

past twelve months in tracheotomy for laryngeal diphtheria (without antitoxin) has been 30 per cent. For twelve years we had not saved the life of a child under two years of age. In this series it will be noticed that there was one child (*d*) of one year and seven months. The plan I adopted was to inject subcutaneously with antiseptic precautions ten minims of Aronson's antitoxin diphtheriæ at intervals of twelve hours for three doses. After that no more was given. In not one of the cases was there any inflammation at the seat of inoculation. There was no doubt about the diagnosis in any of the cases. A typical temperature chart before me shows that the patient had on admission a temperature of 101.8° F., that it remained between 100° and 101° for the first four days, falling on the fifth day and reaching the normal on the sixth, where it remained. The pulse-rates for twelve days were as follows:—144 (on admission), 160, 180, 104, 100, 80, 82, 80, 80, 74, 80, 76. The respiration-rates for the same days were as follows:—32 (on admission), 36, 38, 44, 32, 30, 30, 26, 20, 22, 18, 18.

St. Mary's Hospital, W.

A Mirror

OF

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

A SERIES OF CASES ILLUSTRATING THE SUCCESS ATTENDING THE MODERN METHOD OF OPERATION FOR STRANGULATED HERNIA.

(Cases under the care of Mr. BALLANCE.)

WE do not often have a more favourable opportunity of illustrating the immense advance which has taken place during recent years in the treatment of a disease than is presented by the following series of operations for strangulated hernia treated at one hospital by two of the surgeons between Sept. 12th and 22nd last. We purpose to give a short account of all the cases submitted to operation during that period, and would point out that in no case did a fatal result follow the herniotomy. In most of the cases a radical cure was performed at the time. Altogether seventeen patients were admitted between the dates named with symptoms of urgency due to the presence of an irreducible hernia, and, of these, eleven required operation for strangulation; in another, operation with radical cure was performed at a later date for irreducible hernia; four strangulated hernias were reduced without operation, and one case of obstructed umbilical hernia was treated. This was under the care of Mr. Anderson. We also give, as germane to the series, an account of a very instructive case where obstruction of the bowels was caused after taxis, apparently by the incautious use of an aperient. Excessive peristalsis of the bowel above the paralysed part ensued, and the part which had been nipped acted mechanically by its inability to pass on the fluid contents just as if it had been constricted by an inelastic band. We have commenced the series of cases in the order of admission and propose to give notes of the four others which were submitted to operation in the next issue of THE LANCET. For the following abstract of the notes of these cases we are indebted to Mr. Merry, house surgeon.

CASE 1.—A man aged sixty-one years was admitted to St. Thomas's Hospital on Sept. 12th. He had had a hernia for twenty-five years, for which he wore a truss until four years ago. On admission he complained of great pain in his hernia, which followed a fit of coughing and of vomiting for eight hours and a half. On examination a large, tense right scrotal hernia was seen, which was irreducible and without impulse on coughing. It was resonant over the lower third, but dull above. On operation the sac was found to contain about six inches of transverse colon and some omentum. The gut was in a very bad condition, and in one spot especially it was quite black and flabby. However, it was thought capable of recovery, but, as there was a doubt about it, the gut was replaced only just within the internal ring; the sac was

dissected out and removed; the pillars were not sutured. A drainage-tube was inserted in the wound as far as the abdominal cavity. The patient made an uninterrupted recovery.

CASE 2.—A man fifty-eight years of age was also admitted to St. Thomas's Hospital on Sept. 12th. This patient had had a left scrotal hernia for forty years, for which he had worn a truss for five or six years. On admission he complained of inability to return the hernia, in which there was great pain, and of nausea, but he had only been sick once. These symptoms had lasted for sixty hours. On examination a large scrotal hernia was found, resonant above but dull below to percussion. There was no impulse on coughing. On operation the sac was found to contain sigmoid flexure deeply congested, but in an otherwise good condition. The sac was twisted and drawn through the tendon of the external oblique above the external ring and fixed there by a tendon stitch. The pillars were sutured with kangaroo tendon. The wound healed by first intention, and the patient made a complete recovery.

CASE 3.—A man sixty-five years of age was admitted to St. Thomas's Hospital on Sept. 13th. He acquired a hernia four years ago, for which a truss was worn. The hernia became irreducible one month previously. On admission he complained of pain in the hernia and inability to return it. There was nausea but no sickness. On examination there was seen a small scrotal hernia, not very tense, but with only slight impulse on coughing. It was dull on percussion. At the operation the sac was found to contain dark-red swollen and inflamed omentum only; this was ligatured and removed, and the stump returned. The sac was freed from its firm adhesions, twisted, and brought up through the tendon of the external oblique, and there ligatured. The pillars of the ring were sutured with kangaroo tendon. The patient made a complete recovery.

CASE 4.—A man thirty-eight years of age was admitted to St. Thomas's Hospital on Sept. 15th. He acquired a hernia twenty years ago while lifting a weight, and wore a truss for eight years afterwards, and then left it off. Sixteen hours before going to the hospital the hernia came down again and its descent was accompanied by great pain and vomiting. On examination a large right scrotal hernia surrounding the testis was discovered. There was but very slight impulse on coughing, and it was dull on percussion. On operation the sac, which was a congenital one, was found to contain many inches of deeply congested small intestine; this was returned. The neck of the sac, which was very adherent, was separated from the cord structures and divided; the upper part was twisted and ligatured with tendon, then carried through and fixed to the oblique tendon some distance above the external ring, and a tunica vaginalis was formed from the part below which was closed with sutures. The pillars were brought together with kangaroo tendon. The patient made an uninterrupted recovery.

CASE 5.—A man thirty-one years of age was admitted to St. Thomas's Hospital on Sept. 15th. He had had a hernia since 1879, for which he had worn a truss. Eight hours before admission the hernia came down, and its descent was attended by great pain and vomiting. On examination a tense scrotal hernia on the right side was found, dull on percussion and devoid of impulse on coughing. On operation the sac was found to contain some congested claret-coloured small intestine and some omentum. The omentum was ligatured, cut off, and the stump and intestine returned. The sac was twisted and brought out through the tendon of the external oblique, and there ligatured. The pillars were closed with kangaroo tendon. He made an uninterrupted recovery.

CASE 6.—A woman sixty-seven years of age was admitted to St. Thomas's Hospital on Sept. 12th. She had had a hernia for twenty-five years, for which she had always worn a truss. She had never experienced any difficulty in reducing it until Sept. 6th, when her attempts at reduction failed. The tumour was tender, but there had been no sickness. On examination there was a tense femoral hernia the size of a hen's egg. This was dull on percussion. At the operation the sac contained dark-coloured congested omentum only. This was transfixed, ligatured, and removed. The sac was freed, ligatured with tendon, and cut off, and the stump returned. Poupart's ligament was then sutured with tendon to the fascia over the pectineus muscle and the wound closed. She made an uneventful recovery.

CASE 7.—A woman seventy years of age was admitted to St. Thomas's Hospital on Sept. 14th. She had had a hernia since 1887, for which she had worn a truss. Four days before

admission, after a fit of coughing, the hernia came down and could not be reduced. She went to the hospital, having suffered great pain and having vomited frequently. She was found to be suffering from strangulated inguinal hernia on the right side. Taxis failing, herniotomy was performed, and the sac found to contain deeply congested small intestine and omentum. The omentum was ligatured, cut off, and the stump returned. The sac was twisted and drawn up through the external oblique tendon, and there sutured. The pillars of the ring were brought together with kangaroo tendon, and the wound closed. Her recovery was complete.

We also add short notes of another case in which an unusual condition followed after reduction of a strangulated hernia by taxis before admission to the hospital on Sept. 12th.

A young man aged twenty-one was taken into the Clayton Ward in a dying state with the history that he had suffered from a strangulated hernia, with great pain and vomiting, and that this had been reduced on Sept. 6th by taxis. He was fairly well on the 7th and on the 8th, but in order to produce an action of the bowels he took two aperient pills on his own responsibility. Shortly afterwards he had great pain in the abdomen and began to vomit; vomiting continued until admission. He was very collapsed, pulse very rapid and feeble, skin profusely sweating, the abdomen was greatly distended, and did not move with respiration. The vomited material was offensive and feculent. Dulness was found on percussion over an area on the right side of the abdomen. Mr. Ballance performed abdominal section the same night. About two inches of small intestine was found to be paralysed where it had been strangulated, the bowel above being greatly distended and dark-red in colour and collapsed below. The intestine which had been in the hernia had nearly recovered its natural appearance, but a line across the bowel above and below could still be made out, where it had been most tightly nipped. The dulness was evidently caused by the collapsed portion. The intestine was opened above the obstruction, a Paul's tube inserted and tied in, and the intestine stitched to the abdominal wound. A large quantity of thin faecal matter escaped. Death ensued six hours later without relief of the symptoms.

(To be continued.)

LEEDS GENERAL INFIRMARY.

A CASE OF MALIGNANT DISEASE OF THE ASCENDING COLON PRODUCING INTESTINAL OBSTRUCTION; TYPHLOTOMY AND SUBSEQUENT COLECTOMY; BOWEL SUTURED BY HALSTED'S METHOD.

(Under the care of Mr. H. LITTLEWOOD.)

THIS case illustrates in a striking manner the uncertainty which attends the prognosis as to the duration of life after excisions of the bowel for malignant disease, even when the operation has apparently been very successful. The growth was removed a few days after the patient had been admitted to the infirmary for the relief of obstruction of the bowels caused by it. An early favourable moment was taken, when the patient had recovered from the effects of the obstruction, and after careful preparation the whole of the local growth was removed. Secondary growth, of which there was no evidence when the colectomy was performed, proved fatal five months later. We shall probably, in time, be able to define better than we can at present the class of cases in which excision is not advisable, but until some method as yet unknown of exposing the presence of latent secondary growths is found disappointment to the surgeon will follow apparent cure in many of these cases. Mr. Kendal Franks gave the results of fifty-one reported cases some years ago, in which the operation of excision of malignant growth of the colon had been performed. One of these was cured for four years. The mortality as the direct consequence of the operation was 40·8 per cent. The ultimate mode of death of apparently successful excisions of intestine for malignant disease should be made known by the surgeon in charge, so that others may learn; it is a duty owed to the profession. At present the conclusion comes to by many is that cancer in any part of the bowel is a hopeless disease, no matter what kind of treatment is carried out.

A woman aged fifty-three was admitted to the Leeds Infirmary on Sept. 10th, 1893, suffering from acute intestinal obstruction. Owing to the absence of Mr. Mayo Robson Mr. Littlewood took charge of the case. Until quite recently the patient had always been healthy, but during

the last few months she had lost weight and frequently complained of pain about the umbilicus and the lower part of the back. A fortnight previously, after a hard day's work, she had felt pain in the right side of the abdomen. For some years she had been very constipated. On Sept. 5th a small motion was passed, and since then she had neither passed flatus nor fæces. She had never noticed any slime or blood in the motions. She had vomited incessantly since Sept. 5th. On admission the patient was evidently very ill; she had great pain in the abdomen, which was much distended. Vigorous peristaltic movements could be both seen and felt. The abdomen was resonant on percussion, but owing to the distension no tumour could anywhere be felt. On rectal examination nothing abnormal was found. In the position of the left saphenous opening there was an irreducible swelling; this was dull on percussion and there was no impulse on coughing. The patient said this had been present for several months and did not cause her any discomfort except after a hard day's work; she then thought it increased a little in size. This swelling was thought to be a hydrocele in the sac of a femoral hernia, and not to account for the symptoms. Operation was performed about two hours after admission. Ether having been administered, the swelling in the groin was explored first. This was found to be a hydrocele in the sac of a femoral hernia, and the sac was ligatured at the neck and removed. The abdomen was then explored, an incision four inches in length being made in the middle line, commencing about two inches below the umbilicus. On opening the peritoneum, distended coils of intestine presented, and some fluid escaped. The abdominal cavity was then explored by the hand, and a hard mass was found in the ascending colon fixing it to the parietes. The cæcum and small intestines were enormously distended, and the colon was collapsed on the rectal side of the growth. As the patient's condition would not permit of a prolonged operation the abdominal wound was closed and another made over the cæcum. The cæcum was stitched to the surface and opened. She made a good recovery from the operation, the motions coming away freely from the typhlotomy opening. On Oct. 6th two motions passed per anum. On the 10th, the patient's general condition having greatly improved, it was decided to make an attempt to remove the disease. The cæcum was well washed out and packed with gauze, and the opening into it closed with gauze and collodion. Ether having been administered, a vertical incision about four inches in length was made over the position of the ascending colon; later the incision was prolonged upwards for two inches, and a transverse incision made to the same extent outwards from near its lower extremity. On opening the peritoneum the growth in the colon was at once exposed; it was found situated in the middle of the ascending colon. The colon was a good deal puckered and fixed to the side of the abdominal wall. A flat sponge was packed into the abdomen. The bowel was clamped above and below the growth with Hahn's intestinal clamps and the growth excised with scissors, together with a triangular piece of meso-colon. The bleeding vessels were secured with fine silk ligatures. It was now found that some of the growth fixing the gut to the abdominal wall had not been removed, so this was removed with scissors. The parts were washed out with sterilised salt solution, this solution being used throughout the operation for instruments and sponges. The divided ends of the bowel were now stitched together by the "plain-quilt stitches" of Halsted, fine sterilised silk being used with ordinary round No. 2 sewing needles. About twelve sutures were inserted. The stitches brought the two serous surfaces together, turning in the mucous membrane. The gap in the mesentery was closed with three silk stitches, the parts were cleansed with sterilised salt solution, and the abdominal wound was stitched up in separate layers. The operation lasted one hour and a quarter.

The patient made a good recovery from the operation and was up on Oct. 29th. On Nov. 1st she was having ordinary diet. On Nov. 6th the bowels were opened in the natural way and continued to do so from this date, a small quantity of intestinal contents coming through the typhlotomy opening. On Nov. 18th the patient was prepared by having as little faecal material as possible in the bowels. Ether having been administered, the edges of the fistula were refreshed and the adherent cæcum was separated from the abdominal wall for about a quarter of an