2. It is easier to guide a straight instrument than a curved one.
3. It holds the head more securely.
4. In making extraction the handle of the straight instrument indicates the direction in which traction should be made.

Sir J. Simpson says that the great advantage of the curved instrument is that it does not slip when applied, as a straight one would; as one of the great difficulties is that, that after fixing the head it slips backwards.

My opinion is that this instrument of Dr. Kidd's fulfils every indication, and that although we might be able to use either Sir J. Simpson's or Dr. Hick's in the majority of cases, yet that his is an instrument calculated for almost any case where the deformity would be of sufficient extent to call for this operation.

Since the introduction of the cephalotribe into the practice of midwifery in this city, Dr. Kidd has brought before the notice of the profession four cases, and Dr. Ringland two cases, in which the operation was performed—in all of them pelvic disproportion of a greater or less extent prevailed, but of an extent to prevent a living child passing, or of extraction by the forceps.

The cases have been detailed here and elsewhere, and the medical public are familiar with the particulars of them, which have been published. I am not aware whether the operation has been tried by other persons in this city, or whether any cases have occurred in the Lying-in Hospital, which generally receives so many bad cases, calling for instrumental assistance; but I am happy to have it in my power to add another case to the as yet comparatively few which in this city have been given to the medical public, and again to give my small praise to an instrument which I think, by its greater power and freedom from danger to the mother, and its greater rapidity in accomplishing delivery in those cases where we must diminish the fetal head, has a marked and manifest superiority over the crotchet, and will, I think, in most cases, eventually supersede it.

TRANSACTIONS OF THE ULSTER MEDICAL SOCIETY.

PROFESSOR SEATON REID, President.

Case of Locomotor Ataxy.—DR. HENRY BROWN read the following case:—

Mr. M. J——, aged twenty-eight, single, well-made, and about six feet in height, consulted me in August last. After a very careful examination, I considered him labouring under *locomotor ataxy*, or Duchenne's disease; but, as I had never seen a case before, I thought it advisable to

consult some of my medical friends, and he was seen by Dr. W. MacCormac and Professor Cuming, both of whom considered the case one of locomotor ataxy.

The symptoms first began about ten years ago ; but for the last four years they have greatly increased, during which time he has been under treatment (at one time or another) of various kinds, without receiving benefit.

His attention was directed to his feet at a very early stage of the affection, and he found that in walking, a constant watch was absolutely necessary to enable him to progress with any degree of satisfaction. The habit of walking with his head in a downward direction he could not account for ; but he was certain that up till his eighteenth year he had not noticed anything peculiar in his gait, and was not in the habit of "hanging his head." At present, when walking, he resembles a person under the influence of liquor, throwing his feet out without any precision, and they fall heavily upon the ground. His feet, even to himself, seem to fall "*all of a piece*," and when they come in contact with the ground a sensation is conveyed to him, so that he imagines it possesses no firmness, and he is obliged to use a staff to prevent himself from falling. Under no circumstances could he walk in a straight line.

In damp weather every bone seems dislocated, and the muscles of the legs are much more beyond control than in dry bracing weather. He dreads this relaxation much, for it is with the utmost difficulty he can at all progress. The limbs seem to be well nourished. No diminution in the sensibility of the cutaneous surface can be observed. The points of compasses or other sharp-pointed instrument, can be perceived with exactness ; and I took care that the eyes were obscured during this examination. He can flex and extend the legs with great force. When the leg was extended, neither Professor Cuming nor I could flex it. When seated and requested to raise a leg into the horizontal position, he can do so without any assistance ; but his eyes are steadily fixed upon the limb during this movement. He cannot stand upon one leg, nor can he stand when his feet are close together, without the aid of a staff, and then only with difficulty. He cannot bring the feet into close approximation without considerable shuffling ; and, if he be requested to close the eyes when standing with his feet together, he is seized with a sensation of dread lest he fall, and he opens the eyes after momentary closure with delight at finding himself still standing upon *terra firma*.

The upper extremities are well nourished. For some time he has been very much troubled with "*a burning*" of the hands, which causes great annoyance ; and, as he is a book-keeper, he requires to bathe the hands frequently in cold water to ease this painful sensation, which is always attended with profuse sweating. He can write with his wonted facility, except in the morning, when the right hand is rather tremulous, but this

usually disappears in half an hour or an hour after commencing business. There is no paralysis of the upper extremity.

In order to test his strength I got him to lift a bale of tow—weighing one hundred and a quarter—and this he could have carried upon his back, but for a tendency to fall which he experienced, owing to the want of control over his lower members. He told me he could lift even more than the above weight, and that his strength in this respect was as good as could be.

In the lumbar region an acute burning pain is sometimes felt, which often continues for an indefinite time, and a painful spot can frequently be pointed out, but not always. Percussion, however, causes not the slightest pain; and the spinous processes may be pressed upon without eliciting pain. When pressing the lumbar spines on one occasion, however, pain was felt, and he expressed it—as if burned with a heated sharp-pointed iron.

This is the region of greatest weakness, and he is obliged to wear a bandage and stays to afford support, else he could not walk. To use his own words—“without the stays he would fall in two.”

Over the frontal region a dull heavy pain is almost a constant companion, and, at times, confusion of ideas accompanies it. Noise in the head troubles him very much, and is greatest after rising in the morning. This noise he compares to water heard falling from a considerable distance. In order to remove a feeling of stupor he is obliged to wash his face in the coldest water obtainable, every morning, at least three or four times, and this process is repeated several times during the course of the day.

When exposed, during the transaction of business, to the open air, and then confined to office work, the stupor becomes most unpleasant, and ablution is the only relief he can obtain. There is constant singing in the ears, and the sense of hearing has become blunted of late. The pupils contract perfectly upon the stimulus of light; they are larger than usual, but there is no impairment of vision, nor does he complain of visionary spectra.

The senses of taste and smell are unaffected.

When spoken to in a loud or commanding manner he loses all control; and he has frequently been nearly run over on the street from his inability to move when shouted at. At night, it is with great difficulty he can cross from one side of the street to the other, and his gait is much more unsteady, for an obvious reason. His digestion is excellent, and the bowels are never confined. There is no paralysis of the rectum. The bladder possesses its tonicity, and the urine is voided with ease, but he requires to wait a little before the process of emptying commences. This process requires no straining, however. Sleep is disturbed by frightful dreams, and he invariably awakes at three o'clock in the morning. Seminal emissions occur at least three or four times in the week,

and exhaustion is very great after these. There is no incontinence of urine at night. I have inquired whether he has had any of the shooting pains which "come on and go off with the rapidity of lightning, or of the electric spark," and find at no time have they been observed. I have observed his articulation, and consider it slightly *muffled* of late, but it is distinct. He confesses it is not so good as it formerly was.

He has never been guilty of excess of any kind.

His father is alive, and has attained the age of sixty-seven. His mother died a short time ago at the age of sixty-two. For the last two months of her life she was unconscious, or nearly so; and is supposed to have died of some heart affection. 'This is all the information I can obtain in reference to her death. She was very healthy previously to an attack of rheumatism, from which she never got quite well. His brother, who is a few years younger than the patient, is a healthy young man.

As regards treatment, various remedies have been employed from time to time, by others and by myself, without any appreciable benefit. He has taken strychnia, phosphorus, iron in various forms, iodide of potassium, and tonics in every shape and form, without any good result. Liniment of iodine was applied to his back previously to consulting me, electricity, and no end of other means proving quite impotent to remove, or even slightly benefit his condition. His affection was considered to be paralytic by some who saw him early, and others thought it was inflammation of the spinal cord or its membranes.

More benefit has been obtained from cod liver oil, and a good wholesome diet, with a liberal use of sweet milk, than from all other means combined. I advised nightly ablutions of the genitals with cold water, and great good has resulted from this practice.

Under the use of some lauded remedies the patient lost ground; iodide of potassium increased the debility, although he got only a grain and a half twice daily. An occasional bottle of porter, with the generous diet, have caused an increase in his weight of several pounds within a very short time.

At present (19th March, 1868,) the condition of the patient is much the same as when seen by the members of the Ulster Medical Society in October. He is getting a pair of spring stays made, and he hopes to be able to walk with greater ease. The generous diet is still continued, and the patient considers his condition "at a stand-still." I can observe no change myself; but he is decidedly stouter than when I first examined him.—*October 16, 1867.*

DR. CUMING exhibited the supra-renal capsules of a patient who had been in hospital under the care of Dr. Drennan. The capsules were greatly enlarged, and contained large cheesy masses, having the characters of tubercle. The lymphatic glands in the neighbourhood were

also tuberculous. There was no discolouration of the skin or of the mucous membranes. The patient had suffered principally from abdominal pain and gastric irritability.

DR. CUMING read *Notes of Case of Empyema*, which is published in the *Quarterly Journal* for February, 1868.—*January 3, 1868.*

Case of Popliteal Aneurism. DR. WILLIAM MACCORMAC read the following notes.

Daniel Dobbin, a man twenty-seven years of age, pale and thin, of a lymphatic temperament and peevish disposition, was admitted to my wards in the General Hospital, on Sept. 25, 1867. His occupation is to drive a spring-cart, and he states that four months ago he fell off the cart, striking the step in his descent. He felt his leg very painful for some time, but the limb afterwards perfectly recovered.

About six or seven weeks before coming to hospital he noticed a feeling of stiffness in the right ham, followed by the appearance of a small tumour as large as a bean, which rapidly increased in size.

On admission we found an aneurism filling up the right popliteal space, and fully as large as a medium-sized orange. There was a bruit, and strong distensile pulsation, which could be readily controlled by pressure upon the artery in the groin, and whilst the pressure was kept up the sac could be emptied almost completely. The leg was œdematous, the pulse 60, and rather weak, the heart sounds are natural, and the tongue is quite clean.

The treatment at first consisted in gradual compression, and then an attempt at complete, which only proved partially successful.

Carte's compressor was first employed, but the restlessness and fretful disposition of the patient continually disarranged the apparatus, and I found Signoroni's tourniquet more efficient and more manageable, as well as more readily borne by the patient.

On the 7th October, twelve days after admission, compression having been maintained more or less perfectly for about ten hours each day, it is reported that, although perhaps somewhat firmer and smaller, the tumour is but very slightly altered since admission, and for the last five days scarcely any change has taken place. I therefore determined to try the method of complete compression, and effect, if possible, a rapid cure. I ascertained that a pressure of four pounds readily controlled the femoral, and devised the following arrangement, which was simple and efficacious. I suspended directly over the patient's groin a short round bar of iron, 8 lbs. weight, by means of a cord attached to the ceiling, and into this cord was inserted a piece of India-rubber, so arranged as to reduce the pressure of the iron to four pounds, and to steady the apparatus at the same time. A round button, about an inch in diameter, of polished mahogany, was attached to the end of the bar next the skin. All

that was necessary was to lay this upon the artery, just below the pubis, and with hardly any effort of attention the pulsation in the tumour could be kept completely and absolutely arrested. As it was hopeless to expect a patient such as mine to stand the pain, and exercise the needful restraint for any length of time, I was compelled to keep him slightly under the influence of chloroform during the whole period.

At a quarter before five, then on the 7th, the pressure was commenced and maintained perfectly for five hours. A few jets of blood, however, in spite of our efforts, occasionally passed, in consequence of the man's struggles. The pressure was then removed for a few moments to examine the condition of the tumour, when it was still found beating. During all this time Richardson's ether spray was directed at intervals on the tumour for about twenty minutes at a time, thoroughly freezing the skin over it. This was frequently repeated, until it was deemed no longer safe, as vesication, accompanied by considerable congestion of the part, took place. The compression was resumed, with the addition of forcible flexion of the knee.

After seven hours' trial of these combined methods, the tumour still pulsated, but much less strongly, and no pulsation whatever could be detected in the superficial femoral.

For eleven hours, in short, almost complete compression was kept up. The tumour, however, still pulsated, but not forcibly. The collateral circulation has sprung up, and the attempt had now to be abandoned.

The next day, the 9th, a very faint pulsation could be felt in the femoral. The pulsation in the tumour is very strong, but it feels much firmer.

On the 13th compression of the common femoral was kept up for about twelve hours by Signoroni's tourniquet, and on removal no pulsation was to be felt in the aneurism, nor did it return for eleven hours. Compression was then re-commenced, and maintained as effectively as possible until the 17th, on which day it was kept up from 8.30 a.m. till 9 p.m. On removing the compressor no pulsation whatever could be felt for one minute, and then it returned faintly. On the 21st the pressure was again applied from 9 a.m., till 5 p.m. On removal the aneurism still faintly pulsated, but during the night the pulsation suddenly and finally ceased, and there was no return so long as he remained in hospital. He discharged himself on the 9th December, and the tumour was then becoming gradually absorbed.

Several cases have been recently published by Drs. Mapother of Dublin, Murray of Newcastle, Vanzetti of Padua, and others, showing the advantages of completely arresting the current of blood through the sac in the treatment of aneurism. The treatment of aneurism by compression, a triumph which we owe to the Dublin School of Surgery, has hitherto been based upon the theory that successive layers of fibrine

were deposited in the sac, and that to facilitate the cure a certain diminished current of blood must be allowed to pass through the aneurism. If the views now put forward be correct the obliteration of an aneurism is obtained by the clotting of the blood contained in it, and its subsequent contraction and organization, procured by complete occlusion of the current, and arrest of all movement in the aneurismal sac, for a longer or shorter period of time. In one case mentioned by Dr. Mapother an ilio-femoral sac was obliterated after pressure for four hours and a half on the common iliac, combined with distal pressure on the superficial femoral. In another case of popliteal aneurism pressure on the femoral proved successful after nine and a half hours. At Newcastle an aneurism of the abdominal aorta underwent the process of consolidation in three quarters of an hour, while in another case some twenty minutes are stated to have effected complete cure. The cases reported by Dr. Vanzetti of Padua are, if possible, more striking. They are a traumatic aneurism of the palmar arch cured in thirty minutes, and an aneurism of the femoral cured in less than ten hours.

This method of treatment seems little short of a revolution of that generally accepted, and so indeed it is. In connexion with this matter I read, with great interest and pleasure, some remarks made by my friend Dr. Geoghegan at the late meeting of the British Medical Association in Dublin. He said he had been extremely intimate with Dr. Bellingham, and had seen nearly all that surgeon's cases treated by compression, and for a long series of years had strenuously contended against the principle that the true mode of curing aneurism consists in the mere diminution of the current of blood flowing through the sac. In the discussion which then took place Mr. Ernest Hart, the author of the article "Aneurism" in *Holme's Surgery*, stated "that he felt convinced that this method of rapid cure by complete compression was destined to become generally adopted as the mode of treatment, *par excellence*, of surgical aneurism, and that it was almost as great an improvement upon the slow method of treatment as compression itself was upon the method of the ligature."

In the case just narrated I believe the plan of continuous and complete compression would probably have proved immediately successful had it been more efficiently applied. We had, however, in our patient a very unmanageable person, who resisted our efforts in place of co-operating with them, and in his struggles from time to time a small jet of blood must have gained admission. The only hope of speedy and complete success is in the thorough stoppage of the flow of blood to the aneurismal sac. As it was, I believe a partial clot formed, and this, though insufficient at the time permanently to fill up the sac, proved adequate after the lapse of some days, and was the cause of the sudden cessation on the 21st. I believe the very complete manner in which the collateral circulation was established also aided, in a large degree, to protract the cure, as by that

means blood was freely supplied to the sac by the distal extremity of the vessel. No direct pressure could prevent this, owing to the situation of the aneurism filling the popliteal space, and forcible flexion could not be maintained sufficiently long to effect the same object. I should, therefore, in giving this method another trial, effect if possible compression on the efferent vessel, and if that were impracticable, try, in any case, to procure occlusion of the sac without preliminary partial compression, and without affording time for the collateral circulation to supply the sac with blood. The temporary obliteration of the superficial femoral vessel, which never again became restored in size, is an interesting feature in the case. I should mention that the application of the ether spray, which was kept up for a lengthened period each time, seemed to have no other effect than the production of a troublesome superficial slough, which left behind it an ulcer very difficult to heal. Since writing these remarks I have read a paper by Mr. Samuel A. Cusack, published in the *Dublin Quarterly Journal* for November, 1859, in which he describes an instrument of simple construction for applying graduated pressure by means of weights to the artery. He mentions that in the first case in which he tried it a cure of a case of popliteal aneurism was effected in twenty-six and a half hours. Although it is not mentioned as such, it is probable that in this instance we find an early example of the effects of complete compression.—*January 17, 1868.*

DR. CUMING read a case of *Mitral Regurgitation, independent of Organic Disease, and exhibited the recent Specimen.* This case is published in the present number of the *Journal*.—*January 31.*

Cases of Strangulated Hernia.—DR. WILLIAM MACCORMAC gave the following account of three cases of strangulated femoral hernia.

In bringing forward the history of these cases I do not expect to advance anything that is novel upon such a subject as hernia, which has so long occupied the attention of the best anatomists and surgeons. I merely wish to record the details of cases in certain respects not unimportant, and add, perhaps, a little to the common stock of knowledge. I would also wish to urge my conviction as strongly as I could that to operate early is to give the patient the best chance of recovery. Now-a-days, no surgeon would, I conceive, make repeated and forcible attempts to reduce a strangulated intestine. After a judicious and reasonably prolonged effort had been made to reduce the protruded part without operation, and had failed, there is hardly anything to justify much further delay. I have never lost a patient, nor seen any untoward symptom follow an operation from its having been performed early, while every surgeon must have reason to deplore the fatal consequences which ensue but too often from the long continuance of strangulation of the intestine.

Besides, if one form of hernia more than another requires the prompt recourse to the knife it is femoral hernia. The anatomical conditions under which it occurs sufficiently explain this fact.

CASE I.—Martha Kelly, a thin delicate woman, about forty-eight years of age, and the mother of seven children, was admitted to hospital under my care on the morning of the 26th October, 1866, shortly after midnight, with strangulated femoral hernia of the left side. The patient told that for the last twenty years she has suffered from her malady, and that it made its appearance in consequence of her lifting a heavy weight just before her confinement. Something, she said, "gave way with a crack," and just as her child was being born she felt a similar sensation; and when she got out of bed afterwards a lump suddenly appeared. The woman states also that an abscess, which required to be opened, formed in the same situation. She had worn a truss, but the swelling often came down. There was no great difficulty at any time in returning the parts to the abdomen—into which led, the patient states, a large opening—until the 24th inst, at 11 p.m., whilst at stool the hernia came down, and the woman could by no effort of her own return it. A medical man was sent for the next day. He tried the taxis, prescribed castor oil, and the application of ice, without success. The castor oil was followed by two evacuations from the bowels, but the swelling remained as before. The taxis was then a second time tried without avail, and the patient recommended to go to hospital. My colleague Dr. Murney was present when she was admitted, and he made an effort at taxis whilst the patient was in a warm bath, but without making any change in the tumour; and as the symptoms did not appear very urgent advised an opiate and rest in bed, until I should pay my visit in the morning.

At ten o'clock, when I first saw the case, I found the patient had slept but little, her face wore a sunken, anxious look, tongue much furred, pulse 100, and weak. She had vomited three times some bilious matter. A good deal of pain was felt both in the tumour and abdomen, and the neck of the sac was very sensitive. On examining the left groin I found an oval tumour, the bulk of half a lemon, situated transversely beneath Poupart's ligament. The swelling was not tense, was nodulated, and had the feeling of containing omentum, except at one point, where there seemed to be intestine.

After a consultation, at the suggestion of Professor Gordon, an enema was given, which brought away much flatus, and the ice was reapplied. In the afternoon the patient's condition was not at all improved, and therefore I considered it expedient to operate without further delay, as strangulation had now subsisted about forty hours.

The patient having been first put under chloroform the taxis was tried, but I failed to produce the slightest effect on the bulk of the swelling.

An incision was therefore immediately made, about two and a-half inches long, in the vertical axis of the tumour, but rather to the inner side. The fascial layers were divided in the usual manner, and the sac exposed. On opening this a small quantity of serum flowed away and omentum was seen. The sac was then more freely opened, and on introducing the finger a very tight stricture was felt at the crural ring, beneath which the finger nail was insinuated with trouble. The constriction was divided with the greatest care, and with much difficulty, cutting upwards and inwards, at the junction of Poupart's and Gimbernat's ligaments. The protrusion, however, could not be returned, and on seeking for the cause it was found that the omentum was attached by old adhesions to the posterior part of the sac. These were separated with care, and another attempt made to return the parts, which proved unsuccessful, until Poupart's ligament was partially divided, the edge of the knife being directed upwards. Three sutures were inserted in the wound, a pad and spica bandage applied, and the patient removed to a warm bed, when a large opiate was administered.

That evening the patient was restless and uncomfortable. She was ordered a grain of opium and a grain of calomel every fourth hour.

The next morning I found she had slept well, and felt easy; pulse 120. She is to have chicken soup, and the pills at longer intervals.

On the fourth day, the 29th, the pulse was 110; bowels had been freely open the night before with great comfort to the patient. She had slept well, and had eaten an egg for breakfast. On dressing the wound it was found to have healed throughout by immediate union. The patient became rapidly convalescent. She was slightly salivated, having, however, taken in all five pills, each containing only one grain of calomel. The inferior angle of the wound subsequently reopened at one point to discharge a few drops of pus, but otherwise the wound thoroughly and immediately healed. She was discharged from hospital in fair health, better than she had enjoyed for many years, and wearing a light truss.

CASE II. differs from the last case considerably. The notes from which I have extracted the following account were very fully and accurately taken by Mr. Price, one of my clinical clerks. The patient was much older-looking than her real age—sixty years. She was the mother of seven children, and had evidently suffered many hardships. The hernia was of recent date, and was very small. She first noticed a lump in her groin about a month ago, when she had an attack of cramps and vomiting. Since this attack she has but seldom got out of bed, as she suffered much from nausea and constipation, with weakness and loss of appetite. The lump sometimes was felt, and sometimes not, in the groin—probably the patient did not know the importance of the local ailment.

On the 11th February, 1868, at eleven o'clock in the morning, she suddenly took ill with severe cramps in the belly, and vomiting, not being able to retain either food or drink. A medical man was sent for some time after, who employed the taxis without avail, and then she was sent to hospital, where she was admitted under my care at nine a.m., on the 14th. I saw her a few minutes after, and found her in an extremely weak condition, surface cold, face anxious, skin yellow, voice tremulous and feeble, pulse 120 and thready, tongue much coated. Since the first appearance of the symptoms she has vomited almost continuously, even on drinking cold water, and there has been no action of the bowels. In the right groin there is a little hard lump, not much larger than a cob-nut, just beneath Poupart's ligament. Great pain was felt in the part, and also at the umbilicus.

The case appeared to be one that would brook no delay. The tumour was very tense and small, the symptoms were very urgent, and strangulation had subsisted seventy hours. The woman was at once removed to the operating theatre and chloroform administered. No attempt at taxis was thought expedient, and herniotomy directly proceeded with. A vertical incision, commencing just over Poupart's ligament was made, some fascial layers divided on the director, and a lobule of fat about as large as a hazel-nut exposed. This resembled extremely a piece of omentum, and caused much embarrassment in the course of the operation. By careful isolation of the neck of the tumour this fat was shown to be external to the sac, being contained in the fascia propria. The falciform border being exposed it was divided, cutting directly upwards, and an effort made to return the hernia without opening the sac. In this we entirely failed, and it became necessary to open the sac. This was accomplished with great care and some difficulty. A few drops of dark red serum flowed, and a very small bit of intestine, almost black in colour, and completely adherent to the sac by recent lymph adhesions, was laid bare. The adhesions were cautiously broken through with the finger and the handle of the scalpel. The director was then introduced beneath Poupart's ligament, as the finger or even the nail could not be inserted, and the stricture freed by simply pressing the knife against its edge in a vertical direction. The intestine now receded of its own accord, the thickened sac was cut away, the wound closed by three sutures, and dressed in the usual manner. With regard to the after-treatment, it may be simply comprised in the statement that the patient was let alone. No medicine was given of any kind. Soda water and ice were freely taken to relieve the sickness following the chloroform, and so soon as this had subsided the patient was given some nourishing soup. Next day, the 15th, the pulse had fallen to 90, and the countenance had lost its anxious expression. The abdomen was distended with flatus, but not tender, except in the region of the wound. The sickness

and vomiting had quite abated. On the 16th, the patient complaining of much uneasiness in the groin, the dressings were removed, and the wound was found united by the first intention throughout. The skin around had become inflamed, and was of a dark red colour. The sutures were removed, and the cicatrix yielded in the centre to the extent of a line's breadth, giving exit to nearly a tablespoonful of sanious pus.

Next day the patient was found to have been completely relieved. She had slept well, the tongue was cleaning at the edges, and the pulse fallen to 84. The skin was cool, all sickness had disappeared. No pain was felt in the abdomen, which was still, however, much distended with flatus.

On the 20th, the seventh day after operation, the patient's general condition is reported very satisfactory. A small quantity of rather fetid pus was daily discharged from the wound, which was syringed out with carbolic acid lotion with great advantage. The bowels had not been open since the operation, and an enema of soap and water was directed to be given. A plentiful discharge of both feces and flatus followed, to the great relief and comfort of the patient. On the 22nd February the patient was pronounced convalescent. She eats, drinks, and sleeps well. The bowels had been moved naturally, and the wound was secreting a few drops only of healthy pus. Soon after she was discharged from hospital quite cured of her hernia. She was, however, advised to wear a truss.

CASE III., extremely interesting in many respects, proved a fatal one, and a *post mortem* examination was obtained. We have in this instance an illustration of the most forcible kind of the disastrous results of delay in procuring relief for a strangulated intestine, and an example given where the symptoms merely of disease were treated, and the cause of those symptoms completely overlooked. The account of the case is taken from the very faithful notes of Mr. Chambers, clinical clerk.

Mrs. G., thirty-two years of age, the mother of several children, was admitted under my care on the evening of Friday, February 28th. She had previously enjoyed an immunity from all serious illnesses, but had never been very strong. Between two and three years ago she first noticed a little lump in the left groin, which came and went at intervals, and was occasionally attended by cramps and pain. For three months the menses had disappeared, as she had again become pregnant, and during the 6th, 7th, and 8th of February she suffered from profuse hemorrhage and other symptoms of miscarriage. The bleeding from the vagina continued until within three days before admission, reducing her to a very weakly state.

On Friday, February 21st, whilst washing, and having to make considerable exertion, the lump in the groin suddenly increased in size and

became very painful, while shooting pains were felt extending from it through the abdomen. The next day she was much worse, the pain had increased in severity, and assumed a constricting character at the umbilicus. She began to vomit, and from Saturday the 22nd, at 2 p.m., all food and drink was rejected by the stomach. The bowels were constipated, not having been relieved since Friday morning. On Sunday a medical man was called in, who prescribed her a mixture for the purpose, she stated, of checking the vomiting and opening the bowels. Different mixtures were from time to time ordered, also Seidlitz powders, sinapisms, turpentine stupes, and linseed poultices, and all without affording any relief. Matters proceeded from bad to worse until Friday morning, the 28th, when the patient herself called attention to the presence of a tumour in her groin, which on examination proved to be a hernia, and the cause of the symptoms. Shortly afterwards the woman was sent to hospital.

On admission the patient presented the appearance of a person forty-five years of age. Her face was shrunk in all its features, pale, wrinkled, and very anxious, the angles of the mouth drawn down, the surface was quite cold, the extremities clammy, and the hands blue. The respirations were 25 per minute, the pulse was 120, and almost imperceptible. In short, nearly complete collapse had taken place. The intelligence was perfect. There was little or no local or general tenderness on pressure. The woman complained only of deadly sickness. The vomiting has continued without intermission since the commencement of the symptoms, and the matter ejected is now of a most offensive description, being intolerably fetid. The tumour lies below Poupart's ligament, which it slightly overlaps. Its long axis is transverse, and measures two inches and a-half, while from above downwards it is about one and three-quarter inches. There was no tension, and, as before stated, little or no tenderness evinced on pressure.

My opinion was that the taxis should not be attempted, and that an operation, although the result was hardly doubtful, should be attempted. After some chloroform had been administered an incision, nearly vertical, was made over the tumour, and after dividing several layers of fascia a dark fatty tumour, the size of a walnut, and quite smooth and glistening upon the surface, presented itself. It was extremely difficult to decide as to whether this was a mass of omentum or not. I considered, however, after a careful examination of its appearance and relations, that it was only thickened sac, and proceeded to divide it on the director. Two lines depth of tissue were cautiously divided, and the intestine became visible, completely adherent to the sac by recent lymph. No serum escaped. The adhesions readily gave way before the handle of the scalpel, when the incision into the sac had been enlarged, and a small knuckle of the intestine was exposed, almost black in hue, but it had not

lost its resilient appearance or glossy surface. The stricture was relieved by pressing Sir A. Cooper's knife against some fibrous bands felt with the finger, and dividing them almost directly upwards. The stricture was comparatively superficial and easily divided, and there was no bleeding. The intestine was readily returned. Sutures were now inserted, and the wound dressed.

The patient was then removed to bed, surrounded with warm water jars, and given ice to suck.

Next morning the report is that there had been no vomiting since the operation, but the surface was still cold. She has had a continual desire to go to stool, and feels as if she had frequent motions in the bed, no assurance persuading her to the contrary. She has been very restless, constantly tossing about, and throwing the clothes off her. She was ordered to continue the ice, to have four ounces of port wine, a few spoonfuls of soup occasionally, and in addition a grain of opium every third hour. She afterwards got more wine and opium, and in addition hot punch, combined with the warmth externally.

The next day, in spite of all that could be done, the collapsed condition increased, the pulse became slower and slower, and weaker and weaker, till it ceased to be perceptible. The surface became stone cold. The jactitation was excessive, and painful to witness. She complained of no pain, and answered questions slowly but with intelligence. Towards the last there was some muttering delirium. She finally sank some thirty-two hours after the operation. If the fatal result was not retarded, it certainly was not hastened in any way by the surgical proceeding.

A short time afterwards a *post mortem* examination was procured. The parts involved in the operation were carefully dissected and the falciform border of the fascia lata exposed. It was then seen that Hey's ligament had been divided for about two lines depth, upwards and very slightly inwards. Neither Poupart's nor Gimbernat's ligaments had been touched. The crural ring barely admitted the forefinger. On laying open the abdominal cavity the small intestine, greatly distended with gas, bulged out. The crural ring was closed by a coil of comparatively healthy gut, whilst the portion which had been strangulated was discovered removed about three inches to the right side of the opening. The whole intestine seemed injected and inflamed, but there was very little effused lymph and no serum contained in the cavity of the abdomen.

About three feet of small intestine were now carefully removed for subsequent examination. Towards the lower portion of the ileum the seat of strangulation was clearly seen. About two-thirds of the circumference of the bowel at its convexity was sacculated, a deep sulcus forming its boundary. The part appeared as if it had been tightly tied by a cord, and afterwards set free. More lymph was seen near this than elsewhere, and the included portion was quite black. There was

no sign whatever of extravasation, and in fact none had occurred. The amount of congestion and inflammation of the bowel was much more intense below this point than above it. The intestine was now opened along its mesenteric attachment. At the seat of stricture, for the greater part of its extent, there was a projecting rim caused by the constriction, but through a distance of about half an inch at two places, the mucous and muscular coats had completely ulcerated through, nothing remaining but the serous, which was quite translucent. At one point for a line's breadth the serous coat also had given way, but it must have done so during the process of removal.

In the first of these examples the hernia was of ancient date, the opening through which it came was comparatively large, and the symptoms which followed strangulation were not very acute. It was proved during the operation that there was an impossibility of effecting any good by the taxis, or of reducing the hernia, except *en masse*, without opening the sac. The patient, too, had most confidently asserted, and, as she had suffered from rupture for twenty years, it might be presumed she ought to know, that the hernial protrusion completely disappeared when she lay in bed, and that she could pass her finger up through a large sized hole into the belly. The adhesions discovered during the operation were old and required a careful and troublesome dissection to liberate the parts. It was only too after a free division of the ligamentous structures composing the crural ring that reduction could be effected without force. It requires but little consideration to arrive at the conclusion that it is better to incise the site of stricture as often and as freely as may be necessary rather than handle the intestine much, or attempt to squeeze it through an insufficiently relieved stricture. Of course, for the future strength of the abdominal wall, it is important to make the incision as limited as possible, but at worst a free incision will result in a mere infirmity, whereas much manipulation of the contents of a rupture, morbidly inflamed as they usually are, is a source of extreme risk to the patient's life.

In the second case the hernia was quite recent, and the symptoms complained of by the patient were much more urgent. I only feared that, after the length of time that had elapsed from their commencement, I might find the intestine irretrievably damaged. A few hours will, as we know, in some instances suffice to produce mortification of the gut.

In neither of the first two cases could reduction be accomplished until the division of the deeper structures was effected. In neither was the falciform border the constricting cause.

The third case forms a striking contrast to the others. It may seem almost unnecessary to dwell upon the importance, the absolute necessity in fact, of determining the presence or otherwise of hernia in cases of vomiting

and constipation. In this instance, however, the medical man was not aware during a period of six days that there was a rupture, and the woman was treated by means calculated to benefit her, perhaps, had the cause of her malady been other than what it was, but only tending to injure seriously her chances of recovery from strangulated femoral hernia. Besides, much valuable time, which is a matter of greatest importance, was lost. I would wish to add that it is not sufficient, especially with those in the humbler ranks of life, simply to inquire if there be a lump in the groin, and rest satisfied with the patient's assurance that there is none. Oftentimes persons of this class are liable to overlook, or attach little importance to, the presence of such tumours, and even if of long standing, will sometimes forget or ignore their very existence. We know, too, how far feelings of false delicacy will carry some women. Nothing save a careful examination made with one's own hands, and eyes if needful, will suffice.

The examination of the parts after death renders this case doubly interesting. The evidences of general peritonitis were distinct, but not to so large an extent as I have frequently seen them. The patient seemed rather to die from the collapse induced by the disease, and her state, weakened as it was by the recent abortion, did not offer the same amount of resistance and power of reaction.

The woman did not, I consider, die of the operation, which did not seem to affect much the progress of her case in any way, save by giving relief from the vomiting. The way in which she died appeared to me almost identical with that in a fatal case I witnessed of strangulated femoral hernia where no operation had been performed. In both instances intense restlessness and jactitation, pervading coldness, muttering delirium, from which the patient could be aroused, and comparative absence of local tenderness and pain were very noticeable.

I send round a preparation of the intestine at the strictured part; it shows very beautifully the primary yielding of the mucous and muscular coats of the bowel. The thinned layer of serous membrane still remaining could very easily have been ruptured had any great effort to reduce the tumour by the taxis been employed.

In Mrs. G.'s case the falciform border alone was incised in an upward direction, and very slightly inwards. Vidal insists that this forms the constant cause of strangulation. Dupuytren must have thought the same, for he cut upwards and outwards, while Guthrie and Velpeau cut directly upwards, when relieving the stricture.

I performed a somewhat similar operation, in every instance, by means of an almost vertical incision, inclining slightly towards the umbilicus. The stricture was incised in nearly the same direction as the external wound. By avoiding all cutting or sawing motions, and simply pressing the edge of the knife against the tense fibrous tissues no risk of injuring an important part can occur.

A circumstance pointed out by Key was very well marked in the two latter examples. In both a quantity of fat, simulating the omentum very closely, was contained in the layers of the fascia propria, and it was a very difficult matter to discover what it really was.

The more one sees of hernia, and especially of femoral hernia, the more, I think, one becomes impressed with the necessity for early operative interference. It is not the operation, but the want of operation that proves fatal. Ill directed, and too often repeated efforts at taxis, conjoined with unnecessary delay, are only too frequently the fatal elements present in hospital cases of hernia.

I opened the hernial sac in all three examples, and the condition of the contents proved that it was best to have done so. The advantages of opening the hernial sac are great and apparent, whilst any proportionate disadvantage accruing from such a course is, to me at least, by no means so plain.—*March 6, 1868.*

DR. HILL read a paper *On a Case of Suppression of Urine complicating Pregnancy*, of which the following is an abstract:—

M. B., aged thirty-five years, mother of six healthy children, had a severe attack of some chest affection, from which she never regained her former strength. Shortly afterwards she became pregnant, and when about four months gone she experienced pain in making water, at the same time passing very little. The symptoms gradually increased in urgency, notwithstanding various methods of treatment, till the pain prevented her from sleeping, and she did not pass more than three ounces of urine in the twenty-four hours, which, however, latterly became highly concentrated. She did not complain of cough, though otherwise she presented a phthisical aspect. At seven months labour occurred, with complete relief to her urgent symptoms, but immediately phthisis became developed, and she sank twelve days after delivery. The case was adduced as one showing the remarkable power which pregnancy possesses of keeping the symptoms of phthisis in abeyance. No explanation of the pain could be offered, but Dr. Smith, who had seen the case in consultation, suggested that it might have been caused by the irritation of the bladder by the concentrated urine.—*March 20, 1868.*