

Table of Cases.

No.	Abdominal organs within thorax.	Condition of lungs.	Diaphragm.	Duration of life.
1	Stomach, small intestine, and right lobe of liver.	Not recorded.	Absent on right side.	Probably at birth.
3	Stomach, small intestine, spleen, and left lobe of liver.	Left lung little developed.	Fissure between tendinous centre and cartilgs.	Died at birth.
4	Pyloric end of stomach, spleen, and small intestine.	Left lung not inflated.	Not recorded.	5 weeks.
5	Same as No. 4.	Both lungs acted.		2 mths.
7	Part of intestine.	Normal.	An opening of 2 inches diameter.	20 yrs.
8	Part of colon.	Well developed.	Opening not large.	Advanced age.
10	Stomach, spleen, colon.	Normal.	Ditto.	Mature age.
11	Stomach in right thorax.	Ditto.		24 yrs.
12	Whole small intestine.	Left lung compressed.	Small opening.	Old age.
13	Nearly whole of the viscera.	Not recorded.	Left half absent.	6 weeks.
15		Ditto.	Entirely absent.	7 years.
17	Intestines.	Left lung not developed.	A fissure in it.	7wks.(?)
18	Small intestines and spleen.	Not recorded.	Left wing absent.	Half-an-hour.
19	Whole intestine.	Left lung size of walnut; right, small and compressed.	Aperture in posterior part.	20 hrs.
20	Stomach, spleen, pancreas.			1½ hr.
21	Small intestines, large part of liver.	Right lung very small.	Opening in right side.	¾-hour.
22	Stomach, small intestine, and large part of right lobe of liver.	Not recorded.	Rounded opening in right side.	Died at birth.
23	Stomach, small intestine, colon, part of liver, and spleen.	Developed.	Left side absent.	Ditto.
24	Cardiac portion of stomach.	Not noted.	Deficient in centre.	Puberty.

The cases may be thus classed.

1. Cases 3, 22, and 23, did not survive birth; and to these may be added Mrs. M.'s child, and probably Case 1. Nearly the whole of the abdominal viscera, including the liver, were within the thorax. The lungs were little developed. The diaphragm was not greatly deficient.

2. Cases 18, 20, 21, lived respectively half an hour, three quarters of an hour, and an hour, with a large proportion of the abdominal viscera within the thorax—a less portion of the liver than in the above class. One lung was very small in one case; the size is not noted in the others. The left wing of the diaphragm was absent in one (No. 18).

3. Case 19 survived twenty hours. The whole of the intestines were contained within the thorax. One lung was small and compressed; the other was not inflated.

Cases 4, 5, 13, 17, lived a few weeks. The small intestines, spleen and pylorus, were within the thorax in two of these cases (4, 5); the small intestines in Case 17; and nearly the whole abdominal viscera in Case 13. The left lung was not inflated or not developed in Cases 4 and 17. Both lungs acted in Case 5. The diaphragm was deficient of its left half in Case 13. It had a fissure in it in Case 17.

5. Cases 7, 8, 10, 11, 12, 15, lived some years. In Case 10, the stomach, spleen and colon, were within the thorax. In three others, a less proportion of the abdominal organs was

within this cavity. The lungs were well developed in all except Case 12, in which the left one was compressed. The diaphragmic deficiency was not great, except in Case 15, where this muscle was entirely absent. To this class are to be added the cases given by Littré and Druitt, of a dog and cat.

This collection seems to lead to the inference (as far as allowable from such partial details), that non-viability is due to the amount of splanchnic viscera within the thorax compressing the lungs, and preventing their development or inflation. In only one instance, where life continued some years, was there a large amount of these organs within the chest cavity (Case 10).

In the first class, nearly the whole abdominal viscera were within the thorax; these were all foetal.

In the second class, a less amount, and notably less of the liver, and so on in a diminishing ratio through the other series; Case 13 is a doubtful exception, from the loose and general terms in which it is recorded, and the absence of the authority.

The misplacement of the various organs is not at all in proportion to the deficiency of the diaphragm; nor is the viability, for in Case 15, life continued seven years, notwithstanding the entire absence of this important muscle of respiration.

I had the opportunity of observing accurately in Mrs. M.'s child that death occurred from inability to inflate the lungs, to which repeated efforts were made, unsuccessful doubtless from the presence of the malposed viscera having prevented the development of one lung, and probably preventing the expansion of the other.

It is supposed these abnormalities are not rare, yet the few I have been able to gather in a considerable search, show that they are either rare or not sufficiently put on record, and certainly not with sufficient fulness and accuracy; and I would ask those who have met with similar instances to publish them; all congenital defects are interesting to the physiologist and pathologist, however little valuable in practical medicine.

## TEN YEARS OF OPERATIVE SURGERY IN THE PROVINCES.

By AUGUSTIN PRICHARD, Esq., Surgeon, Clifton, Bristol.

### II.—OPERATIONS ON THE ABDOMEN AND LOWER INTESTINE.

[Continued from p. 836.]

*Inguinal Hernia.* CASE LVII. S. B., aged 38, was admitted with strangulated hernia of the left side, of about twelve hours standing. His truss had been broken. Upon using the taxis, the tumour became smaller, and appeared to have been reduced; for the patient was relieved, and the bowels were moved; but, twelve hours afterwards, the swelling returned, and he complained of great pain. I tried the taxis again, but ineffectually. Upon operating, I found that the sac merely contained omentum and a large quantity of fluid. The omentum was thickened and extremely congested by the pressure of the neck of the sac. I tied and removed a considerable portion of it, and brought the wound together as usual. This patient made a fair and speedy recovery.

CASE LVIII. W. H., aged 50, an extremely fat man, with inguinal hernia of the right side, which he has had twenty years, but has only worn a truss for two years. Symptoms of strangulation began about eighteen hours before I saw him, but they were not very urgent. He had been bled, and the taxis used, with warm bath and other means. After trying again to reduce the swelling, but in vain, I operated, and had to divide an enormous thickness of fat, so that the length of an ordinary director was only just sufficient to reach from the skin to the external ring. The sac was opened, and a small tumour was found in it, not having the usual black colour of strangulated intestine, and it appeared to be fixed in the canal. Finding the rest of the openings free, I brought the parts together, and ordered him some opiates. No very troublesome symptoms followed, but the wound healed slowly.

I do not believe that, at the time of the operation, this patient was suffering from strangulation; but the difficulties of the case were unusual, for he had symptoms of obstruction (vomiting and pain in the tumour), and the hard swelling in

the inguinal region of the size of a walnut. There was also the previous history of an old hernia, which had come down suddenly the day before. In addition to this, the excessively fat condition of the patient rendered the case more obscure; and he lived some little distance in the country, where I could not see him again within twenty-four hours, a space of time it did not appear prudent to wait; and, under these circumstances, I believe that the plan adopted was correct.

CASE LXIX. A. W., aged about 50, was admitted under my care, suffering from strangulated inguinal hernia of the right side. His symptoms were acute, and had existed for forty-eight hours; and it is a remarkable fact that, exactly one week before I was called to operate upon him, he had left the Infirmary cured, having been admitted under one of my colleagues, and operated on for strangulated inguinal hernia of the other side.

The hernia was of a large size, filling his scrotum on the right side. I made a small incision; and, after dissecting down to the sac, divided the stricture, which appeared to be formed by the external ring, without opening the sac. While, however, I was trying to reduce the rupture, my finger passed through the membrane, which was unusually thin and distended, and the fluid escaped. I returned the intestine, which was dark, but polished and firm, without any further division of the stricture. The patient had a slight attack of erysipelas round the wound, but recovered without any other drawback.

The following are unsuccessful cases of operation for inguinal hernia.

CASE LX. W. K., aged 19, had been occasionally subject to a hernial protrusion of the right side; it came down three years before this time, and again upon the morning of his admission, whilst he was at his work; and then it speedily became very hard and painful. I saw him within six hours, and found a round hard tumour in the right side of the scrotum, evidently occupying the tunica vaginalis; for the site of the testicle could not be discovered. The swelling was so circumscribed at the external ring, that I could confine it between my finger and thumb, and feel the component parts of the spermatic cord. His pulse was very quiet, being only 60; and he stated that he had passed flatus *per anum* since the occurrence of the tumour. He also had gonorrhœa. No impulse on coughing. Being in some doubt about the nature of the case, I had him bled, gave him an opiate and a dose of castor oil to take in the morning; and then, finding that matters were no better, performed an operation, intended to be exploratory, about twenty-four hours after the first signs of strangulation. There was a feeling of fluctuation about the swelling, and extreme thinness of the investing tissues, which made it look like a cyst; but, upon cutting through it, a piece of dark livid intestine protruded itself, covered by a thin layer of omentum, containing coagula in its tissue. I divided the stricture upwards, and returned the bowel; but with some little difficulty, as the man was struggling violently, from the effects of the chloroform. The testicle was seen at the bottom of the cavity. The patient never seemed to recover himself; his pulse became extremely rapid; and he died about fifteen hours after the operation.

POST MORTEM EXAMINATION. A small portion of the calibre of the intestine was adherent to the ring inside; that part which had been strangulated was variegated in colour, black, purple, and soft, with white and yellow spots about its surface. No other morbid appearance was found.

The difficulties of this case were, the form of the tumour, its position in the tunica vaginalis, with the absence of any history of congenital hernia, the existence of gonorrhœa, the passage of flatus, the quiet pulse, the patient's freedom from other general symptoms, and the want of any impulse on coughing. This latter sign was, however, only an additional difficulty when combined with the absence of fever; for a hernia really strangulated receives no impulse, being cut off from the abdominal cavity; but, under such circumstances, it is rarely the case that the general symptoms of strangulation are not manifested. The stricture was so tight that the vitality of the protruded part was speedily destroyed; and the patient's violence under chloroform, and intolerance of its effects, still further lessened his chance of recovery.

CASE LXI. T. T., aged 74, was admitted with strangulated scrotal hernia of the right side. After trying in the ordinary way to reduce the swelling, I gave him chloroform, intending to operate, should I find that it could not be done. After he had inhaled for a minute or two, I began to manipulate the tumour, and found that I could lessen its size; but my attention was suddenly called away to the condition of the patient,

whose pulse ceased while the house-surgeon had a finger on the wrist, and all respiratory movements stopped at the same time. The old man appeared to be dead for half a minute; but the battery being at work upon an adjoining table, the handles were applied to his epigastrium and the back of his neck, and immediately he started into life, and struggled to sit up. I then reduced the hernia, and he went out well in a few days.

Two years and a half after this date, when the patient was in his seventy-seventh year, he was again admitted under my care, with symptoms of strangulated hernia; and when I was called to him, about midnight, he was suffering from vomiting, severe pain in the abdomen, and a very large and hard scrotal hernia. After trying the usual means, it was determined to operate; and the death-like syncope into which the old man fell at the first inhalation of the chloroform at once reminded me of what I had not recognised before, namely, that I had my former old patient again to treat. I operated without chloroform, and opened the sac, finding in it adherent omentum and a considerable quantity of dark intestine, which latter was returned, and the wound brought together as usual. I gave him some opium and a little wine, and he went on well until the third day, when his bowels were moved; but, in the latter part of the day, the skin around the wound, and the side of the scrotum and penis, turned black, as if from some sudden sphacelus with effusion of blood; and he began to sink, and died the next day.

At the *post mortem* examination, a large slough was seen over the side of the scrotum, and the lower part of the abdomen and upper part of the thigh. The intestine was slightly adherent to the neighbouring parts, and seemed to be recovering itself. No attempt at adhesion in the wound.

In this case, the old man had not vitality enough to withstand the operation; and the feebleness of his circulation, which caused the sloughing of the integuments, in all probability gave rise to the alarming symptoms which chloroform produced in him.

CASE LXII. E. W., aged 28, had been subject to hernia for many years, but upon this occasion it had been strangulated for *one hundred and twenty* hours. He had, on admission, a little hard tumour in the left inguinal region, and suffered from stercoraceous vomiting to a large extent. When I operated, he was excessively feeble—in fact, almost pulseless. There was no fluid in the sac; the intestine was very dark, but not disorganised; and the stricture was very tight. The intestine was easily reduced.

The next day, he felt and seemed well; but the bowels had been moved three times in the night, although he had taken a grain of opium after the operation. I ordered him wine, and an opiate draught three times a day; and he slept fairly, and expressed himself as comfortable the next day; but he gradually became lower and weaker, and died in the evening of the third day.

The peritoneum in this case was injected, but no lymph was effused; the intestine was dark, but firm; the wound made in opening the sac and dividing the stricture had healed. No other morbid appearance was noticed.

This patient, although a young man, was worn out by the long continued vomiting and depression produced by a very lengthened strangulation.

CASE LXIII. A. B., a farm labourer, aged 65, had been accustomed to live very freely, and had been the subject of inguinal hernia of the left side for many years. In addition, he had ventral hernia above the umbilicus, inguinal hernia of the right side, and also, what probably caused the rupture, a stricture of the urethra. The swelling had been down for three days, and he complained of much pain and sickness.

Upon operating and opening the sac, I found the stricture very tight, and about five inches of moderately dark intestine within. Some difficulty was experienced in reducing the hernia. After the operation he did not appear to rally, and the pulse still continued weak and intermittent; and he suffered from occasional vomiting. His strength gradually and steadily failed, and he died on the fourth day from the operation.

The *post mortem* examination shewed nothing very marked. There was imperfect suppuration in the scrotum and along the cord, but no peritonitis, or sphacelus, or effusion of blood.

In this case, also, the damage done by the disease to a vital part was relieved by the operation; while the effect upon the patient's unhealthy condition was so great that he could not rally from it.

CASE LXIV. G. D., aged about 35, a healthy labouring man,



was admitted as my patient with an enormous scrotal hernia, in a state of strangulation which had existed only a few hours before I saw him. The tumour was on the right side, and was very hard, tense, and painful, and considerably larger than the fetal head at nine months.

Upon operating, when the sac was opened, I found a great quantity of small intestine, very turgid and black: there appeared to be a double stricture, formed of the two inguinal openings, which the weight of an old and large hernia had drawn opposite one another. They were tense and hard, like the rounded tendon of a muscle. After dividing them, I tried to return the intestine, and succeeded, after repeated endeavours for a long time. The patient was an hour under the influence of chloroform.

The operation was performed late in the evening; the patient was seen at 2 A.M. the next morning (that is, in about four hours), and again at 4 A.M., when the assistant house-surgeon, finding him covered up in bed, did not disturb him. When I called in the morning, he was dead, and had been so apparently for some time.

POST MORTEM EXAMINATION, about nine hours after death; the weather being very hot. The body was much swollen, discoloured, and disfigured; the face and neck dark purple, tumid, and crepitating; the skin about the wound, and over the abdomen, pelvis, scrotum, and penis, was purple and green; and some little blood was effused here and there among the muscles. *Two yards and a half* of small intestine were quite black, and this part was cut off by a distinct line of demarcation from the rest, and blood was effused into its tissues. He had besides, air in the veins; a large thyroid vein, the internal mammary, the iliacs, the venæ cavae, and the azygos, were distended with gas; the vena cava inferior looking like a piece of small intestine. Frothy blood was in the heart, and air in the auricles. The intestine was in such a state, that it was quite impossible that he could survive; but, undoubtedly, the immediate cause of death was the presence of air in his blood. He only took half an ounce of chloroform, and he rallied well after it. Whether the prolonged operation, or the chloroform, or the great damage done to the alimentary canal caused this state, I am quite unable to decide.\*

*Umbilical Hernia.* CASE LXV. T. B., aged about 40, long the subject of umbilical hernia, which had in all probability been produced by the distension of his abdomen from dropsy, was admitted with symptoms of strangulation that had existed about eighteen hours before I saw him. He had been tapped three times.

After trying the taxis in vain, I operated, and was obliged to open the sac, in which I found a coil of small intestine, black, but polished. It went back immediately upon the division of the stricture, and a large quantity of serum flowed from his peritoneal cavity through the wound, which was afterwards brought together by suture, compress and bandage. Complete union by the first intention occurred, and not a particle of pus could be seen.

REMARKS. The number of hernia operations altogether is twenty-five, but they are too few for any satisfactory numerical calculations; in fact, in a disease so varied as hernia, where the cases differ so much from one another in almost every particular, I cannot understand how any point of practical value as to treatment can be deduced from numbers, and it is even difficult to see how any pathological facts can be established in this way. The principal points which can be gathered in the numerical way from this series may be thus expressed:—

Of the twenty-five, fourteen were women, and eleven men; the eldest was 77 years old, the youngest 18 years; sixteen were femoral, eight were inguinal, and one umbilical; seventeen occurred on the right side, and seven on the left; in the successful cases of femoral hernia the average age was 48 years, whilst that of the fatal cases was 60 years; the average duration of the period of strangulation in the successful cases of femoral hernia was *fifty-two hours*, and of the unsuccessful cases *sixty-eight hours*; the average length of strangulation in the successful cases of inguinal hernia was *twenty-six hours*, and in the unsuccessful cases *forty-eight hours*. Four cases of femoral hernia died, out of sixteen that were operated on; while five cases of inguinal hernia died, out of eight operated on. The only case of umbilical hernia recovered. Three women died, out of fourteen operated on; and six men, out of eleven operated on. I subjoin a table of the fatal cases.

\* Cases of death with air in the veins have been published by Mr. May of Reading, in the JOURNAL for 1857, pp. 477 and 663. Several deaths from chloroform have occurred, in which air was found in the veins.

## 1. Femoral Hernia.

Sex and Age.	Period of Strang.	Side.	Remarks, and Post-Mortem Appearances.
F. 69	24 hrs.	Left	Peritonitis with lymph and adhesion. No recovery of the intestine; eight inches very dark.
M. 56	80 hrs.	Right	No recovery of the intestine that had been strangulated: no sign of inflammation.
F. 70	96 hrs.	Right	Diarrhœa caused her death. No <i>post mortem</i> examination.
F. 48	90 hrs.	Right	Intense peritonitis, caused by prolonged strangulation previous to operation.

## 2. Inguinal Hernia.

Sex and Age.	Period of Strang.	Side.	Remarks, and Post-Mortem Appearances.
M. 19	24 hrs.	Right	Strangulation excessively acute. He never appeared to recover from the chloroform thoroughly.
M. 77	24 hrs.	Right	Sloughing of the scrotum and penis, and integuments about the wound.
M. 28	120 hrs.	Left	Great depression and weakness; no recovery in the intestine.
M. 65	60 hrs.	Left	Suppuration about the cord. (Query, pyæmia?)
M. 35	12 hrs.	Right	Veins full of air: eight feet of intestine black.

The cases which we meet with here in hospital practice are, as a rule, very unfavourable; quite as much so as those met with in the London hospitals; for, after attempts at reduction and other treatment by the patient's own medical man, or by the surgeon of a poor-law district, all of which involves delay, they are frequently brought in many miles from the country, perhaps after a day or two's consideration, and again undergo examination by the resident surgical pupil and house-surgeon, before the surgeon of the week is called upon to operate. All this is inevitable; for we all admit that these attempts at reduction must be made; and really a large number of cases is in this way cut off from coming under the surgeon's knife, by the return of the ruptures by the taxis, at one or other of the stages I have described.

To draw any guide as to the after treatment of any particular case of hernia from statistical observations is manifestly absurd, owing to the great variety in the cases; but there are a few points on which I should like to give an opinion.

As to the debated question of giving purgatives after the operation, while I am convinced that diarrhœa is much to be dreaded, and I generally give opiates to keep the parts quiet and at rest until some repair or recovery has taken place, yet the opposite condition, if too prolonged, is also to be feared, not on its own account, but because it indicates that the intestine does not recover its function; and the converse of this proposition is also true, that when the bowels are naturally relieved two or three days after the operation, the patient will in all probability do well. To begin with active purgation, is to damage or destroy the patient's chance of recovery.

The intestine was returned without cutting into the sac in only two of these cases; but, as a rule, if such can be given, it is better to do so always; on the other hand, it is not unfrequently impossible to effect it, and in cases where strangulation has existed a long time, or old omentum is contained in it with the strangulated intestine, it is important to see the condition in which these organs are, and sometimes to remove the omentum. Upon looking over the causes of death as discovered by the *post mortem* examination in these unsuccessful cases, we may say that two patients possibly died from the effects of the operation, namely, the old man (Case LXI), aged 77, whose scrotum sloughed, and another who had suppuration about the cord; one old woman died of diarrhœa and prolonged strangulation, and two from well marked peritonitis. I do not think that opening the sac had anything to do with the fatal result in any of the cases; in most of which the patient's death warrant seems to have been signed by the damage done to vital parts before the operation was performed. In two of those who did well, an artificial anus was temporarily formed by the adhesion to the wound and sloughing

of part of the calibre of the intestine; but they both healed spontaneously, and in one of them the hernia returned exactly at the same place. I think it not improbable that these two cases would have been reckoned in the list of deaths had the intestine been returned without any aperture in the sac.

The fact of the occasional *sloughing of the sac* during the progress of recovery does not appear to have been much noticed. It requires no special treatment; and, as the wound heals, the peritoneal cavity closes. It is easily intelligible, that a membrane so little vascular as the peritoneum, if squeezed out of its accustomed attachments and subject to severe pressure, should lose its vitality in the course of a day or two. In those old and rare cases where the stricture is caused by thickening at the neck of the sac, this would not be likely to occur.

In operating, I have always observed a peculiar sensation conveyed to the finger on opening the serous cavity, namely, a disagreeable feeling as of satin, and I have never yet been deceived respecting it; so that I should, in a case of doubt, take it as a guide as to whether the sac had been opened.

The fact that, in cases where strangulation exists, no flatus passes *per anum*, is occasionally a valuable aid in forming a diagnosis, and it is a question that should always be asked; but I do not think it is sufficiently noticed among the symptoms of the disease.

In several cases I gave the patients a little blue pill and opium, where there were signs or threatenings of peritonitis, and in one it was necessary to continue it until the mouth became sore, when a very marked improvement took place, and whenever it was administered I had reason to believe that it was of service; and hitherto I have seen no reason to doubt the lesson inculcated by our teachers twenty years ago, that to give mercury with opium, and not brandy, is the best mode of treatment for inflammation of the serous surfaces.

[To be continued.]

## Transactions of Branches.

### SOUTH-MIDLAND BRANCH.

#### RUPTURE OF THE SIGMOID FLEXURE OF THE COLON.

By HAMMETT HAILEY, Esq., Newport Pagnell.

[Read at Newport Pagnell, October 12th, 1860.]

H. B., a boy, about 15 years of age, a farm labourer, returned one evening from work, stating that he had received an injury in lifting a sack during the course of the day. He complained of violent pain in the abdominal region, with sickness and constipation. The parents administered castor oil and other mild aperients, without producing any alleviation of pain or operation on the bowels.

About twenty-four hours after his return, I visited him. He was lying on his back, breathing almost entirely by the thoracic muscles; the bowels were slightly distended, painful on pressure, particularly in the left iliac region. I inquired if the bowels had acted; he said that nothing had passed, but he felt something move internally, particularly in the side I had touched, in fact he expected that it had passed from him. I now percussed the part and found a dull sound, much duller than in any other region of the abdomen.

On placing my ear over the iliac region, I heard a distinct sound, something similar to the metallic tinkling heard in pneumothorax. I called in another practitioner, an elderly man, to see the case, and told him I believed from these two circumstances—viz., dullness on percussion and that peculiar sound—there was a rupture of the bowel; and that the most judicious treatment would be to administer sedatives. He replied, and very properly, that the boy was suffering from violent inflammation of the bowels, which ought to be reduced; and that the sound I heard might be caused by flatus. This advice was followed by leeches, fomentations, calomel and opium, and lastly, by a blister. An enema being recommended, I injected some gruel, and immediately afterwards placed my ear in the old spot, and heard the same sound, but louder, in conjunction with a much greater distention in that particular region. This confirmed my previous theory. I now persevered with the sedative treatment. The patient went through the process usual in peritoneal inflammation and died after several days of severe suffering.

**POST MORTEM EXAMINATION.** The day after his death, in conjunction with the before named medical man, I performed

a *post mortem* examination. Upon opening the peritoneum, there escaped a vast quantity of fecal matter, mixed with the gruel of the injection. On examining the peritoneum, we found it much inflamed. We next examined the bowels and found no inflammation of any importance; but, on inserting a quill into the colon, and blowing through it, air escaped from the sigmoid flexure, and, upon examination, I found it torn to the extent of from an inch to an inch and a-half.

**REMARKS.** The practical value of this case appears to rest on an important point in reference to internal injuries; viz., correct diagnosis. The existence of a lesion in the intestinal canal was obvious to me, by the dullness on percussion; and while listening to the disease, the peculiar sound conveyed to my ear from the apparent seat of injury. My impression was, that the large bowel was ruptured; and that the less the case was interfered with the better, that nature might, at least, have an opportunity of employing her own curative processes. The injection, undoubtedly, aggravated the evil, as it forced the probably collapsed opening and admitted a foreign material into the cavity of the abdomen, and doubtless with the current carried whatever feculency it might meet along with it. Of course there must be great obscurity in these cases; but I would strongly urge the impolicy of any hasty proceeding, however important, under other circumstances, where there exists a doubt as to the possibility of a rupture in parts so grave, and so essential to life as the intestinal canal. To diagnose, and to diagnose well, is the essence of correct and judicious practice.

### EAST YORK AND NORTH LINCOLN BRANCH.

#### TRAUMATIC ANEURISM OF THE RADIAL ARTERY, SUCCESSFULLY TREATED BY COMPRESSION AND FLEXION, AND AFTERWARDS BY EXTENSION.

By R. M. CRAVEN, Esq., Hull.

[Read at New Holland, September 26th, 1860.]

My reason for bringing before you the following case of traumatic aneurism is, because a successful result has followed from unusual treatment. Although, on seeing the case, I determined to follow a similar course of treatment to that which I will now detail to you, I, nevertheless, anticipated that I should have to make an incision, remove the coagulum, and tie the artery above and below the wound. Had I seen the case immediately after the accident, I should, as a matter of course, have endeavoured to place a ligature above and below the wound, and thus have prevented the occurrence of subsequent aneurism. I have seen several cases of traumatic aneurism, and all of them were treated by ligature above and below the wound.

I have thought this case of such importance and interest to bring before you, as a perfect cure has been the result of the treatment employed, without the use of the knife or ligature.

**CASE.** Thomas B., aged 39, a blacksmith, was admitted into the Hull Infirmary, under my care, on June 22nd, 1859. On June 13th, ten days before, when at his work, a piece of iron broke from the hammer or metal which he was hammering, and struck him on the left forearm. A wound was made, which bled profusely at the time, he says to the extent of three or four pints of blood, which was of a very bright colour. He went to a druggist, who applied a pad and bandage. He noticed that the wounded part had begun to pulsate and swell up four days before his admission. He again went to the druggist, who advised him to see a surgeon.

On examination, there appeared a scar about the middle of the left forearm, half an inch in length, along the course of the radial artery; there was a pulsating swelling, and a distinct bruit on applying the ear. A pad and bandage were firmly applied from the fingers upwards, and a tourniquet placed on the brachial artery, to diminish, but not to stop, the flow of blood. The forearm was flexed on the upper arm, and bound in that position. He was ordered low diet.

This treatment was continued for one week. A decrease in the amount of pulsation resulting, it was resolved to continue the same treatment, which was persevered in for three weeks longer. At the end of this period, the state of parts was found much the same; and the plan of treatment was altered. The limb was extended and bound down upon a straight long splint, from July 19th to July 30th. The last mentioned treatment was continued up to the latter date with apparent success. A flat piece of lead, four inches by three, moulded to the shape of the arm, was now applied, and bound pretty tightly with a bandage; the arm being still kept in an extended position.