
29	M. 60	Sudden.				D.	Constricted condition of cæcum: fresh morbid matter had formed tough band strangulating intestine.	20 hours.	Mr. Brown, Association Medical Journal, Feb. 11, 1853.	Usual remedies.
30	F.	Gradual.				D.	Strangulation of ileum by old bands.	10 days.	Mr. Brown, <i>Ibid</i> .	Usual remedies. Patient had for some time complained of pain across umbilicus; also in cæcal region, where circumscribed hardness could be felt: frequent constipation.
31	M. 35	Sudden.	No.			D.	Internal strangulation.	7 days.	Mr. Curling, Lancet, July 20, 1850.	Explor. oper. in groin without relief.
32	M. 21	Sudden.				D.	Internal strangulation; also hernia.		Mr. Solly, <i>Ibid</i> , July 13, 1850.	Explor. oper. in groin; disease not discovered.
33	F. 50	Sudden.	Yes.	No.	Over-reach.	D.	Apparent hernia. To internal ring portion of ileum was attached firmly, and opened during operation. A band stretched from omentum to right groin, immediately under which was the small coil of intestine connected with internal ring.	17 days.	Mr. B. Phillips, Med. Gaz., August 8, 1851.	Explor. oper. in inguinal region: escape of purulent matter, followed by relief. Three days before death, symptoms returned and ended fatally.
34	M.	Sudden.				D.	Intern. strang. of ileum by band.	24 hours.	Mr. Callaway, Lancet, vol. for 1830, p. 743.	Bleeding, calomel, etc.
35	M. 63	Sudden.	No.			D.	Intern. strang. of ileum; also old hernia.	3 days.	Dr. Crisp, <i>Ibid</i> , May 29, 1847.	Usual remedies.
36	F. 24	Sudden.				D.	Strang. of ileum by band, from appendix to another portion of ileum.	3 days.	Mr. Marshall, Lancet, Jan. 9, 1847.	Bleeding, calomel, opium, etc.
37	M. 16	Gradual.	No.			D.	Intern. strang. by band of three feet of intestine.	15 days.	Dr. Beilby, Edin. Med. and Surg. Journ., 1835.	Mercury. Attack came on after diarrhoea for one day. Large amount of intestine strangulated may account for gradual character.
38	M. 12	Sudden.			Strain in wrestling.	D.	Band from umbilicus strang. intestines.	7 days.	Dr. Berneastle, Lancet, Feb. 13, 1845.	Various remedies: injections, etc.: frictions with croton oil.
39	F. 20	Sudden.	No.			D.	Ileum strang. by band from colon to spine. Peritonitic effusion; intest. very vascular.	19 days.	Mr. C. R. Thompson, Med. Gaz., July 12, 1851.	Bleeding: purgatives, injections. Exciting cause of attack was wet feet and suppressed catamenia.
40	F. 23	Sudden.	No.			D.	Two feet of ileum strang. by band from mesentery to another portion of ileum. Bowels agglutinated by recent lymph.	4 days.	Mr. C. R. Thompson, <i>Ibid</i> .	Injections: wine: beef-tea, brandy.
41	M. 40	Sudden.	Yes.	No.		D.	Strang. of lower part of ileum by bands.	6 days.	Mr. Robinson, London Journ. of Med., July 1851.	Purgatives: enemata: opiate, etc.

No.	Sex and age.	Character of symptoms.	Action of bowels.	With or without relief.	Cause.	Result.	Nature of disease.	Duration.	Authority.	Treatment: and remarks.
42	M. 34	Sudden.	No.		Strain.	D.	Ileum bound down to iliac fossa by bands.	8 days.	Mr. Robinson, London Journ. of Med., July 1851.	Bleeding: leeches: calomel, etc.
43	M. 17	Sudden.	No.		Several attacks.	D.	Ileum bending down and attached to pelvis.	5 days.	Dr. Abercrombie, Diseases of Stomach, etc.	Bleeding: blisters, etc. Each separate attack sudden.
44	F. 14	Sudden.				D.	Lower portion of ileum involved in old disease, and completely confined by false membrane.	3 days.	Dr. Abercrombie, <i>Ibid.</i>	Usual remedies. Had never complained before the sudden attack.
45	F. 61	Sudden.	Altern. with diarrhoea.			D.	Cæcal ulcers and fistulæ; colon and ileum firmly agglutinated.	3 mths.	Dr. Jenks, Association Journal, Feb. 11, 1853.	Camphor relieved extreme flatulence: diarrhoea uncontrollable.
46	F. 32	Gradual: rather sudden.				D.	Bowels agglut. together.	10 days.	Mr. Erichsen, Lancet, Feb. 9, 1850.	Bleeding: leeches: injections.
47	M. 28	Sudden.				D.	Old disease of bowels. Intest. matted together strang. loop of ileum.	4 days.	Dr. McCarogher, Med. Gaz., Aug. 24, 1840.	Injections, etc.
48	F. 14	Gradual.	Diarrhoea.	No.		D.	Intest. matted together.	5 mths.	Mr. I. B. Brown, Lancet, July 13, 1850.	Hyd. c. cretâ, Dover's powder, etc. Solid tumours in abdomen had been mistaken for ovarian tumour; but disappeared on discharge of feces.
49	M. 4	Sudden.	No.			D.	Intern. strang. by another portion of intestine.	2 days.	Mr. Simon, Prov. Med. and Surg. Journ., Oct. 13, 1852.	Aperients, etc.
50	F. 60	Very gradual.				D.	Diseased mass round rectum causing stricture; intestine itself apparently healthy.	Several weeks.	Dr. Abercrombie, Diseases of Stomach, etc.	Usual remedies.
51	M.	Gradual.				D.	Tuberc. dis. of mesent. glands. Calculi making exit through abdom. parietes.	Months.	Dr. Oke, Prov. Med. and Surg. Jour., July 7, 1852.	The case resembled more strict. rect.
52	F. 65	Gradual.				D.	Diseased uterus.	Years.	Mr. Gay, Lancet, June 7, 1851.	Amussat's operation.

B. OBSTRUCTION PRODUCED BY THE INTESTINE ITSELF.

53	M. 50	Gradual.	Yes.	No.		D.	Ileus: dilated and contracted portions.	2 weeks.	Mr. B. Phillips, Med. Gaz., Aug. 8, 1851.	Calomel, colocynth, etc. Explor. oper. in umbilical region without relief.
54	M. 5	Sudden.				D.	Ileus: three contracted portions: undigested food.	3 days.	Dr. Cholmley, Guy's Hosp. Rep., and Prov. Med. & Surg. Journ., April 16, 1851.	Aperients: cal.: leeches: bleeding. Twisted about in bed as from colic.
55	M. 40	Gradual.	Yes.	No.		D.	Ileus: small intestines uniformly distended.	10 days.	Dr. Abercrombie, Diseases of Stomach, etc.	Usual remedies.
56	F. 20	Gradual.	No.		Cold.	D.	Ileus: small intestines distended.	10 days.	Dr. Abercrombie, Dis. of Stomach.	Bleeding, warm bath, etc.
57	F. 70	Sudden?	No.			D.	Ileus: small intestines distended.	2 days.	Dr. Abercrombie, Dis. of Stomach.	Bleeding, warm bath, etc. Though attack was apparently sudden, bowels had been confined some days.
58	M. 12	Sudden?				D.	Ileus: colon gangrenous.	4 days.	Dr. Abercrombie, Dis. of Stomach.	Bleeding, etc.
59	M. 19	Sudden?	Yes.	No.		D.	Ileus: small intestines gangrenous.	10 days.	Dr. Abercrombie, Dis. of Stomach.	Bleeding. Characters of this and of preceding case very indistinct: merely "was affected thus, and had been ill so many days."
60	M. 63	Sudden.	Yes.	No.	Crush.	R.	Ileus?	14 days.	Mr. Soden, Prov. Med. and Surg. Journ., March 17, 1852.	Expectant treatment: opium: ice: nutritive enemata.
61	M. 45	Gradual.	Yes.	Yes.		R.	Ileus.	4 days.	Mr. Hinton.	Bleeding: leeches: inject. of tart. em., cal., and op.
62	F. 32	Sudden.	No.			D.	Intussuscept. of ileum into colon.	4 days.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies.
63	M. 19	Sudden.	No.			D.	Intussusceptio.	3 days.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies.

No.	Sex and Age.	Character of symptoms.	Action of bowels.	With or without relief.	Cause.	Result.	Nature of disease.	Duration.	Authority.	Treatment: and remarks.
64	M. 2½	Sudden.	Yes, blood.	No.		D.	Intussusceptio: the intussuscepted portion protruding at stool. It commenced from the middle of arch of colon.	3 days.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies.
65	6 mts.	Sudden.	Yes, blood.	No.		D.	Intussusception of cæcum into colon.	4 days.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies.
66	M. 37	Sudden.			Dose of rhubarb.	D.	Intussusception.	8 days.	Mr. R. Jones, Lancet, Dec. 20, 1851.	The attack apparently induced by action of rhubarb.
67	6 mts.	Sudden.	Blood.			D.	Intussusception: ileum into cæcum.	4 days.	Mr. Clark, Lancet, Aug. 25, 1850.	Pulv. Doveri.
68	8 mts.	Sudden.				D.	Intussusception: the intest. protruding at anus.		Dr. Steele, Lancet, June 23, 1849.	
69	4 mts.	Sudden.				D.	Intussusception of colon into rectum.	2 days.	Dr. Steele, Lancet, June 23, 1849.	Castor oil, etc.
70	M. 4ms.	Sudden.				D.	Intussusception of colon into rectum.	2 days.	Mr. Nind, Lancet, June 23, 1849.	Castor oil, etc.
71	Inf. 4ms.	Sudden.	Blood.			D.	Intussuscept. of ileum and cæcum into colon.	3 days.	Dr. Alex. Monro, Med. Gaz., March 2, 1833.	Injection of castor oil.
72	M. 28	Gradual.	Diar-rhoea.			D.	Intussuscept. of ileum and cæcum into sigmoid flexure.	Weeks.	Mr. B. Phillips, Med. Gaz., March 2, 1833.	Peculiarly chronic case: no obstruction.
73	Inf. 5ms.	Sudden.	Blood.			D.	Intussuscept. of ileum and cæcum into colon.	3 days.	Mr. Blizard, Med.-Chir. Trans. 1815.	
74	M. 9ms.	Sudden.	Blood.			D.	Intussuscept. of ileum and cæcum into colon.	3 days.	Mr. Cunningham, Med. Gaz., Sept. 15, 1838.	Leeches: enemata.
75	M.	Sudden.	Yes.	Yes.	Super.	R.	Intussusception: 23 in. passed at stool.	15 days.	Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Remedies not mentioned.
76	M. 23	Sudden.	Yes.	Yes.		R.	Intussusception: intestine discharged.	18 days.	Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Remedies not mentioned.
77	M. 45	Sudden.	Yes.	Yes.	Strain.	R.	Intussusception: 18 in. passed.	14 days.	Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Remedies not mentioned.
78	M. 37	Sudden.	Yes.	Yes.		R.	Intussusception: 18 in. passed.	20 days.	Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Remedies not mentioned.
79	M. 40	Sudden.	Yes.	Yes.		R.	Intussusception: intestine passed 10 inches.	14 days.	Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Mercury.
80	F. 40	Gradual.	Yes.	Yes.		R.	Intussusception: intestine passed.		Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Remedies not mentioned.
81	F. 56	Sudden.	Yes.	Yes.		R.	Intussusception: 40 in. passed.	7 days.	Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Remedies not mentioned.
82	M. 6	Gradual.	Yes.	Yes.		R.	Intussusception: intestine passed at stool.	5 days.	Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Remedies not mentioned.
83	F. 30	Sudden.	Yes.	No.		D.	Intussusception: ½ ell in length passed away.	8 days.	Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Remedies not mentioned.
84	F. 48	Gradual ill health, attack sudden.	Yes.	No.		D.	Intussusception: 10 in. passed.	30 days.	Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Bowels had always been costive: seizure quite sudden: they had not been acted on for five days previously.
85	F. 31	Gradual.	Yes.	Yes.		R.	Intussusception: 10 in. passed.		Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Bowels had been unacted on for eight days.
86	M. 24	Sudden.	Yes.	No.	Several attacks.	D.	Twist of colon: cæcum turn. upwards, & attached to colon by old adhesions.	3 days.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies: opiates, etc. Vomiting not mentioned.
87	M.	Sudden.				D.	Twist of colon.	36 hours.	Dr. Ayre, Med. Gaz., Oct. 29, 1841.	Usual remedies.
88	M. 52	Very sudden.				D.	Twist of sigmoid flexure.	7 days.	Mr. Erichsen, Lancet, Jan. 26, 1850.	Operat. in median line: twist replac.: faeces passed into it: bow. twice mov.: pat. d. of exhaust. 11 hrs. aft. op.

No.	Sex and age.	Character of symptoms.	Action of bowels.	With or without relief.	Cause.	Result.	Nature of disease.	Duration.	Authority.	Treatment: and remarks.
89	F. 50	Gradual.				D.	Twist of sigmoid flexure.	4 weeks.	Dr. Roupell, Lancet, Aug. 9, 1851.	History indistinct: says she had been ill three days.
90	M. 20	Sudden.	Yes.	No.		D.	Inflammation of ileum.	6 days.	Dr. Abercrombie, Dis. of Stomach.	Usual remed. Had felt uneasiness for many days. Pain intense, as of peritonitis.
91	F. 3	Gradual.	Yes.	No.		D.	Upper part of small intestine gangrenous.	6 days.	Dr. Abercrombie, Dis. of Stomach.	Bleeding, etc.
92	M. 10	Sudden.	Yes.	No.		D.	Upper part of small intestine much distend., pushing down lower into cav. of pelvis.	2 days.	Dr. Abercrombie, Dis. of Stomach.	Bleeding, etc.
93	F. 22	Gradual.	Yes.	No.		R.	Inflammat. of cæcum? Distinct tumour of some thickness in that part, continuing after relief of pain.	4 days.	Mr. Hinton.	Cal. and op. each gr. ij, ev. hour: leeches: frict. of ung. hyd.: inject. of tartar emet.: castor oil, etc. Grt. tenesmus foll.: relieved by opium in rectum: at least 3 ss of op. taken by mouth.
94	M. 40	Gradual.	Alter. consti. & diar.	No.		D.	Stricture near middle of ileum from contr. of periton. coat.	14 days.	Mr. Robinson, Lond. Journ. of Med., July 1851.	Bleeding: leeches: injections: croton oil, etc.
95	M. 24	Gradual.	Yes.	No.		D.	Stricture of arch of colon.	1 year.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies.
96	M. 47	Gradual.				R.	Stricture of colon.	Weeks.	Mr. Clement, Med. Times, March 6, 1852.	Operation in ascending colon.
97	M. 40	Gradual.	Yes, occas. diarr.			D.	Stricture of colon.	Weeks.	Mr. Hinton.	Diarrhœa at times with difficult controlled: attacks simulated dis. of stomach.
98	M. 23	Gradual.				R.	Stricture of colon. Died subsequently.	Months.	Mr. Evans, Med.-Chir. Trans. vol. xxviii, p. 25.	Operation in ascending colon.
99	M. 55	Rather sudden.				D.	Stricture of colon at lower part: hernia also.	10 days.	Mr. Luke, Lancet, March 30, 1850.	Explor. oper. in groin. No relief.
100	F. 42	Gradual.				R.	Stricture of colon, prob. beyond transverse portion.	Weeks.	Mr. Hilton, Guy's Hosp. Rep., vol. viii, pt. i, p. 186.	Opium and enemata: afterwards oper. in ascending colon.
101	F. 80	Gradual.				D.	Stricture above sigmoid flexure.	Weeks.	Dr. Murer, Med. Gaz., Jan. 21, 1841.	Inject. of croton oil, etc.
102	M. 50	Gradual.				D.	Stricture of colon. Old hernia came down on fifth day: ret'd. with diffic.: red. <i>en masse</i> suspected. Gt. hypertrophy of musc. coat.	13 days.	Mr. Luke, Lancet, March 30, 1850.	Explor. oper.: enemata, etc. Duration short, yet symptoms came on gradually from weariness. Hypertroph. musc. coat would probly. explain absence of constipation.
103	F. 56	Gradual.				D.	Stricture of colon.	20 days.	Mr. Avery, Med. Gaz., May 18, 1849.	Explor. oper. in groin: extended to umbilicus: art. anus formed. Death in eight hours.
104	M. 65	Gradual.	Yes.	Yes.	Dinner.	R.	Strict. of colon? Ileus?	4 days.	Mr. Hinton.	Opii gr. ij, cal. gr. i, 2ndis horis. Oleaginous and croton oil injections, both ineffectual. Inject. of tartar emet. appeared to have effect. At least gr. xx of opium were taken.
105	M. 70	Very gradual.				D.	Stricture of sigmoid flexure.	Several weeks.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies.
106	M. 30	Gradual.	Yes.	No.		D.	Stricture of sigmoid flexure.	Several weeks.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies.
107	F. 63	Gradual.	Yes.	No.		D.	Stricture of sigmoid flexure.	Several weeks.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies. Alternately diarrhœa.
108	F. 44	Gradual.	Yes.	No.		D.	Stricture of sigmoid flexure.	Several weeks.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies. Alternately diarrhœa. At one period, had no evacuation for 13 weeks.
109	F. 40	Gradual.				D.	Stricture of sigmoid flexure.	6 weeks.	Mr. Lawrence, Lancet, Aug. 9, 1851.	
110	M. 33	Gradual.				R.	Stricture of sigmoid flexure.	Months.	Mr. Field, Lancet, Jan. 19, 1850.	Operation in descending colon.
111	F. 21	Gradual.				R.	Stricture of sigmoid flexure.	Months.	Mr. Clarkson, <i>Ibid.</i>	Operation in descending colon.

No.	Sex and age.	Character of symptoms.	Action of bowels.	With or without relief.	Cause.	Result.	Nature of disease.	Duration.	Authority.	Treatment: and remarks.
112	F. 50	Gradual.				D.	Stricture of sigmoid flexure.	8 weeks.	Dr. Roupell, <i>Lancet</i> , Aug. 9, 1851.	Amussat's operation performed after death.
113	M. 38	Gradual.				R.	Stricture of rectum: prob. near sigmoid flexure.	Months.	Mr. Curling, <i>Med. Times</i> , Dec. 18, 1852.	Oper. in left loin. Died 5 months afterwards.
114	F. mid. age.	Gradual.				D.	Stricture of rectum: strang. of ileum & cæcum.	Weeks.	Dr. R. Bennett, <i>Med. Times</i> , Dec. 18, 1852.	Imperfect report: said to be gradual constip.: stricture prob. cause of death.
115	F. 44	Gradual.				D.	Stricture of rectum.		Mr. B. W. Brown, <i>Associat. Journ.</i> , Feb. 11, 1853.	Usual remedies.
116	M. 50	Gradual.				R.	Stricture of rectum.	Months.	Mr. Pennell, <i>Lancet</i> , May 25, 1850.	Operation in descending colon.
117	M. 36	Sudden?			Mowing.	D.	Stricture of rectum, as if tied with string: ulcer at stricture.	10 days.	Mr. Crompton, <i>Med. Gaz.</i> , July 20, 1849.	Explor. oper. in descending colon: relief: patient sank. He fancied he had strained himself in mowing: soon aft. had bloody motion.
118	M. 65	Sudden.	No.		Super.	D.	Scirrhus of ileum.	6 days.	Mr. Hinton.	Bleeding: leeches: injections, etc. Extreme suddenness, caused by indigestion: vom. portions of unchewed meat, $\frac{1}{4}$ inch in diameter, and 1 in. long. I heard afterward that he previously had slight attacks.
119	F. 51	Gradual.				D.	Scirrhus of ileum at lower part.	Months.	Dr. Crisp, <i>Lancet</i> , May 29, 1847.	Purgatives, enemata, etc.
120	M. 70	Gradual.				D.	Scirrhus of colon.	Months.	Dr. Oke, <i>Prov. Med. & Sur. Jour.</i> , July 7, 1852.	
121	M. 60	Gradual.	Yes.	No.		R.	Disease about sigmoid flexure.	14 days.	Mr. Luke, <i>Med. Gaz.</i> , July 11, 1851.	Aperients: explor. oper. of Littre.
122	F. 35	Sudden.				D.	Scirrhus of sigmoid flexure.	20 days.	Dr. Oke, <i>Prov. Med. & Sur. Jour.</i> , July 7, 1852.	Puncturing colon with trocar.
123	F. 55	Sudden.				D.	Two attacks: death in second. Scirrhus of rectum: felt by finger.	8 mths.	<i>Ibid.</i>	Diluent injections.
124	M. 44	Gradual.				R.	Dis. of rectum: nearly complete obstruction.	Weeks.	Mr. C. Hawkins, <i>Med. Times</i> , March 20, 1852.	Operation in descending colon.
125	M. 33	Gradual.				R.	Scirrhus of rectum.	Weeks.	Mr. Adams, <i>Ib.</i> , March 6, 1852.	Operation in descending colon.
126	M. 43	Gradual.				D.	Scirrhus of rectum.	3 mths.	Mr. Clement, <i>Ibid.</i>	Operation in descending colon.
127	F. 62	Gradual.				D.	Disease of rectum.	Weeks.	Mr. Baker, <i>Ibid.</i>	Operation in descending colon.

C. OBSTRUCTION FROM FOREIGN BODIES WITHIN THE INTESTINES.

128	F. 40	Gradual.	Yes.			R.	Impacted fæces.	Months.	Mr. Erichsen, <i>Lancet</i> , Feb. 9, 1850.	Leeches; injections; and removing fæces.
129	F. 50	Gradual.	Yes.	Yes.		R.	Fæcal accumulations.	3 days.	Mr. Hinton.	Calomel and strong aperients. She habitually took calomel and colocynth every other night, never otherwise having a motion; this time they failed. Case peculiar, from severe crampy pains from shoulders to elbows and from hips to knees; which ceased as soon as bowels were relieved.
130	F. 25	Gradual.	Yes.	Yes.	Pregnancy?	R.	Fæcal accumulation.	7 days.	Mr. Hinton.	Oleaginous enemata; opium freely; miscarried at fourth day.
131	F.	Gradual.	No.				Concretions in rectum.		Dr. A. Knox, <i>London Journal of Med.</i> , Sept. 1850.	Purgatives; injections; removal of concretions.
132	M. 40	Sudden.			Several attacks.	D.	Large gall-stone.	5 days.	Dr. Abercrombie, <i>Diseases of Stomach</i> , etc.	Usual remedies. Jaundice accompanied each attack.

No.	Sex and age.	Character of symptoms.	Action of bowels.	With or without relief.	Cause.	Result.	Nature of disease.	Duration.	Authority.	Treatment: and remarks.
133	F. 50	Sudden.				D.	Biliary calculi in lower part of ileum.		Dr. Oke, Prov. Med. and Surg. Journal, July 7, 1852.	Injections, etc. Two attacks, in second of which pain shifted to another position after action of bowels, also pain at onset was <i>paroxysmal</i> , like passage of gall-stone.
134	F. 50	Sudden.				D.	Biliary calculus.		Dr. Oke, <i>Ibid.</i>	Mercury. This, from the <i>p. mort.</i> exam., was cause of death by inducing gangrene. Pain spasmodic.
135	F. 23	Sudden.				D.	Mass of cherry-stones at pyloric end of stomach.	12 hours.	Mr. B. W. Brown, Association Med. Journal, Feb. 11, 1853.	The cherries were eaten the evening previous; the attack occurring in the night.
136	F. 10	Gradual.			Bean.	D.	Horse-bean in appendix had set up peritonitis.	3 days.	Mr. B. W. Brown, <i>Ibid.</i>	Usual remedies.
137	M. 11	Gradual.			Swallowing bullet.	R.		4 days.	Dr. Cumming, Prov. Med. and Surg. Journal, May 28, 1851.	Injections of castor-oil; leeches, etc. Bullet was never found.

[Continued from page 432.]

lation and exposure necessary for the reduction of the strangulation; and I confess I am in some measure disposed to accord with the opinion. Nor was this the only point opposed to the recovery; the three punctures were subsequently found to be continuous, and required the uninterrupted suture; yet, although the operation was followed by erysipelatous inflammation, the recovery was perfect.

In the *Medical Gazette* for March 2nd, 1833, Mr. B. Phillips, speaking on this very subject, says that he has collected three hundred and thirty-two cases of gastrotomy; only forty-four were fatal. In intestinal obstruction of all kinds, curable and incurable, the mortality is far above this. I cannot but think that the cause of death after gastrotomy, when applied for the relief of intestinal obstruction, depends on the delay. That is *indeed* dangerous; but with an earlier adoption of the operation, and with proper precautions as to the temperature of the room, which should be raised nearly to blood-heat, I feel convinced that different results will ultimately attend the surgeon's efforts; and that success will crown his attempts at the restoration of life.

I would here tender my sincere thanks to my friend Mr. Colthurst, the honorary secretary of the Bristol Branch, for his kindness in looking out several works for me, by which I was enabled in a short space of time to add several cases to the table, which were beyond my limited means of reference; also, to Dr. Alexander Henry, who most kindly drew my attention to several other cases, and who also arranged the table in its present advantageous form for reference.

Blaina Iron Works, Monmouthshire, March 1853.

CASE OF ACUTE INTESTINAL TUBERCULOSIS.

By WILLIAM HENRY ASHLEY, M.D., Surgeon to the Kensington Dispensary.

CASE. Miss B., aged 14, of a weak and delicate constitution, not having yet menstruated, had been from an early age subject to those symptoms which mark a high degree of tuberculous dyscrasia. Her stature was exceedingly dwarfish, and the general conformation of the frame so diminutive, that she might have been considered rather of the age of ten than fourteen years. The circulation was languid; the extremities had a shrivelled appearance, and were generally cold; and the pallid surface of the body in-

dicated an impoverished condition of the blood. On many occasions she had been under medical treatment, on account of general debility and ulceration of the feet, when she had taken with much benefit the mineral acids and cod-liver oil. Several members of her family were afflicted with scrofulous cachexia; but she appeared to have been the greatest sufferer, and to have inherited the disease in a remarkable manner. The friends of the young lady attributed her illness to exposure to the night air.

January 25th, 1853. The face was pale, with œdema of the eyelids and cheeks; the expression was anxious; there was considerable emaciation; the respiration was natural; she had slight cough, with scanty viscid expectoration; there was no pain on deep inspiration. The percussion sound was clear, and there was sonorous breathing in the upper lobes of the lungs. The physical signs indicated but very partial disease of the pulmonary tissue. The pulse was small, and 120 in the minute. The cardiac sounds were normal. She had occasional febrile exacerbations, but no rigors; the epigastrium and abdomen were free from any tenderness or pain; the action of the bowels was regular, without diarrhœa; the tongue was moist and somewhat furred; the skin very dry and unperspiring; the feet and ankles were œdematous; the urine was scanty, pale, and highly albuminous; the specific gravity was not ascertained, in consequence of its paucity and involuntary flow with the motions. She had some pain over the lumbar region. I prescribed as follows:—

R Liquoris ammoniæ citratis ʒiij.
Tincturæ scillæ 3j.
Tincturæ digitalis 3ss.
Spiritus ætheris nitrici ʒij.
Acidi hydrocyanici diluti ʒxx.
Syrupi aurantii ʒss.
Misturæ camphoræ ʒiiss.

Misce. Sumantur cochlearia duo quartâ quâque horâ.

R Hydrargyri cum cretâ gr. iss.
Extracti hyoscyami gr. ij.
Scillæ pulveris gr. ss.

Misce. Fiant pilulæ duæ mane nocteque sumendæ.

Hot mustard hip-baths were directed to be used, and an embrocation, as a counter-irritant, to be applied over the region of the kidneys.

February 1st. There had been some amendment since the last date. The hydropic affection had in a measure subsided, more particularly in the face; there was scarcely any cough; and she expressed herself generally relieved. The pills were directed to be omitted in the morning, and the mixture to be continued.

February 6th. Since the last date, the œdema had not decreased; and the countenance had assumed a more anxious