ing the four years, no relief had been experienced. The abdomen, on examination, was found somewhat tense, and tender to pressure. By placing the hand on the hypogastrium, a solid and movable tumour was found rising above the pubis. This was found to be a voluminous uterus, and through the vagina the cervix was felt enlarged and painful to the touch. The sound passed easily into the uterine cavity, and showed it to be about five inches in length. In the broad ligament to the left of the uterus, in the direction of the sciatic notch, was discovered also a smooth tumour about the size of a small egg. It was situated somewhat behind the uterus, and could easily be felt to the left side of the rectum. The tumour was immovable, elastic, not lobulated, or very painful to the touch, and some arteries of considerable size were found beating on its surface.

This was diagnosed as a chronically inflamed uterus, but was probably one of those cases of subinvolution described by Dr Simpson. The tumour in the broad ligament was believed to be a chronic inflammatory one of the cellular tissue in that situation, and this idea was considerably strengthened by finding that it was much diminished in size after bleeding, and the use externally and internally of iodine. The position of the phlegmonous tumour in this case, seemed to be in the cellular tissue enclosing the divisions of the internal iliac vessels.

(*To be continued.*)

ARTICLE VII.—*Surgical Cases, with Remarks.* By JAMES SPENCE, Fellow of the Royal College of Surgeons, Lecturer on Surgery, etc.

CASES OF STRANGULATED HERNIA.

CASE I.—*Strangulated Femoral Hernia; Division of Constriction External to the Sac; Recovery.*

Mrs R., æt. 70. I saw this patient with Dr Gordon on the 19th March 1849. Dr G. had been sent for in the morning, and found that the hernia had come down, or at least that it had been first noticed about twenty-four hours previously. He had tried to reduce it by the taxis, but without success. On examination, I found a small femoral hernia tense, unyielding, and very painful; there had been no motion from the bowels since the first appearance of the rupture, although enemata and purgatives had been given; there was constant vomiting and great general prostration; the belly was tympanitic and tender to the touch.

Under these circumstances, I put the patient under the influence of chloroform, having first obtained her consent to an operation if the taxis should fail. I then attempted the taxis when she was completely under the influence of the chloroform, and the parts were fairly relaxed by attention to position, but could not succeed. I accordingly proceeded to operate. I made an incision parallel to Poupart's ligament, and another perpendicularly downwards from it, over the tumour, so as to enable me to see the deep-seated parts at the neck of the swelling distinctly. After dividing the superficial fascia and some cellular tissue, the falciform process was exposed, the resisting fibres divided carefully; the probe-pointed bistoury guided on the finger was then insinuated gently between it and the hernial sac, and by turning the edge obliquely upwards and inwards a deeper constriction was divided. The sac and its contents were then drawn gently downwards, and a few fibres, apparently closely attached to the sac, and which seemed to constrict it, were scratched through with the bistoury. Holding the sac with one hand, I easily

returned its contents into the abdomen, and, feeling that it was empty and small, I invaginated it by pushing it upwards with my finger. I retained it within the ring till one of the gentlemen who assisted me in the operation closed the wound by sutures, the finger being withdrawn just before the last stitch was closed. A pad of sponge enveloped in lint was then placed over the opening, supported by a larger pad, and the whole secured by a spica bandage. An opiate was given after the effects of the chloroform had passed off. During the operation a little delay was caused by vomiting occurring while the patient was under chloroform, requiring her to be raised so as to prevent the fluid from passing down the air-passages. I saw her again in the evening; she seemed quite relieved; the vomiting and hiccup had ceased, and there was no tenderness of the abdomen. Next day she had a dose of castor-oil, which, however, did not act; two Colocynth pills were then given, and next morning I found the bowels had acted freely three times. The wound healed well; she recovered rapidly, and she was able to be up in about a fortnight after the operation.

CASE II.—*Strangulated Femoral Hernia; Sac Opened; Recovery.*

Margaret M., æt. 30, had been subject to femoral hernia for about eighteen months previous to my seeing her. The hernia used to come down occasionally, but was always easily returned, and she had never worn a truss regularly. About ten days previous to the attack for which I saw her, she had been delivered of a child, and was making a good recovery, when, having risen to make her bed, she felt the rupture come down. As it did not give her much uneasiness, she did not think of trying to reduce it till some hours afterwards, when she found it hard and painful, and then she could not succeed. As general pain and vomiting soon supervened, a medical man was sent for, enemata and other remedies were used, and the taxis tried unsuccessfully. I saw her in the afternoon, and found her suffering from very urgent symptoms. The abdomen was tense and acutely tender to the touch; constant vomiting, hiccough, and quick pulse. At that time, however, she would not submit to an operation, though the taxis had failed. She again sent for me in the evening, and I then operated. On dividing the tissues over the neck of the sac, I found I could not completely empty it, although it became more flaccid; it was therefore opened, and found to contain a portion of omentum, much congested, and slightly adherent. (The intestine had probably been returned before the sac was opened.) The omentum was returned, and the wound closed and dressed in the usual manner. Next day her bowels had been opened freely by a dose of castor-oil, but there still existed great abdominal tenderness and quick pulse. I therefore ordered hot fomentations to the abdomen, and directed her to take 2 grs. of calomel and ½ gr. of opium every six hours.

Under this treatment the abdominal tenderness soon subsided, but the pulse still continued very rapid, and there was great nervous irritation; on inquiry I found she had suffered from flooding after her delivery, and lost a considerable quantity of blood. I therefore allowed her more nourishing diet and wine. Under this change of diet the pulse gradually came down to the natural standard, and she made a good recovery.

Remarks on Cases I. and II.—I have selected these two cases as, by contrast, illustrating certain precautions to be observed in reference to the extra-peritoneal operation for hernia. In both cases, strangulation had only existed for a comparatively short period, and both were therefore well suited for that plan of operation; and in both I proceeded to operate in accordance with it by dividing the stricture external to the sac.

In Mrs R.'s case, when this was done, I was able at once completely to empty the sac of its contents, and feeling it empty, to invaginate it within the femoral ring, satisfied that none of its contents could be then constricted.

In the woman M.'s case, although on dividing the constricting fibres external to the sac, part of its contents returned into the abdomen without pressure, I found that the greater part could not be returned from the sac; and though, from the hernial tumour being small, I daresay I could have reduced it *en masse* without much difficulty, such practice would in my opinion have been very *uncertain* and dangerous, because there might have been constriction of the irreducible portion by the neck of the sac itself; and therefore I considered it my duty to open the sac and satisfy myself as to the actual condition of the contents.

I hold that in all cases the complete reduction of its contents from the hernial sac ought to be made an invariable requirement in the extra-peritoneal operation, otherwise it will be apt to be brought into disrepute from reduction of small herniæ *en masse* with constriction still existing, and in all cases where the sac cannot be so emptied, the safest plan is to open it so as to make sure of the exact state of matters.

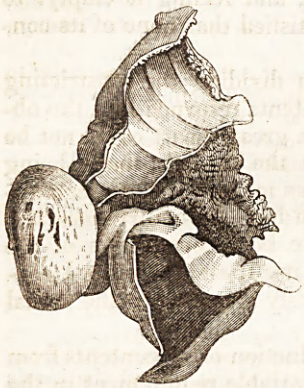
The case of M. is also useful as showing the necessity of constantly keeping in view the general state of the patient at or previous to the operation. The rapid pulse and irritable nervous state were evidently dependent upon her puerperal state and the loss of blood during parturition, and hence quickly disappeared under the use of opiates, nourishing diet, and wines; whilst an opposite treatment, from a dread of peritoneal inflammation, might have led to very serious results.

CASE III.—*Femoral Hernia Strangulated for Four Days; Operation, with Relief to Obstruction; Death from subsequent Perforation of the Bowel.*

Barbara L., a feeble woman, 76 years of age, from Fenton, East Lothian, was admitted into the Royal Infirmary August 25, 1852, on account of a femoral hernia, which had been strangulated for four days. Repeated attempts at the taxis had been made before her admission into the hospital; and the hernial swelling, which was about the size of a large walnut, was excessively painful even to the slightest touch.

I saw her about half an hour after her admission. From the state of the hernia, and the patient's general symptoms, I made no further attempt to reduce it, but proceeded at once to operate, after the patient had been put under chloroform. The integuments and superficial fascia were of the usual appearance, but the textures immediately over the sac were covered with recent lymph, and there was a small quantity of pus immediately external to the sac. On opening the sac, it was found to contain a small portion of bowel, very dark-coloured, congested, and granular, but not gangrenous. It was very slightly adherent to the sac at one point by effusion of recent lymph. It was replaced, and the wound dressed in the usual manner. The patient had an opiate after the operation.

August 26.—Patient much relieved; has slept well. Slight tenderness on pressure over abdomen; pulse 90. She had a warm water enema, and subsequently a dose of castor-oil, which moved the bowels slightly.



27.—Passed a good night. Tenderness over abdomen increased; edges of wound inflamed, and no adhesion; enema repeated; bowels freely moved.

28.—Very restless; pain much increased; pulse 110, wiry. Calomel and opium were now given. The pain increased rapidly, with symptoms of sinking, and she died on the 29th of August.

Post-mortem Examination (*thirty hours after Death*).—The wound looked sloughy, and the peritoneal surfaces presented traces of acute inflammatory action. The portion of the bowel which was in the sac was not adherent at any point, but floated loose. It preserved an indented appearance, and was dark coloured. It had not given way by a large slough, but was perforated by a number of minute openings (as represented in the accompanying wood-cut), through which the serous portion of the feculent matter had exuded into the peritoneal cavity.

CASE IV.—*Femoral Hernia Strangulated for Six Days; Operation; Recovery.*

Mrs Robb, ætat 70, was seen for the first time by Mr Wallace, one of my pupils at the Royal Dispensary, on the evening of Monday, the 29th November 1853, who, finding that the hernia had been down from the preceding Tuesday, that the symptoms had commenced shortly after its descent, and that there was now feculent vomiting, requested me to see the case with him.

I found the patient a feeble woman, with anxious expression of countenance, quick small pulse, surface of the body cold, and her face covered with a clammy sweat. There was almost constant vomiting of thin feculent matter, and frequent hiccup. The abdomen was tense and painful; the hernial tumour was red, and tender to the touch. I was informed that, immediately after the rupture came down, she had passed a loose stool, but that since then she never had had any motion from the bowels, and the vomiting had continued almost from the commencement. As she was subject to biliary derangements, she had not applied for medical aid until the symptoms became excessively severe, and all medicine had failed to act on the bowels. Under these circumstances, I at once proposed the operation, as her only chance of safety. She readily consented; and Dr Gordon having administered chloroform, I divided the integuments by a T incision, so as to expose the neck of the sac and the falciform edge fully. Finding that there was no fluid in the sac, so as to enable me to pinch it up from the intestine, I insinuated a very thin probe-pointed bistoury between it and the falciform edge, and divided the resisting fibres. This enabled me to draw down the sac a little further, and to bring into view a portion of it which I was able to separate and pinch up. I now opened the sac carefully, and enlarged the opening with the probe-pointed bistoury sufficiently to allow me to introduce my finger. I found the bowel adherent to the interior of the sac by soft lymph; this I gently broke up, and, guiding the bistoury on my finger, I opened the sac fully, so as to expose its contents, which were found to consist of a small knuckle of intestine, of a dark purplish-brown colour, granular, and presenting no glistening surface. The adhesions to the sac were quite soft, and easily broken up. The history of the case, and the appearance of the bowel, made me very doubtful of returning it; but as from the light I could not be quite certain of the shade of colour, and as there was no gangrenous smell, I replaced it gently, and only closed the wound partially, supporting the parts very lightly with a pad of sponge enveloped in lint, and retaining this by one or two turns of a bandage. An opiate was then ordered to be given in

about an hour after the operation. Next day, I found the patient had passed a good night; the pulse was about 98, the vomiting and hiccup had ceased, and there was less pain and distension of the abdomen. On removing the dressings, and finding no gangrenous smell, I reapplied the pad and bandage. As she was very thirsty, I desired her to keep a little ice in her mouth occasionally to allay the constant desire to drink water, which might have induced vomiting. On the following day she had a laxative enema and two Colocynth and Hyoscyamus pills, which procured two free evacuations from the bowels. This was followed by complete relief of abdominal pain and distension; the pulse gradually fell to its natural standard, and she made an excellent recovery, requiring little or no treatment, except regulation of diet, and the occasional exhibition of some gentle laxatives and tonics.

CASE V.—*Scrotal Hernia—Strangulated seven hours; Operation; Recovery.*

Mr ————, æt. 63, of spare habit of body, and suffering for many years from an aggravated form of dyspepsia and biliary derangement, had long been the subject of an inguinal hernia, for which he had worn a truss.

On the morning of the 29th May 1852, on getting out of bed the hernia came down suddenly, and to a larger extent than usual. He returned to bed, and attempted to reduce the rupture, but failed; and feeling the swelling larger, more painful than usual, and accompanied with sickness and other unpleasant symptoms, he sent for his medical attendant, Dr Burn, who came immediately and tried the taxis; but finding that steady and regular pressure did not succeed, he requested me to see the patient with him.

I accordingly visited the patient and found a pretty large scrotal hernia on the right side, tense and rather painful on pressure. I was told that the hernia was in general easily and completely reducible. As the protrusion had only existed about four hours, and as the swelling seemed to have suffered from the attempts of the patient to reduce it, I stated to Dr B. that before making any further efforts at reduction, it would be as well to apply cold to the tumour and to administer an enema. The patient was requested not to press the swelling at all, and it was arranged that we should see him again in about two hours.

Accordingly, at two P.M. we again visited the patient. The tumour was much more tolerant of pressure, and from this circumstance and a deceptive feeling of yielding, both I and my friend Dr Duncan, who kindly accompanied me, thought it would yield to steadily maintained pressure. We accordingly tried the taxis persistently for nearly half an hour. At the end of that time, finding that no progress had been made, and the patient being under chloroform, I proceeded to operate. After dividing the coverings of the tumour by an incision 3 inches long, and the textures at the deep ring external to the sac, I found the hernia still tightly constricted a little lower down. I opened the sac, and introducing my finger, divided the constriction from within in the usual manner. The bowel was now seen to be much congested and ecchymosed, and of a dark port-wine colour, but presenting a smooth glistening appearance; it was now easily reduced.

The wound was closed by suture, and a pad and bandage applied. An opiate was then given. I visited him in the evening and found him free from pain, with no vomiting, but suffering a little from flatulent distension. The opiate was ordered to be repeated at bed-time, and a dose of castor oil to be given in the morning.

At my visit next day, I found him still keeping free from any urgent symptom, but the bowels had not been acted on, and the pulse was about 120 and small. At my visit in the evening I found the bowels had acted twice freely, and the flatulent distension was much relieved. He had no sickness, abdominal tenderness, nor any bad symptom, except the quick pulse which seemed to depend on the use of the opiates, for on their gradual withdrawal the pulse began to fall and speedily attained its natural standard.

The part of the wound corresponding to the deep ring was slow of healing, thin pus being discharged from it for some weeks; but in every other respect the cure went on favourably, and he was able to wear a truss and be out on the 12th of July.

CASE VI.—*Strangulated Oblique Inguinal Hernia; Operation; Recovery.*

On the 23d of May last, I received a message from Dr Cruickshank of North Berwick, to come and operate on a case of hernia in that neighbourhood. I reached the patient's residence about a quarter to ten A.M. Dr Cruickshank informed me that the patient, H——, an old man about 73, had for sometime been under treatment for a severe attack of pneumonia, from which he was slowly recovering. That on getting up the preceding night about eight P.M., the rupture, which had existed for many years previously, came down, but he thought nothing of it till he felt it painful and became sick, and he then attempted to return it, which he could usually do with great ease, but could not succeed though he made great efforts. Dr Cruickshank was then sent for, who saw him early in the morning, found the swelling hard and tense, and after giving an enema he tried reduction by the taxis for some time, and then feeling satisfied that an operation would be required, he sent a message for me in time to leave by the first train, so that I saw the patient within thirteen hours from the time the rupture first came down. From the urgent vomiting, abdominal pain and general state of the patient, and the tense and tender condition of the hernial tumour I felt it would be injudicious to try the taxis. I therefore having obtained the patient's consent to an operation, put him under chloroform and operated in the usual manner.

Finding that the stricture was in the neck of the sac, which appeared deeply indented, I opened it carefully at one point where I could pinch it up, and then enlarging the opening, I introduced my finger so as to guide the bistoury and slit open the sac more fully. This exposed the gut, which was a knuckle of small intestine about three inches long, of a dark purple colour, granular, and covered with flakes of adherent lymph. There was no fluid in the sac, merely a soft gelatinous-looking effusion. The constriction seemed deeply indented, and so tight that I could not get my nail within it. I accordingly made the bowel be drawn gently down, and with the probe-pointed bistoury, I notched the constricting edge sufficiently to enable me to introduce the point of a flat director between it and the gut, and then divided the deep stricture directly upwards. A large quantity of dark serum now escaped from the abdomen. I next drew down the bowel very gently to examine its condition at and above the constricted part. I found it looking sound above, but the knuckle which had been protruded seemed thin and covered with lymph, and retained its indented and constricted appearance after all constriction had been removed. Still, as it was not gangrenous, I replaced it gently within the abdomen, closed the wound and bandaged the patient. I did not see this patient again, but I learned from Dr Cruickshank that he made a very good recovery.

CASE VII.—*Strangulated Inguinal Hernia; Operation on the fourth day; Recovery.*

G. R——y, æt. 39, coach-painter, was admitted into the hospital, September 27th, 1852. He states, that ten years ago he first felt a swelling in right inguinal region. The rupture came down sometimes as often as once a fortnight; at other times, not for a period of six months. Four years ago he felt a similar, but smaller lump, come down occasionally in the same region on the left side.

On the night of the 23d September, or very early on the morning of the 24th, the hernia came down on the right side. This was an unusual occurrence, as it formerly had generally come down during the day. He felt very

severe pain in the part, and found he was not able to reduce the bowel, as he had been before accustomed to do. He went to his work, however, on the Friday morning, but feeling ill, he returned to his lodging, but did not go to bed. All the food he took was vomited. He continued in this state till Monday the 27th, when he applied to Mr Lizars. Mr L. was unsuccessful in his efforts to reduce the hernia, and recommended him to apply for relief at the hospital, which he did in the evening at half-past seven P.M., when he was admitted.

On admission; he has evidently been drinking recently, and his manner is excited. He says he only vomits when he takes food. The tumour is excessively tense, and the size of a small orange. He was put into a warm bath, and the taxis carefully employed, but without avail. At half-past nine P.M. Mr Spence operated for the relief of the hernia. On opening the sac, a large quantity of yellowish, but clear serum, exuded from the wound. The bowel was dark-coloured, and had a granular appearance. There was a small spot resembling a clot of blood sticking to the gut. The stricture having been divided, the bowel was returned, and the external wound brought together by three points of suture. A compress of sponge, with a folded towel, was applied to the wound. This was kept in accurate apposition to the walls of the abdomen by a spica bandage. After awaking from his chloroform sleep, he said that he felt quite easy. 50 drops of sol. morph. were shortly after administered, and a second 50 drops had, after an hour's interval, the effect of sending him to sleep.

Sept. 28th—Continues to feel easy: had an injection of warm water and castor oil at eleven P.M., which opened his bowels freely, after which he felt more comfortable; no tenderness of abdomen on percussion.

Sept. 29th—Bandage changed by Mr Spence; suture removed; wound looks well.

Sept. 30th—The bandage having become loose was reapplied: the remaining sutures were removed, on which some discharge exuded from the wound. Patient feels quite well, and even expressed a wish to sit up. He is allowed low diet for the present.

Oct. 9th—Has continued to improve since last report. A few days ago he caused the upper part of the wound to gape by getting out of bed contrary to orders. He is quite comfortable, and feels quite well.

Oct. 13th—A very small portion of the wound remains unhealed; in all other respects he is quite well.

Oct. 29th—Is quite well, and wears a double truss, as there is a decided tendency to hernia on the opposite side.

Nov. 1st—Dismissed cured.

CASE VIII.—*Strangulated Umbilical Hernia; Operation; Recovery.*

On the evening of the 24th November 1851, I was requested by Dr M'Cowan to visit Mrs M'G——, æt. 65, who was labouring under symptoms of strangulated umbilical hernia. It appeared that she had been subject to the protrusion of the hernia from childhood, but was always able to press it back. For some years past, however, she had suffered from attacks of bronchitis, which, she thought, had caused it to increase in size; and she also stated that for some time past there had been always a little solid swelling left after the rupture was replaced. About eight days before I saw her the swelling protruded whilst she was coughing more suddenly, and of a larger size than usual, and she could not put it back. She did not, however, apply to any one at the time, but as she felt sick she took some aperient medicine, but without any effect. She repeated the medicine, but this time she vomited it almost immediately, and now feeling the tumour painful and hard, and the vomiting and obstructed state of the bowels continuing, she applied for relief.

Dr M'Cowan tried the taxis, but without success, and on consideration of the length of time which had elapsed, and the urgency of the symptoms which were present when he visited her, he requested me to come and operate.

I found the patient suffering from the symptoms of strangulated hernia, anxious and restless, with quick small pulse, and abdominal tenderness. The hernial tumour was about the size of a large orange, very tense and painful, and generally elastic except at one part where it felt solid, as if the textures were matted together. I made an incision about 2½ inches long over the tumour parallel to the linea alba, and a shorter transverse incision, and carefully exposed the surface of the sac. On opening the sac, I found the contents to consist of a considerable portion of the small intestine much congested, and a portion of omentum. After division of the constricting edge directly upwards, the bowel was readily reduced, but on attempting to return the omentum it was found adherent at one point, and on tracing it towards the surface I discovered that the sac at that part was quite obliterated, and that the omentum was adherent to the superficial fascia and integuments. I, therefore, divided the narrowest part of the protruded omentum, and placed ligatures on some vessels, and then removed the adherent portion. The wound was then closed, and a pad and broad bandage were applied, and an opiate was directed to be given.

Next day the patient was easier, the vomiting had ceased, and there was very little abdominal tenderness. The bowels had not acted; an enema was, therefore, ordered to be administered, and a dose of castor oil to be given in the evening. Her general symptoms improved, but as the bowels continued to resist the action of the milder purgatives, on the third day after the operation two compound Colocynth pills were given, followed by a saline purgative, which acted freely on the bowels, and relieved the tympanitic distension of the belly. Indeed, from this time she improved very rapidly. The ligatures which had been placed on the omentum did not separate for fully six weeks; this rendered the healing of the wound tedious, but did not prevent her wearing a truss, and going about her usual avocations. When the ligatures came away, the wound healed firmly in a few days.

Remarks on Cases III. IV. V. VI. VII. and VIII.—This group has interest as exhibiting the different effects of the constriction in hernia upon the included intestine, and the difficulty as to the prognosis, judging from the apparent amount of alteration in structure. In some cases there is no room for doubt; when a portion of gut is ash-coloured or black, and has a sloughy appearance and gangrenous odour, there can be little hesitation as to the practice to be adopted, viz., to relieve the constriction and lay open the mortified portion of bowel, or at least to forbear returning it into the abdomen, and to apply warm water dressing to the wound, so as to afford a chance of cure by artificial anus. But the cases where the practitioner is sometimes in doubt as to the propriety of returning the bowel are those where the constriction has been very tight or long continued, and where the bowel, though much altered in structure and its vitality impaired, is not positively gangrenous. In such cases where the stricture is divided, with careful after-treatment the gut may recover its vitality and tone. On the other hand, notwithstanding every precaution, the diseased action may go on and lead to fatal results from perforation. The cases of L., and R—b, show this difficulty of judging from the mere appearance of the strangulated bowel; in Mrs L.'s case, the gut, though dark, granular, and tightly constricted, had by no means so bad an appearance as that in Mrs R—b's case, yet perforation took place in the former, whilst the latter recovered without a single

bad symptom. The period after the operation at which the symptoms of perforation supervened in Mrs L.'s case, the portion of the intestine floating loose, instead of adhering to the surrounding structures, together with the examination of the perforated portion, and the character of the minute perforations show that ulceration had proceeded from the mucous surface outwards. Hence the symptoms were at first favourable, and this shows how guarded we should be in our prognosis in cases where the strangulation has existed for so long a period, particularly in old feeble people in whom the reparative powers are small. In such cases we should especially avoid exciting the action of the bowels too soon, and where there is much doubt as to the state of the intestine, I would recommend the plan of dressing the wound which I adopted in Mrs R—b's case, so that if sloughing of the bowel should occur, the feculent matters have the chance of escape by the wound. In the case of Mr —— the very dark, congested, and ecchymosed appearance of the intestine, was, I think, principally due to the prolonged attempt at reduction by taxis as well as to the tightness of the constriction, for the serous coat of the bowel had not lost its natural smooth glistenous look, nor did it present any appearance of effused lymph on its surface. In H., on the contrary, though, as in Mr —— the strangulation had only been of very short duration prior to the operation. The state of the bowel was apparently quite as bad as in Mrs L.'s case. It was "dark purple, granular, covered with flakes of recent lymph, and retained the indented appearance even after the constriction was divided;" and though from the appearance of the intestine and the feeble state of the patient, I formed a very bad opinion of the case, I was agreeably disappointed to find my prognosis was not fulfilled, for he made an excellent recovery. The cases of R—y and Mrs M'G. afford examples of the symptoms existing for some days, gradually increasing in intensity, and inducing great alteration in the constricted portion of the intestine, yet contrary to what might have been expected and what is generally found under such unfavourable circumstances, both recovered without the supervention of peritonitis or other bad symptoms. Mrs M'G.'s case possesses some interest also, as umbilical herniæ are not very frequently the subjects of operation, and the obliteration of the peritoneal sac at one part, and the adhesion of the omentum there to the deep surface of the superficial fascia, is also a point of practical importance worthy of notice.

CASE IX.—*Scrotal Hernia, apparently reduced by Taxis. Small Hernial Tumour felt at upper part of Canal; Operation; Death.*

Mr C., æt. 85, was seized with the symptoms of strangulated hernia on the 23d December 1853. He was seen by Dr Cruickshank of North Berwick, who found a large scrotal hernia which the patient stated he had had for upwards of twenty years, but that it had never troubled him as he could always reduce it. Dr C. returned the tumour apparently by the taxis, but the symptoms still continuing, Dr C. asked me to meet him to examine the

case. I visited him on the afternoon of the 27th, and found him restless and suffering from hiccough. I was informed that the vomiting had not been so bad for some hours, and that he had had a slight motion of the bowels after an enema. The abdomen was tense and painful to the touch; there was, however, no distinct appearance of hernial swelling but merely a general fulness from great development of fat on both inguinal regions. On examining the left side where the large scrotal hernia had existed, by passing my finger from below upwards along the cord, I thought I could detect a small swelling at the upper part of the canal. After again examining him, and feeling more satisfied as to the existence of the small swelling, I explained to his friends the necessity of an operation to afford him the only chance of relief, although from his exhausted state and advanced age the case was very unfavourable.

He had previously suffered from acute rheumatism and asthma, and on trying to administer chloroform it so depressed his pulse that its use could not be continued.

An incision was made beginning well over the position of the deep ring and carried down for about 2½ or 3 inches. A very great depth of fat required to be divided in order to reach the tendon of the external oblique. I then slit up the tendon from the external ring so as to expose the canal, and when this was done I brought into view a small hernial tumour, about the size of a walnut, constricted at the deep ring. The sac was cautiously opened as there was no fluid in it. The bowel was found very red and granular, but not very dark, and it presented no appearance of gangrene. The constriction was then divided directly upwards. I next gently drew down the gut to examine it immediately above the stricture, when I found a small firm band of lymph constricting it within the sac. This I also divided, then readily returned the bowel, and dressed and bandaged the wound in the usual manner.

I did not see the patient again, but I learned from Dr Cruickshank that after a temporary relief, the symptoms of vomiting and hiccough returned with abdominal tenderness, and the patient gradually sank and died on the 30th of December.

Case X.—*Strangulated Femoral Hernia; Operation; Recovery.*

I visited this patient at the request of Dr Maine of Gorebridge, and as I only saw her on the occasion of my performing the operation, I am indebted to Dr Maine for the rest of the report of the case.

Mrs W., æt. 62, previously stout and healthy, was rather suddenly seized with pain in the right hypochondrium, at twelve o'clock noon on the 10th March, followed by sickness and vomiting. Was first seen at twelve P.M. Pain severe but intermittent, and shooting along the course of transverse colon. Pulse, skin, and tongue natural. Bowels have been confined for two days. A calomel and Colocynth pill, with one grain of opium was given, and warm fomentations directed to be applied to abdomen.

11.—No Better. Pain and vomiting at intervals; rather anxious expression of countenance. Bowels not moved. On examining the lower part of left side of abdomen a tumour, the size of a large walnut, was found in the inguino-femoral region rather hard and somewhat nodulated. She complained of no pain in the part, even on pressure, but some uneasiness in the bowels above it. Dr Maine tried to reduce it, but could not; he directed a simple enema to be given, and warm fomentations to the abdomen on the return of pain. Dr Thomson, Dalkeith, saw her with Dr Maine in the evening, when we found her much easier. Had one or two attacks of pain during the day, but not of long continuance. Pulse good; enema had brought away a hard stool. Applied taxis again, but without success. An opiate to be given at bed-time.

12.—Twelve P.M. Has remained nearly free from pain and vomiting all day. Repeat the opiate.

13.—I saw this patient about half-past five P.M. of the 13th March, along with Drs Maine and Thomson. The abdomen was tense and generally tender

to the touch, her features were sharp and anxious, and bedewed with cold perspiration. The pulse was 96 and jerking; tongue rather dry and white in centre. She stated that the vomiting had not been so frequent as yesterday, but that whenever she takes food or liquid the vomiting returns. The bowels were obstinately constipated.

On examination of the left inguino-femoral region I found a hard firm swelling about the size of a walnut, somewhat flattened and movable. It lay outward over the vessels, and no distinct neck could be traced from it towards the direction of the femoral ring, and there was not the slightest impulse on coughing. Still the symptoms and history of the case, combined with the presence of a tumour in this region, seemed to me sufficient warrant to operate. I accordingly, after obtaining the patient's consent, did so. I made a T incision over the swelling, but from the very great amount of fat, I had to convert it into a crucial incision to gain room. After dissecting through a great depth of fat, I exposed a small hernia. The sac was found vascular with masses of fat developed in it, so as very closely to resemble omentum, but by tracing it upwards to the narrow neck of the tumour, its true nature was easily recognised. I next opened the sac, which required great care, as it contained no fluid. The bowel was dark and granular, but not adherent.

On dividing the constriction, which was very tight, a large quantity of reddish serum escaped from the abdomen.

The bowel was then gently reduced, and the wound dressed and bandaged.

14.—Passed a comfortable night, but complains of considerable pain over abdomen generally—has vomited this morning—considerable thirst present. Pulse 110, good. Ordered a grain of opium and two of calomel every three hours. Twelve P.M., greatly relieved. Pulse 100. Pills to be given every four hours.

15.—Much in the same state as last night. ʒvj. of castor oil to be given at once, and a grain of opium every six or eight hours.

16.—Feels more comfortable, little or no pain, tenderness slight. Wound looking well—removed some stitches. Opiates to be withdrawn, and the oil repeated. Twelve P.M., bowels moved—feels comfortable. Opiate to be given if necessary to procure sleep.

20.—Has continued to improve till this evening, when, probably owing to having been moved in bed, the pain in abdomen returned with vomiting, and some amount of tympanitis. Ordered the calomel and opium pills again every three or four hours, and a sinapism to the abdomen to be repeated in a few hours.

21.—Pain relieved somewhat, but vomiting continues. Tenderness and tympanitis increased. Face cold, with anxious and sunk expression; pulse small, 120. Covered abdomen with tela vesicatoria, gave a grain and a half of opium to be repeated in three hours. Twelve P.M., greatly better—nearly free from pain—vomiting ceased—skin warm and comfortable. Pulse 112, good. Ordered a poultice to abdomen, and an opiate every six hours.

22.—Passed a good night, and feels better. Opium withdrawn, except at bed-time.

23.—Still improving. Bowels moved by castor oil. Wound sloughing to small extent. Dressed with red lotion. A more generous diet allowed.

From this time she improved rapidly without an unpleasant symptom.

Remarks on Cases IX. and X.—These two cases illustrate two of the difficulties as to the question of operating, arising from the doubtful nature of the case. In both these cases, there was one feature in common, which added to the other difficulties of diagnosis, viz. a very great development of fat in the inguinal region, but, in other respects, the cases were very different. In Mr C.'s case, the doubt as to the existence of any portion of hernia being down,

together with a deceptive remission of the symptoms, rendered it much more difficult to decide as to operating. The hernia, originally a large scrotal one, had been reduced by Dr Cruickshank, with a distinct gurgling sound, of which the patient was sensible. There was also for a day, some remission of the symptoms, and a slight stool. These circumstances taken in conjunction with the absence of any apparent swelling in the inguinal region, when compared with that of the opposite side, or by examining the surface of the abdomen with the fingers, seemed to prove that the hernia had been reduced, and from its large size, it could not have been reduced "en bloc." On the other hand, though there had been some remission of vomiting, still there was not that relief which follows complete reduction by taxis. There were the quick pulse, hiccup, clammy sweats, abdominal tenderness, tympanitis, and occasional vomiting on taking liquids; and the mere remission of the vomiting is by no means uncommon in cases of strangulated hernia, as I have had occasion to remark before in this Journal. The most deceptive symptom to my view was the character of the stool, it was scanty but liquid and bilious looking, as if from the upper part of the intestinal canal; and this, in conjunction with the statement that several distending enemata had been given, which came away without any feculent matter, whilst the thin stool had been passed after the patient had taken some medicine by the mouth, I confess somewhat staggered my decision at first, but after several careful examinations of the dilated inguinal canal by my finger introduced along the chord, I was sure I felt a small swelling very deep, and too tense to be merely a part of the sac, and, therefore, after explaining the necessity of giving the patient a chance of relief, I operated, and as it proved, the state of matters justified my decision. In a younger person, there would have been less room for hesitation, because in such a case the mere incision, even supposing no hernia had been found, would not have been dangerous. In the case of Mrs W., though there was doubt as to the nature of the hard small swelling, still I felt no hesitation as to the practice to be pursued, for the existence of a tumour near the ordinary position of hernia, combined with the symptoms present in her case, is a sufficient warrant in my view, to cut down upon, and expose it. For we not unfrequently find small femoral herniæ lying under glands, adherent to the surface of the sac, and even if no hernia be found, no great harm is done, or rather the real nature of the case is rendered clearer by the process of exclusion; and the practitioner may use more powerful remedies than he could venture to do, so long as there was any probability of strangulated hernia being present. On the contrary, if the surgeon for fear of not finding a hernia, delays too long in such a case, then he most certainly puts his patient's life in great jeopardy.

Besides the difficulties of diagnosis, there is another point of

interest in Mr C———'s case, the peculiar cause of strangulation of the small knuckle of bowel. When the great mass of the hernial contents were reduced by taxis, What prevented the return of this small portion? Before operating, I thought it might depend on a double constriction in the sac, similar to that in the case of P—— B——, recorded in the series of hernia cases, in this Journal for August 1845. But on opening the sac, the true cause was explained by the presence of a band of lymph, constricting the loop of bowel, in fact, an internal strangulation within the hernial sac, keeping the constricted portion distended, leading to its further strangulation by the neck of the sac at the deep ring, and so preventing reduction. The occurrence of such cases has sometimes been argued against the extra-peritoneal operation for hernia, as it has been said that we cannot be certain in any case that such an internal constriction may not be present. But if we pay attention to the rule to make sure of being able to return the contents of the sac without forcible pressure, and take care not to push the sac and its contents back *en masse*, we may feel satisfied there is no such constriction. For although in this case not only all constriction external to the sac was divided, but even the neck of the sac itself, the knuckle of bowel still remained tense, and could only have been reduced by forcible pressure, if at all, and therefore I believe that the objection is groundless, inasmuch as division of the textures external to the sac would not permit of reduction, and thus the surgeon would be necessitated to open the sac, and so recognise the true nature of the case.

Part Second.

REVIEWS.

The Pathology and Treatment of Stricture of the Urethra. By HENRY THOMPSON, F.R.C.S., M.B., London. 8vo. 1854. Pp. 424.

(Continued from page 347.*)*

IN regard to the diagnosis of stricture, Mr Thompson after pointing out the insufficiency of symptoms, however apparently well marked, to lead us to a correct diagnosis in cases of stricture, and stating the necessity for physical diagnosis by means of instruments, proceeds to point out the form of sounds and catheters which he considers best adapted for passing readily and with least chance of obstruction along the urethra, and gives the figure of one constructed on the natural curve of the canal. The curve and shape of that which he