

Original Communications.

SUCCESSFUL CASE OF OVARIOTOMY: WITH OBSERVATIONS ON THE OPERATION.

By THOMAS NUNNELEY, ESQ., F.R.C.S.E.

THOUGH so many cases of ovariotomy have now been performed and recorded by many different surgeons, as to materially lessen the interest and importance which attach to an individual case, still, judging from the statements and opinions which emanate from time to time from men whose opinions are of value, there appears yet to remain considerable doubt in the minds of some as to the propriety of the proceeding, and the probability of its taking permanent rank amongst the great standard operations of surgery. It would hence seem that the publication of all cases in which the operation has been performed is desirable, so that the question may be settled in accordance with the results of large experience. More especially at present are details of operative proceedings of importance; because, according as these are successful or not, we may learn to avoid all those contingent, but not necessary, dangerous accompaniments, which may add materially to the difficulty and hazard of what must, under every circumstance, be one of the most serious operations which can be undertaken; and to adopt all those methods which may reduce the danger to the minimum, so that the patient may only have to struggle against what must inevitably be attached to such an injury inflicted upon the human system. It admits of a doubt whether some of the proceedings which have been adopted in certain cases may not have been the cause of an unsuccessful result, rather than the mere removal of the ovarian tumour itself; and whether the desire to avoid or lessen certain dangers has not led to the adoption of plans, which have of themselves been productive of more danger than that which has been sought to be avoided. A more unpromising case than the following it would be difficult to select; a more satisfactory result could not be desired. Though it obviously would be absurd to attempt to dogmatise from a single case, whether favourable or unfavourable, I feel convinced that the result was not uninfluenced by the proceeding employed; thereupon I shall presume to remark.

CASE. I first saw the patient, Maria B., on December 25th, 1862. I learned from herself, from the woman with whom she had lived for several years, and from Mr. Mann, an intelligent young surgeon who had attended her, and who had already diagnosed ovarian dropsy, the history of the case up to that date. She was 26 years old, unmarried, but had had a child seven years previously, which was the cause of her leaving her home—a small farm-house in the East Riding of Yorkshire. Since that time she had supported herself as a char- and washer-woman amongst the poorer class in Leeds, and consequently had had a life of very hard work. Six weeks previously, she was delivered of a six months fetus. Between the two pregnancies, she had been regular; and since the last confinement, the catamenia had appeared once. Until the last year, her general health had been good; but for some time past the great size of her body had been a subject of constant remark. The increase lately had been very rapid, and was not materially diminished by her confinement; indeed, it

was greater now than before this took place. Owing to her great size, and feeling unwell, she for some time past had not been able to work; and, consequently, she had not been able to obtain anything like a sufficiency of food. She was a very tall, gaunt skeleton of a woman, with the abdomen measuring, over the bare skin, forty-six inches. It was as tense as a drum, and very tender, particularly over the right side, where there was the greatest hardness, and where she had for several weeks felt considerable pain. On this side, and all below the umbilicus, the perception of fluctuation was most obscure. Above, it was much more evident. There was not the least indication of any rolling over as the body was inclined from side to side; indeed, had there been no other cause, the tenseness of the abdomen was too great to allow any motion of its contents. The pulse was very quick, feeble, and small. She was so weak as not to be able to walk, and hardly to sit up. The face was haggard and hectic; the respiration imperfect and hurried; the tongue red, dry, cracked, and glazed. There was constant thirst, and no appetite. The urine was dark and scanty. She had diarrhoea. The legs were oedematous. The uterus was normal in size and position, and readily admitted the uterine sound.

I sent her to a small ward, in which she alone was placed; and gave her good broths, milk, and farinaceous diet, with alkalies, bitters, and hydrocyanic acid in the daytime; and two grains of pilula hydrargyri and four of compound ipecacuanha powder at bedtime. The improvement was at once most marked. The countenance lost its anxiety; the tongue became moist; the pulse slower and stronger; the bowels regular; the urine more copious; the legs less swollen. She slept well; and the pain and tenderness of the abdomen considerably lessened, but never passed quite away. The former remedies were changed for iron and quinine, and a good portion of meat was added to the diet, with which the improvement continued; when, having waited until the catamenia had again passed away, and had the bowels well opened by an aperient given the previous day, on January 19th, 1863, I operated upon her, with the assistance of Mr. Smith and other friends.

The room was heated to 65° Fahr., and the air made thoroughly moist by the evaporation of boiling water for some time before the operation. Chloroform was administered, but only to a moderate extent, as it had a tendency to cause retching; and, after the incision through the skin is made, no very considerable amount of pain is inflicted. I had intended to have made only a short incision; but, owing to the size, thickness, and adhesion of the first cyst, I had to enlarge the wound until it was eight inches long. From the tenseness of the abdomen and the long continued pain, I was prepared for some adhesion, but not for the extent I found. So completely were the parietal peritoneal surface and the cyst confounded, that, when the cyst was reached, some of those present could not believe that this had been reached; but, after a little manipulation, the escape of some clear ascitic fluid proved that the peritoneum had been opened. The cyst was now punctured with a large trocar furnished with an elastic pipe, by which many pints of thick dark fluid were drawn off. Still no part of the cyst escaped; and it was only after some time, considerable care, and some amount of force by the fingers and handle of the scalpel, had been employed, that the cyst was separated from the peritoneum before, and a considerable extent of omentum behind. It also adhered in a less degree to the transverse and descending colon. I thought it better to tear, and avoid hemorrhage, than use the knife or scissors and incur the risk of bleeding. A second cyst, nearly as

large as the first, was punctured. It, however, was not nearly so thick, firm, nor vascular, as the anterior cyst, and was but little adherent. It, however, contained some solid matter, as did smaller cysts. The pedicle, consisting of the right Fallopian tube and broad ligament, was moderately long and narrow. It was tied with a single thread of "China twist". The left ovary and uterus were quite healthy. There was hardly any hæmorrhage; and, owing to the admirable assistance Mr. Smith rendered, scarcely any escape of fluid into the peritoneal cavity. The tumour weighed upwards of forty pounds.

The wound was closed by three strong white metal pins, with flexible iron wire twisted round them, instead of thread. A good hold of the peritoneum was taken with these three pins. Between the three larger sutures, several of fine iron wire were carried through the skin, so as to bring every part of the two sides of the skin-wound into apposition. The pedicle, which was left so long that there should not be any dragging, was secured to the wound by the central pin being carried through it; and its ligature was brought out at the umbilicus. Broad strips of plaster were carried all across the body, a thin soft compress placed over the wound, and a flannel bandage lightly adjusted. Forty minims of tincture of opium, in a little weak brandy and water, were given. The operation was well borne.

After the immediate effects of the operation subsided, she had very little pain or tenderness in the body. For two days there was, at intervals, considerable vomiting of green slimy matter, during which time only a little brandy and water was allowed by the mouth. Enemata of broth and gruel were given, and well retained. A grain of calomel and half a grain of powdered opium were given, night and morning, until the third day, when they were omitted, and a mixture with aromatic spirit of ammonia and tincture of opium substituted, with the effect of checking the vomiting. On the third day, broth, and on the fourth, milk with a little bread, were allowed. She slept well; and the only unfavourable symptom was, that the pulse for several days, particularly on the third, was very rapid and small; but, as more food by the mouth was allowed, and the ammonia and opium given, the quality of the pulse considerably improved.

The wound was not touched for five days, when the pins were removed, but not the wire which had been twisted over them, as it adhered closely to the skin, and could not occasion any irritation. From only one of the punctures did the least matter ooze. The plaster was not removed, but only slit up, so that the pins could be taken out. Other long strips were put on; but the bandage was not replaced; indeed, it had soon slipped, and was useless.

Seventh Day. She was well in every respect, except that the pulse was still up at 100, and weak. She had so much distress from a large mass of hæmorrhoids as to interfere with the use of the injections, which were directed to be discontinued, and a diet of good beef-tea and rice-pudding taken. As the bowels had not been opened, two pills, of six grains of compound extract of colocynth and four grains of extract of poppy, were ordered.

Eighth Day. The wound was dressed. There was no discharge; and the wound was perfectly united through its whole extent. The bowels were not opened. The pills were ordered to be repeated.

Ninth Day. She was greatly distressed by the enormous mass of irritable hæmorrhoids, and from a copious discharge of acrid pus from the vagina, which had excoriated the external genitals. Though the pills had been twice repeated, the bowels had not been opened. She was ordered to have half an ounce of

castor oil; and, after it had acted, to eat an egg, which she had asked for. One grain of quinine three times a day was ordered. The pulse was now coming down.

Tenth Day. The bowels had been well opened. She was better in every respect.

Fifteenth Day. She had considerably improved in strength, and said she felt quite well. She ate very heartily, so much so that she had to be restrained. For the last three days there had been a discharge of pus from the larger pin-punctures, and a very free one from that where the pedicle was. The ligature from this came away to-day. The whole line of the incision itself was perfectly united, and the union appeared firm and strong.

From this time the improvement was steady and rapid. She quickly recovered strength and flesh, and, from a thin, haggard, sickly person, became a healthy looking woman. She was soon able to get up and walk out; but, from the situation of the pedicle, there continued for some days a very free discharge of thick matter. By repeated applications of the nitrate of silver, the wound closed; and on the 3rd of March, six weeks after the operation, she went to her home in the East Riding quite well in every respect, except that the catamenia had not appeared.

I lost sight of this woman until September 5th, 1863, when she called upon me. She had grown so stout and healthy looking, that at first sight I did not recognise her. Though directed, when she left in March, to wear a bandage round the body, and to be very careful not to lift heavy weights, she neglected both precautions. The bandage she did not employ; and, on getting home, at once did all the work in the farmhouse, where no servant was kept. She milked the cows, made the butter, and did the washing, etc. On one occasion, about a month after her return home, and less than three months after the operation, while standing upon some steps and reaching over her head to hang some very heavy hams (the pig had weighed forty stones) to hooks in the ceiling, she suddenly felt something to give way in the body, and a considerable swelling to come on. This increased for a few days, and then continued stationary. As it was not painful, she paid no further attention to it; but, fearing a return of the disease, she on this date called upon me. I found a protrusion of the entire line of incision; and, below the umbilicus, a circular aperture, nearly two inches in diameter, in the linea alba, through which nearly the entire mass of floating abdominal viscera protruded, only covered and supported by the integument, which was so thin that the peristaltic motion of the intestines could be easily seen. As her stays did not reach to the aperture, this large mass had literally had no support whatever.

On her return home, she at once menstruated, and had done so with regularity ever since. Three weeks before I saw her, she was married, and assured me that she felt herself as apt and as efficient for the duties of the state as she had ever done.

[March 14th, 1864. I have lately seen this woman, who is quite well, and seven months gone with child.]

By means of a large soft pad and an elastic belt, the protrusion was restrained so as to occasion very little inconvenience.

REMARKS. Among the prominent points in this case upon which I may remark is, first, the fact of the woman becoming pregnant while labouring under ovarian dropsy. Though, so long as the uterus is healthy and one of the ovaries normal, there is nothing to obstruct conception, the occurrence is not very common; and the conjunction of the two would not tend to render clearer a diagnosis which, at the best, may be difficult and obscure. The abortion at six months

was probably simply occasioned by the pressure of the ovarian tumour upon the expanding uterus, rendering a farther development of the child impossible. The great pressure thus occasioned had not probably first originated the widely-spread subacute inflammation of the peritoneum; and the very extensive adhesion of one of the larger sacs is a state which would be assisted by the exertion the woman had been compelled to make, and the low state of health which her condition and the want of proper nutriment had induced.

The wretched condition of the woman when I first saw her, the benefit which resulted from rest, tonics, and good diet previously to the operation, and the quick and complete restoration to health after its performance, show how purely local the affection was in its nature; and that, though the constitution was suffering considerably, it was so solely from the local mischief. This, I cannot but think, constitutes an important argument in favour of operation even in some cases which do not appear promising, provided only that the viscera are healthy.

The necessity for some abdominal support, and for caution against undue exertion, by which great pressure may be put upon the cicatrix, long after the performance of the operation, is shown by the enormous protrusion which took place suddenly in this woman ten weeks after the performance of it. Though it probably would be impossible to put the firmness of a cicatrix to a more severe test than was so imprudently done in this instance, and to the like of which few will be exposed, it is a lesson which should not be forgotten. Had the peritoneum not been included in the sutures, it might have been argued, that the want of this had occasioned the weakness; but, inasmuch as particular care was taken that a good hold should be had of this membrane by all three pins, the union of all the structures was made as firm as it could be. I observe that some operators are afraid of including the peritoneum in the sutures, on the ground, I presume, of avoiding all possible cause of exciting inflammation in this membrane; but, inasmuch as it has already been extensively divided and handled, I cannot think that the small additional mischief of being punctured by the pins is likely to add materially to the tendency to unfavourable results; while the fact of the peritoneum being that tissue which above all others is disposed to take on adhesive inflammation is so important, and the continuity of the lining abdominal serous surface so essential, that I think the bringing together the edges of the incision in it is most desirable, and likely to assist in the primary closure of the wound by adhesion, and to lead to the subsequent formation of a firm cicatrix by the whole tissues being consolidated together; while, on the other hand, if there should be a disposition towards diffuse non-adhesive inflammation, I do not think the non-inclusion of the serous membrane would be sufficient to prevent its development. This most fatal complication is more likely to ensue from the patient not being in a good constitutional condition at the time of the operation, than from an additional puncture of the peritoneum.

I believe that the good diet and tonics to which this woman was subjected previously to the operation, enabled her to surmount difficulties to which she would otherwise have succumbed. A woman in vigorous condition is far less likely to sink under the immediate shock of such an operation, or to die from diffuse inflammation, than one who is in a debilitated state. In the former, we might have too much action, but we should have corresponding power; in the latter, whatever the action might be, we certainly should not have the essential power—a condition

which it is always difficult and often impossible to deal with satisfactorily. In the former, we may not improbably control and limit the action within not very injurious bounds; in the latter, we have often but little time for treatment; and when we have, it is too often altogether inoperative. As I believe there is no operation which is calculated to inflict a greater shock upon the system than ovariectomy, so I believe there is none in which it is more important to have the patient so prepared that, while there is no plethora (of which, indeed, in the majority of these cases, there is no great danger), there should be as much power and strength in the system as possible.

As regards the steps of the operation itself, I am disposed to think that, while it is desirable to have the temperature of the room sufficiently elevated to prevent the exposed peritoneum and viscera from sudden cooling, in the desire to avoid this risk, in many late instances, the patient has been subjected to too high a temperature, in which the air has also been too dry. A temperature of 80° Fahr., or above, is not likely to assist a patient in supporting such an operation well; and a dry atmosphere of so great elevation carries off moisture from the exposed membrane so quickly, that it is far more likely to be injurious than a moderate exposure to a somewhat lower temperature in which the air is so moist that it has little disposition to take up more from the membranes. The time occupied by the operation is not, or ought not to be, so prolonged as to cause an injurious depression of temperature in the exposed viscera, so as to bring on reaction; whereas considerable desiccation is likely to do so. In this case, I had the temperature of the room not above 65°, and the air made moist by the evaporation of boiling water.

The administration or not of chloroform is an important consideration. In the majority of cases, it should, I apprehend, be given very sparingly, and more especially so if it occasion any retching, which in these cases it not unfrequently does, if not at the time of the operation, subsequently to it. Indeed, there rather appears to be a liability in these cases for vomiting to come on, than which nothing can be more distressing; for the straining acts directly upon the wound, stretching and disturbing every part which should be maintained in as quiescent a condition as possible. Besides, after the incision into the cavity has been made, the operation is not a very painful one; and, therefore, there is less necessity for complete anæsthesia throughout the whole period of it than in many others. I would therefore suggest that, if chloroform be employed, its use should be limited in a great degree to the earlier stage of the operation, while the painful incision is being made.

The handling the viscera as little as possible, and the prevention of the flowing of the fluid from the cysts into the peritoneal cavity, I regard as of primary importance, and as not unlikely to make all the difference between a successful and a fatal issue. A rough handling of the viscera, and the repeated mopping and wiping of these parts by sponges, however soft, cannot be too carefully avoided. Who amongst us, on his oath, would hesitate, in a medico-legal inquiry, to declare that such a proceeding was sufficient to account for death, supposing the incision and effusion alone, with the mopping and handling of the parts, had been the mischief inflicted upon a healthy person? And surely the evil is not likely to be less when it is inflicted upon the commonly impaired constitutional powers of an ovarian case, and the removal of the diseased mass as well is undergone. Delicacy and quickness of manipulation are essential for the prevention of the first mischief; and a careful, watchful assistant, who will so support and guard the abdominal walls as to main-

tain the tumour protuberant and keep the intestines behind the parietes, while a large trocar and tube attached carry the fluid well away from the body, is of the utmost importance for the second. But, if fluid escape into the intestines and into the pelvic cavity, should it be allowed to remain, or ought it to be removed? If the fluid be small in quantity, clear, and little more than serum, I should be disposed to allow it to remain, as it is impossible to entirely take it out, and the absorption of a little more or less would not be material; while, if the fluid be mere serum, it will probably have little tendency to excite depressed diffused action. On the contrary, if the quantity of fluid be considerable, and especially if the quality be bad, thick, dark, offensive, or containing portions more or less solid, I think that it should be removed as quickly and effectually as possible by the insertion of very soft moist warm sponges, gently pressed upon the parts to absorb it.

The complication of adhesion is one of the most unfavourable possible; yet, as this case proves, it is not necessarily a fatal one; though there can be no doubt, that it must always be regarded as most materially adding to the danger of the operation. It is a circumstance which, if it were possible to be correctly ascertained, might make the difference between our deciding in favour of the operation or against it. In this case, I must confess, though I was prepared to meet with some adhesions, had I anticipated that they would have been found nearly co-extensive with the parietal peritoneum before, and to a great extent of the omentum behind, and below to the colon, I should have been afraid of risking the operation. Though we may, in some degree, form an opinion as to the presence or absence of adhesion, as there may have been pain and tenderness of the body, or parts thereof, or the mobility of the tumour in varied positions of the body, these indications can never be very reliable means of diagnosis, or accurately reveal the extent of the adhesions, supposing these actually to exist. Adhesions will often occur without there having been much pain or tenderness, and may not necessarily be present when these have been suffered; and the mere distension and tenseness of the abdomen, as in this case, may be so great, as by the pressure alone to quite prevent any rolling over of the cysts in the moving of the body.

When adhesions are found to have occurred, what is the best method of separating them? If recent, and not requiring any very great effort to accomplish, I should, as practised in this case, try, with care and without hurry, to separate them with the fingers or the handle of the scalpel. This may often be done without hæmorrhage, which it is most important to avoid; for though the vessels may not be sufficiently large to require ligatures, it will be almost impossible, if the vessels have been cut, to avoid the escape of some blood amongst the viscera, which, even if it can all be removed, will necessitate the handling and rubbing of the parts—a proceeding so much to be avoided; and will, under any circumstances, delay the operation by our having to wait until all risk of bleeding has ceased. If, on the other hand, the adhesions be found dense and firm, more particularly if they be in bands, then, I think, it would be better that they should be divided *seriatim* with the knife or scissors, taking care, if there be any vessels likely to bleed, to first tie the portion with two fine threads of flexible iron wire, cutting the knots close off, and making the division between the threads. (This wire I have now got as thin and flexible as silk.) Its presence will, in all likelihood, be far less injurious than a clot of blood, which is liable not only to act as a foreign body, but to decompose, and thus excite diffusive inflammation.

The length of the pedicle is of no slight importance. If possible, it should be left sufficiently long that, when brought to the peritoneal wound, there should not be any dragging upon it. If it be found impossible to leave it long enough to avoid dragging—if it be brought to the abdominal surface—I should think it the less evil of the two not to attempt so to secure it. I am convinced that the dragging would far more than counterbalance any advantage which may arise from having the cut stump near to the surface.

In this case, I did not use the clamp or any similar contrivance; nor would I do so in any other. I have always been at a loss to conceive what advantage such means could possess over the ligature; while it is certain that its use does not in any degree simplify the operation. If the pedicle cannot be secured by threads, I feel certain that it will not be by the clamp. There must be very few pedicles so thick and unyielding as to be incapable of being compressed by a piece of well-twisted cord; or, if the fibrous material be objected to, the "China twist" (which I believe to be of animal origin) which, if pulled tight enough, will cut through any pedicle in the world, may be employed. If the pedicle be very massive, it will be easy to draw a double thread through the middle of it, and then tie the two threads separately. If the threads be drawn tight enough to be proof against hæmorrhage for the first twenty-four hours, there will be no danger from the subsequent shrinking of the ligatured pedicle; for, long ere this shrinking occurs, the vessels will have been closed, if they ever will be so.

In bringing the wound together, I have already stated why I think the peritoneum should be included in the sutures. I should not again employ the white compound metal pins; as I do not think that they are in any respect better than the ordinary long steel pins. In the first place, they are longer and so require more force, and cause larger holes in penetrating than the steel pins do; and in the next, when the flexible iron wire is used to form the twisted sutures with them, I fancy a galvanic action is set up, which has a tendency to induce suppuration. At any rate, in this case, at each of the pin-apertures, there was a black deposit; and a copious and somewhat obstinate discharge of pus took place and continued long after the whole line of incision was otherwise sound. Of course, if thread were employed with them instead of the wire, there would not be any galvanic action; but I much prefer the flexible wire to the thread; for though I do not go to the extent that Dr. Simpson does in his notions as to the great influence fibrous material has in inducing pyelitis, the flexible wire is certainly a cleaner material than is either flax or silk thread; and as it does not absorb any of the discharge, when it is wished to withdraw the pins, a simple rotatory motion is sufficient for the purpose; which is not the case with the fibrous material imbued with the tenacious gluey discharge; it has either to be cut or to be soaked in water to be loosened from the pins, and so the adhesive process is liable to be interfered with; while, with the wire, the pin has simply to be withdrawn without any force, and the wire may be left undisturbed *in situ*, still supporting the feebly united integuments by its adhesion to them.

I need hardly observe that the wound should be disturbed as little as possible, and that the abdominal parietes should be as relaxed as may be, by the patient being placed upon the back, with the shoulders and knees comfortably raised and supported; while, from the removal of the great internal pressure to which she has been so long subjected, it is well that some moderate, equable, external support should be supplied by the adjustment of a flannel bandage.

As the patient's bowels have been efficiently opened the day before the operation, and for some days after it the diet will be very light, they should not be disturbed by aperients for some days after its performance.

A dose of opium should be at once administered, and repeated if there be much pain or restlessness; if there be depression, wine or brandy may be added to it. In this case, for the first two days, half a grain of opium and one grain of calomel were given night and morning, and I am not sure that the practice is not a good one; but if there be no tendency shown to active inflammation, the mercury should not be continued.

Upon the question of allowing food to be taken by the mouth for the first few days after the operation, there is a difference of opinion. Some who have had experience, hold that it is better not to allow food to be swallowed, but that enemata should be given. For the first two days, this plan was adopted with this patient; but I confess to not feeling satisfied with the correctness of the reasoning upon which the practice is founded. I am not certain that less disturbance of the parts concerned in the operation is caused by the injections *per anum*, than by the ingestion of fluids by the mouth. The administration of these involves considerably more disturbance to the patient than does the act of swallowing. The parts to which they are at once carried are in more immediate contiguity with the seat of the operation than is the stomach. They are quite as likely to excite peristaltic motion in the lower bowel as when in the stomach. Injections are not so pleasant nor so grateful to the feeling as is drink; and though, doubtless, fluids are absorbed when thrown into the rectum, they do not afford that support to the system which they do when taken into the stomach in the natural way. At any rate, this patient at once materially improved in every respect when she was allowed to swallow simple food; to which, in proper limited quantity and quality with portions of ice if there be heat or thirst, I should from the first incline to allow, rather than to rely upon enemata alone.

There is only one other point to which I will allude before bringing my remarks to a close; that is, the propriety or not of tapping a case of ovarian dropsy before the section is made. The advantages to be obtained are important, and not to be overlooked. By so doing, we may possibly satisfy our minds in some important particulars. We may not improbably render what is perhaps the most obscure and difficult problem connected with ovarian operations—the diagnosis of the disease—clear and certain. Some surgeons would perhaps say, undoubtedly we may do this. In some cases, we may certainly do so; but with the following case impressed upon my mind, I cannot go to this full extent. Many years ago, long before ovariectomy came into vogue, a woman was admitted into one of the large London hospitals, and fell under my immediate care as a subordinate officer. She was the patient of one of the best surgeons it has ever been my good fortune to be intimate with, or, I believe, England has produced. The woman's body was of large size, very hard, with obscure sense of fluctuation. Ovarian dropsy was diagnosed, and tapping ordered. As a mark of confidence, I was allowed to use the trocar; it penetrated well, but only a few drachms of fluid could be obtained. My principal, who was present, then tried; but with no better success. A director was introduced through the cannula and moved about; but still no fluid escaped. The woman was put to bed; and quite unexpectedly, the next day, rapidly sank and died, to the amazement of the few who were cognisant of the case; for, as the operation had been done on casually going round the ward, not

many knew of it. Another excellent surgeon, who was then attached to the hospital—both have been dead many years—and who was not particularly noted for his enforcement of *post mortem* examinations, heard of the case, and was so struck with the interest and obscurity attaching to it, as he declared, that he took a great deal of trouble to obtain an examination of the body, which the other surgeon, although, as a rule, most punctual in his personal attendance at *post mortem* examinations, was, in this instance, quite willing the friends should remove from the hospital unopened. Unfortunately, on the morning of the following day, when the examination was to take place, my first friend sent for me to his house, as he was suddenly taken ill, and was too unwell to attend; but emphatically desired that I should make the section, or at any rate be present—which I did, in the presence of my other friend and many others. Prior to the opening of the body, many were the surmises as to what the tumour would prove to be. No error whatever had been committed in the diagnosis. Ovarian dropsy existed sure enough; but the cysts were many; and, curiously enough, it had happened that in both punctures the trocar had penetrated a very small cyst, the walls of which were too thick to be ruptured by such force as it was thought proper to employ with the director; and so hardly an ounce of fluid escaped, though gallons were contained in the abdomen. There were neither adhesions nor inflammation; the woman had simply sunk from the shock of so simple an operation. My report made immediately to my first friend was very effectual in relieving his indisposition at once; but, I am sorry to add, the revelation was not consolatory to the gentleman who had been present at the examination; for I believe he would have been better satisfied had the diagnosis been erroneous, than that practical surgery should have failed in so unimportant an operation.

Many surgeons will be able to call to mind cases which, if not identical with this, are at least so similar as to prove that, though in many cases, by preliminary tapping, we may be assisted in our diagnosis, in others we may by it be possibly led astray; and it is precisely in those cases where the difficulty of diagnosis is least, that the tapping is the most applicable, as in a single cyst; and in those cases where the difficulty of diagnosis is the greatest—the multicellular—tapping is the least applicable. Moreover, the operation is not altogether devoid of danger, as statistics show; though it may be argued with some force, in answer to this, that if the patient should die from the minor operation of tapping, the probability of death following the far more serious operation of ovariectomy would be very great, though this does not necessarily follow, for paracentesis has some dangers of its own. But the greatest objection I feel to preliminary tapping is the likelihood of adhesions, if they do not already exist, being established between the cyst and the peritoneum, to what extent it may be impossible to determine, and thus materially add to the danger of the subsequent ovariectomy; and as some considerable period must elapse between the two operations, the patient is during this time kept in a state of suspense.

I had almost forgotten to remark that, in operations of this nature, (indeed, I doubt if the same would not apply to almost all the more serious operations), it appears to be most advantageous to the patients that they should be secluded as much as possible from other diseased conditions, and that, therefore, isolation in a separate ward should be adopted. There is much to be said in favour of, and, so far as I know, nothing against the suggestion.