Forty cases of ovariotomy / by Thomas Keith.

FORTY CASES

OF

OVARIOTOMY.

BY

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CASES OF OVARIOTOMY.

WITHIN the last three years I have performed ovariotomy forty times, with the result of thirty-one recoveries and nine deaths. Of the first sixteen operations I lost six of my patients; of the last twenty-four, three only have died. Hitherto no mistake in diagnosis has happened to me. I have not yet found it necessary to make any exploratory incisions, and I have not commenced an operation without finishing it. Of those whose lives were saved by ovariotomy, it is now satisfactory to tell, that from the youngest, aged sixteen, to the oldest, aged seventy, all enjoy the best of health. Of the nine whose lives were shortened by the attempt to save them from a miserable death, I operated on four against my own judgment, and at the earnest entreaty of the sufferers, even when told that the chances were as ten to one against them. In the fatal cases, the average weight of the tumours removed was upwards of 45 lbs. In most of these the disease was far advanced, and the powers of life were very feeble, and death was but a relief from the utter misery that precedes the natural termination of ovarian disease. Three only of the cases that terminated fatally were looked upon as fair average cases. Twenty-one of these cases have been already published at length in the Edinburgh Medical Journal for 1863-4. The following paper contains an account of the others, in the order in which they occurred:—

CASE XXII.—*Large Single Cyst, twice Tapped. Ovariotomy. Recovery.*

In the end of September 1864, Dr Chalmers, of Thornhill, asked me to see an unmarried dressmaker, forty-four years of age, who had been the subject of a large ovarian tumour for upwards of ten years. Dr Chalmers had delayed tapping as long as possible, but it had become necessary about eighteen months before, when a large quantity of thick dark-coloured fluid was removed, and a similar fluid continued to drain off for several days after the tapping. The cyst gradually refilled, and she had again become nearly as large as before. The savings of her industry were exhausted, and her life, for long a useless one, had now become a burden to her.

She was a large, pale, fat woman—not a very favourable-looking subject for ovariotomy. The tumour was unilocular, and apparently free from adhesion. As the girth at the umbilicus was 47½ inches, it seemed more advisable to tap first, before proceeding to the extirpation of the cyst. Nearly four gallons of fluid were removed, and the patient having had some good nights, ovariotomy was performed on the 4th of October. The tumour consisted of a single thick-walled cyst, and was easily removed through an incision in the peritoneum not exceeding two inches, though, on account of the thickness of the abdominal wall, the external incision was upwards of six inches. A long slender pedicle, arising from the right side of the uterus, was secured by a small clamp, and the wound was closed by one deep and five superficial silk sutures, the whole proceeding being remarkable only for its simplicity. Dr Russell, Dr Chalmers, Dr Bogie of Annan, and Dr Scott of Dumfries were present.

She was carefully tended by Dr Chalmers, who took charge of her after the operation. She recovered without an unpleasant symptom, and three months afterwards Dr Chalmers wrote me that she was in the best of health, and doing a large business.

CASE XXIII.—*Multilocular Ovarian Tumour, weighing* 56 *lbs. Three Tappings. Ovariotomy. Recovery.*

In 1862, Mrs R., aged fifty-two, from Rothesay, consulted Dr Drummond of Glasgow, now of Nice, on account of a large multilocular ovarian tumour of about three years' growth. She had taken a great deal of purgative and diuretic medicines, and had twice been severely salivated. After the first salivation her girth diminished very considerably, but at the same time she lost strength and became much emaciated.

As there had till then been no successful case of ovariotomy in Scotland, Dr Drummond gave her no encouragement to run the risk of the radical cure. He advised her to give up hope of getting rid of her disease by medicines, but by simple life and full nourishment to keep up present power, and to delay tapping as long as possible. In February 1864, she was tapped, with much relief, by Dr M'Laughlan of Rothesay, and it was necessary to repeat the operation in September last. In the interval she had again seen Dr Drummond, and was placed by him under my care for ovariotomy towards the end of October. Though she had been tapped but a month before, her girth was already 45 inches; and since then she had suffered from severe cough, with much expectoration.

There was dulness of the lower half of the right lung, with general bronchial irritation. She was emaciated, and had a feeble pulse between 90 and 100. She looked ill, and was by no means in a favourable condition for ovariotomy. The chances of success and failure seemed about equal.

In the hope of relieving this congested state of the lung she was again tapped, and nearly 40 lbs. of fluid were removed from two

large cysts, leaving a large semi-solid mass behind. Extensive parietal adhesion was now easily diagnosed, for the cyst did not recede farther than an inch below the edges of the ribs. In the course of a week the dulness of the right lung had nearly disappeared, and though the cough was still troublesome, ovariotomy was performed on the 11th of November. The peritoneum was opened to an extent just sufficient to admit the hand, very extensive adhesion above the umbilicus was separated, the largest cyst drawn forward and opened, the hand passed in and the semi-solid portion, consisting of exceedingly small thin-walled cysts, weighing upwards of 17 lbs., was broken up, and the whole withdrawn without enlarging the incision. The clamp was applied to a thin pedicle, the clots removed, the pelvis carefully sponged, and the wound closed by silk sutures.

For forty hours after the operation she remained entirely free from cough, then bronchitis set in very violently and unexpectedly, and for several days her condition was critical. Notwithstanding severe paroxysms of coughing, the wound healed entirely by the first intention. She was out of bed in three weeks, and almost able to go home; and though she had been carefully nursed through the dangers of an unusually hazardous ovariotomy, she would not allow herself to be taken care of during her convalescence, but by her imprudence brought on an attack of peritonitis, followed by effusion. Finding one morning some bulging of the recto-vaginal fossa, I passed a small straight trocar into it close behind the uterus. As only clear serum escaped, I withdrew the trocar, and the fluid was removed by absorption in the course of a fortnight, but it was not till nearly seven weeks after the operation that she was able for the journey to Glasgow.

CASE XXIV.—*Multilocular Ovarian Tumour. Second Tapping, followed by Gangrenous Inflammation of the Cyst. Ovariotomy. Recovery.*

In the following case ovariotomy was performed under unusual and very far from hopeful circumstances. Though the practice adopted seemed at the time to be rash and scarcely justifiable, yet it saved the life of the woman, and it appears to me to be one which may sometimes be recommended when bad symptoms come on after tapping.

Mrs G., aged fifty-one, had suffered from an ovarian tumour for upwards of four years. Little inconvenience had resulted till within the last twelve months, when tapping had twice become necessary. She had borne a large family, and had been a remarkably healthy woman; but as the disease progressed her strength gave way, and her life became useless. On the 1st of December last she was recommended to me by Dr Bartholemew, of Inverkeithing, as a fit subject for the radical cure.

She was nearly six feet in height, and must have been a very

powerful woman, though now exceedingly emaciated. The tumour was large; her greatest girth was 47½ in., and the distance between the ensiform cartilage and pubes was 32 in. The heart and liver were pushed upwards by the tumour, which also hung down over the pubes upon the thighs. The uterus was low in the pelvis; it felt heavy, but was central and movable.

She had been a good deal shaken by a long coach journey, and passed a restless night, complaining of general uneasiness in the tumour and pain in the back. In the hope of relieving her, and of giving her some good nights before operation, I tapped her on the 2d of December—a practice I have now frequently followed a few days before the removal of very large tumours with the best results. The tumour was nearly unilocular, and upwards of 49 lbs. of bland albuminous fluid were removed from the largest cyst.

Next day she looked and felt quite well, but the pulse was upwards of 100; and on the evening of the second day after the tapping, slight pain on moving was complained of in the left iliac region. She had little inclination for food, suffered greatly from flatulence, was excitable, and did not sleep. On the 6th she had passed a very restless night, and had wandered a good deal. The conjunctivæ were yellow, and she had a strange wild look; the pulse was 120; the tongue loaded and dry; and there was a dark discharge from the uterus. The bowels had been freely acted on by medicine, but the urine was scanty and offensive. Still there was no tenderness except over one small spot in the left iliac region; the intestines, however, had become much distended, and the transverse colon felt very large, running along, and apparently attached to the upper margin of the cyst.

These symptoms—all too indicative of low cyst inflammation—continued with varying intensity till the morning of the 9th, when it seemed to me, most unpromising though the circumstances were, that the proper practice was to give the patient a chance of life by the removal of the tumour ere the blood should be fatally poisoned. I confess, however, that, on uncovering the abdomen after she was under chloroform, I almost hesitated to proceed, for the intestines were now very much distended. The cyst was exposed midway between the umbilicus and pubes, and as far as the finger reached was unattached. About half a gallon of fluid, which had accumulated in the cyst since the tapping, was withdrawn, and its gangrenous odour was at once perceived by all who were present. The aperture made in the cyst was then carefully closed, the incision was enlarged upwards and downwards, and very extensive intestinal adhesion came at once into view. There was no parietal adhesion except over a space the size of the hand, close to the false rib on the left side. This was very firm, and the bleeding from it very troublesome. The adhesions between the different folds of small intestine and to the tumour were of greater extent than I had ever met with before, and embraced the whole of the posterior

surface of this large cyst; while the transverse colon was attached by recent lymph to its upper margin. The intestines were of a dark-cherry colour, and in a high state of inflammation; their swollen, spongy, friable condition was very remarkable, and it required the utmost care and tenderness in effecting their separation from the posterior wall of the cyst, which was of a very dark colour. After an hour the whole mass of cysts was turned out, but of course the recent adhesion that existed in all directions between the different coils of bowel was not interfered with. The operation had been sometimes most embarrassing, for the bleeding was profuse, and, from the constant straining of the patient from the chloroform sickness, the swollen intestines were continually being forced downwards, obscuring the view, and pushing out of sight the newly separated bowel, often before I had satisfied myself that the bleeding had ceased. Numerous clots were then removed by passing several sponges of special softness in all directions amongst the viscera; but it was impossible to bring all the separated surfaces into view, from the amount of adhesion that existed between the different folds of bowel themselves. The blood was allowed to gravitate into the pelvis, and thence removed, though several small clots must have been left behind. The oozing from the separated parietal surface gave a good deal of trouble, and it was necessary to keep up pressure on it by the hand, and allow a large flat coagulum to form, which was left adhering to the wall. The pedicle was thick and of fair length; but, from the unusual size and depth of the pelvis, and the distended condition of the abdomen, there was a considerable strain upon the uterus when it was secured by the clamp. The wound was then closed by deep and superficial silk sutures, and it was remarked, as the last look was taken of the intestines—glued together as they were with shreds of recent lymph visible in all directions—that they were now, from the local bleeding they had received, of nearly their normal colour. The patient was under chloroform for nearly two hours.

The cyst-walls weighed 8½ lbs., and the large cyst had contained upwards of 49 lbs. of fluid; so that the weight of the whole tumour was 57½ lbs. On opening the large cyst, it was found in a complete state of decomposition. Its anterior wall, which was half an inch in thickness, was lined with a very thick layer of recent fetid lymph. The greater part of the posterior wall was in a state of complete slough, extending through to its serous covering. The base of the tumour was about an inch and a half in thickness, and was of cartilaginous hardness.

The improvement in the general condition that almost immediately followed the removal of the source of irritation was very remarkable. By evening the patient was in a profuse perspiration, and the pulse had fallen to 90. There was distressing flatulence and excessive thirst, but she was stinted in her fluids as much as possible, in hopes of favouring the absorption of the blood and clots

that I knew were left inside. There was great depression of the clamp, and the abdominal distention did not begin to subside till the fifth day; but I ventured to remove the whole of the stitches at the end of forty-eight hours. This was the first thing, the patient told me afterwards, she had any recollection of since the operation. There was no discharge whatever from the incision. She was out of bed in three weeks, and went home thirty-five days after operation. I have seen her lately; she was strong and well.

CASE XXV.—*Multilocular Ovarian Tumour. Once Tapped. Ovariotomy. Death from Septicæmia.*

An unmarried lady, forty-four years of age, was recommended to me in September 1864, by Dr Ross of Inverness. On account of illness, I did not see her till the 12th of November following, when her friends placed her under my care for ovariotomy, to which she had made up her mind, and which she had weekly been led to expect at the hands of another. The tumour had been detected little more than three months before, and had hitherto caused little inconvenience, except what arose from its bulk. It filled the abdomen to within three inches of the ensiform cartilage, and was composed chiefly of one cyst, except in the left hypochondrium, where part of it was semi-solid. The girth at the umbilicus was 38 inches, and there was no evidence either of abdominal or pelvic attachment. The uterus was movable, but it lay low and backwards in the pelvis, and the space between it and the tumour was evidently small. For five weeks previous to my seeing her, the patient had taken large doses of the tincture of the muriate of iron. She was rather fat, somewhat anæmic looking; and, under a remarkably calm exterior, she had a good deal of nervousness, for at every visit her pulse became very rapid, and I do not remember ever counting it under 115. Still, her general condition was so good that had she not fully made up her mind previous to my seeing her to have the tumour removed, I should have hesitated in at once recommending ovariotomy at such a comparatively early stage of the disease.

She was tapped on the 27th of November. This was done to relieve acute œdema of the limbs, and to give her some quiet nights before operation, for latterly her nights had been restless. The cyst contained upwards of 19 lbs. of very thick tarry-looking fluid. The semi-solid portion was of considerable size, but there was nowhere any adhesion. The uterus now lay very far back in the hollow of the sacrum.

For two days after the tapping she had a very rapid pulse, with profuse perspirations, but without any abdominal disturbance. These symptoms, though rather alarming looking, were entirely of a nervous character, and disappeared after a few days, leaving her somewhat weak, but otherwise immensely relieved by the tapping. Up till this time the case had been looked upon as a remarkably

favourable one for operation; but the disturbance of system after tapping had been so great and unusual that I began to fear that too favourable a prognosis had been given to the patient and her friends, and I at one time thought of advising her to go home for some months. But it soon became probable that the progress of the disease would be rapid, for in less than three weeks her girth was already 36 inches, showing that the cyst had half-filled.

Ovariotomy was performed on the 16th of December; and before commencing I stated to my friends who were present that I had no expectation of being able to secure the pedicle externally, but that I intended to return it along with the ligatures, after the method so successfully practised by Dr Taylor Smith. There was a very thick layer of fat between the sheath of the rectus and peritoneum, such as I had not met with before. Upwards of a gallon of fluid was removed from the large cyst, which was then drawn forwards, opened to admit the hand, and after breaking down the semi-solid portion, the whole was easily withdrawn through an incision about 4 inches in length. The pedicle was even shorter than I feared, and the thickest I have had to do with. The uterus did not rise from the pelvis, and the base of the cyst was unfortunately upwards of an inch in thickness—too thick to allow me to lengthen the pedicle by placing a clamp round the neck of the cyst. After some difficulty the pedicle was tied in five portions close to the uterus, leaving the ligatures hanging out at the lower end of the wound, for, from the thickness of the mass, it was manifestly unsafe to return it with the ligatures. No sponging of the pelvis was necessary. The patient was then placed in bed, exactly one hour and a quarter after she had begun to inhale the chloroform, for the application of the ligatures had been tedious, and there was a troublesome oozing from the external incision, which delayed the closing of the wound. The cyst walls weighed nearly 6 lbs.

There was a good deal of moaning in the afternoon, which was relieved by two small opiate enemas. By evening she was in a profuse perspiration, and she expressed herself as more comfortable than after the tapping. The night was passed fully as well as it usually is after ovariotomy; but in the morning the pulse was up to 118, and in the forenoon an attack of vomiting brought on pain, which was again relieved by an opiate enema, and she slept quietly in the afternoon. By evening there was fetid red serum trickling along the ligatures. The second night was quiet, and though she required no more opiate, she moaned heavily in her sleep. In the morning the pulse was 120 and feeble, and there was a great deal of fetid red serum. By afternoon she was unconscious, and died early next morning, sixty-one hours after operation. There was no examination. Decomposition set in very rapidly; indeed, it may be said to have commenced before death. The red serum was of a very irritating nature, for the nurse and myself suffered from pustules on the fingers for some time afterwards.

CASE XXVI.—*Multilocular Ovarian Tumour, weighing* 26 *lbs. Ovariotomy. Recovery.*

W. R., æt. 36, unmarried, was sent to me on the 6th of December 1864, by Dr Brown of Coldstream, who had detected an ovarian tumour two months before. It was multilocular, and reached to midway between the umbilicus and ensiform cartilage. The girth was 36½ inches.

She was a very fair-complexioned, delicate woman, and thin about the arms and shoulders. She had suffered much from flatulence and dyspepsia, and had lost all her teeth before she was twenty years of age. The family history was not good: her mother having died of phthisis a few years ago. As the tumour was small, and as her general health was still pretty fair, it was agreed that she should return home, the risks and advantages of ovariotomy having been fully explained to her.

In three weeks she came back anxious to be relieved of her burden. In the interval she had been almost entirely confined to bed on account of severe pain in the lower part of the tumour, with sickness and vomiting, while the loss of flesh during this short period was very remarkable. The tumour now reached to the ensiform cartilage, and her girth had increased to 39 inches. The general condition was not favourable for ovariotomy; but this was her only resource.

The tumour was removed on the 4th of January, through an incision just sufficient to admit the hand, by first tapping the large and then breaking down the smaller cysts, several of which were in a state of suppuration. The pedicle was broad, but was secured outside with a clamp, without much pull upon the uterus. The wound was closed by deep and superficial silk sutures. Dr Brown of Coldstream and other friends were present.

Though the operation was most simple, a recovery was obtained with great difficulty. She had extensive pelvic peritonitis, with great abdominal distention. She was greatly distressed for some days with flatulence, and the vomiting was very severe, especially on the third night after the operation. This was followed by profuse and fetid discharge around the pedicle, though the rest of the wound healed by the first intention. She required very careful nursing for the first fortnight. In the third week she regained strength rapidly, and returned to Coldstream thirty-five days after the removal of the tumour, having been walking about the house for the previous week.

CASE XXVII.—*Multilocular Ovarian Tumour, with Fibroid Tumour of Uterus. Ovariotomy. Recovery.*

M. G., from Gourock, 54 years of age, was sent to me in January 1865, by Dr Drummond, of Glasgow. She was a pale, thin, nervous woman, but her health had been good till August last, when she

found that her dresses would not fit her as formerly. She increased rapidly in size, and when I saw her, the girth at the umbilical level was 41 inches. The tumour occupied the whole abdomen, extending under the sternum. Fluctuation was much more distinct at some places than others. On internal examination, the finger came at once against a solid tumour, filling up the recto-vaginal fossa. The cervix was central and very movable; the sound passed 2½ inches, and, on turning it about, no impression whatever was made upon the posterior tumour, which had the feeling of a hard fibroid. It could not in the least be pushed upwards. After repeated examinations, I was not able to satisfy myself whether the mass was adherent or not, till one time I felt on it, far back, a small projection the size of a pea. On pressing my nail against this, and drawing it towards me, the whole, forming a tumour about the size of a very large orange, suddenly gave about a quarter rotation. I was then satisfied that it had no connexion with the ovarian tumour above, and the impression left was, that it was a pediculated fibroid of the uterus. It was explained to the patient that two tumours existed, that it was unsafe and unnecessary to interfere with the smaller one, but that the ovarian tumour, which was killing her, could be taken away. To be quite sure of the diagnosis, it was thought better to have a preliminary tapping: 26½ lbs. of dark bloody fluid were removed. This fluid was peculiar, and more resembled that which is found in fibro-cystic growths of the uterus. The tumour was now found to consist of a large, very thick-walled cyst, with some semi-solid part at its base.

Much relief followed the tapping, and on examination a few days afterwards, the position of the parts in the pelvis was found to remain the same. The solid tumour could be rotated as before, without in the slightest affecting the cervix uteri. On placing her on the elbows and knees, the mass was pushed out of the pelvis, and it did not come down again. Still the position of the cervix was unchanged. On now introducing the sound, and moving it as far as possible from side to side, the solid tumour, which could easily be felt by pressing downwards above the pubes, was slightly but distinctly moved with it. Some of my friends who examined the case for the first time at this stage could arrive at no satisfactory diagnosis, for it was now difficult to isolate the solid tumour from the lower semi-solid portion of the ovarian cyst.

It was left to the patient to decide whether she should return home till the cyst should refill, or whether the operation should be gone on with. As she wished the latter, ovariotomy was performed on the 30th of January, with the distinct understanding that the smaller tumour was not to be interfered with. The diagnosis written down before operation was, "Multilocular tumour of right ovary,—pediculated fibroid of uterus." The incision extended from an inch below the umbilicus downwards six inches. Slight parietal adhesion was separated, and a very thick multilocular cyst, arising

from the right side of the uterus, easily removed. The pedicle was long, and twisted upon itself, which might account for the clots found inside the large cyst. The solid tumour was then brought into view. It was the size of a large orange, and arose from the fundus of the uterus. It had no very distinct pedicle, but appeared to be rather a continuation of the fundus. The body of the uterus was very much elongated. Indeed, I believe the sound had not entered into the cavity at all, and it was difficult to imagine how the tumour, as it lay in the recto-vaginal fossa, was unaffected by the sound when passed into the cervix. It was thought better not to examine it too curiously, for it got at once of a dark-cherry colour from handling, and I was glad to let it sink back into the pelvis. The cyst walls weighed 3 lbs. 13 oz., and the largest cyst contained 26½ lbs. of fluid.

She suffered from sickness and distention for some days, but otherwise no bad consequences followed, and she returned to Gourock a month after the operation. I saw her a few weeks since. She had got very fat, and was well in every respect, except that she complained of pain in her back, which always disappeared when she lay down. The fibroid had not descended into its old position, but was felt in the pelvis, and seemed smaller and harder than before. The cervix uteri was still quite unaffected by any downward pressure upon it, or by any other movement; and had I not had the tumour in my hand nine months before, nothing would now convince me that it is a uterine growth.

CASE XXVIII.—*Nearly Solid Ovarian Tumour, surrounded by Ascitic Fluid. Five Tappings. Ovariotomy. Death from Exhaustion.*

In August 1864, Dr James Young asked me to see Mrs F., aged 34, in whom he had detected a small ovarian tumour, after her first confinement in August 1858. After her second confinement, in June 1861, the tumour rapidly increased, and she was tapped in the following November. At this time she was seen by Dr Simpson, and the case pronounced an unfavourable one, on account of adhesions. She was tapped a second time in April 1864, and when I saw her, four months after, the fluid had again accumulated to a considerable extent.

The patient was a little, dark, wiry-looking woman, of healthy parents. She had enjoyed excellent health, and, until recently, the tumour had given little inconvenience. The abdomen measured 43 inches at the umbilicus, and was occupied by a solid tumour about twice the size of the adult head, surrounded by ascitic fluid. The tumour was well defined, except near the false ribs on the left side, where the omentum seemed adherent to its upper part. I called Dr Young's attention to the presence of a thick band connecting the tumour to the abdominal wall near the angle of the ribs. The uterus was normal and movable. At this time her general

condition was favourable to ovariotomy, but there were no urgent symptoms, and the patient had not made up her mind on the subject. I heard no more of her till the end of November, when I was asked to perform ovariotomy, and a day was fixed for me on which to do it. I found she had been tapped a third time about a month before, and was already larger than she had yet been. Her pulse was quick, her emaciation extreme, and her health thoroughly broken up. The general condition was so unfavourable for ovariotomy that I at once declined interference. Tapping was, however, requisite to relieve her urgent symptoms, and nearly five gallons of fluid were removed, leaving the solid tumour as high as the angles of the ribs on either side. I saw her next day, and found her with a pulse at 130, and apparently sinking. Indeed, I arranged with Dr Young that he should try to have an examination. Some time afterwards I heard that she had rallied, and I saw her, and again tapped her on the 20th of January, her girth being then 49½ inches. From this tapping she rallied well, but the pulse continued high, and the fluid accumulated with alarming rapidity. Still it was agreed to give her the chance of ovariotomy, as she was now anxious for it, though it was faithfully represented to her, and those interested in her, that of three such cases two would probably die after operation. Some delay was occasioned in procuring a suitable lodging for her, and ovariotomy was performed on the 11th of February; and though she had been tapped but three weeks before, the girth at the umbilical level was already 53 inches. On the morning of the operation, though she had passed a good night, the pulse was 118, the breathing rapid, and her feebleness great. I told her that the chances were now as ten to one against her recovery after ovariotomy, and that I could not recommend it. She said she wished to have even that small chance for her child's sake.

But on putting her under chloroform, her appearance became so alarming, and the pulse so feeble, that I hesitated to proceed. After waiting a little, it was agreed to allow some of the ascitic fluid to escape slowly, then to enlarge the opening to admit the hand, and do no more should it be found that any great extent of adhesion existed, the separation of which would prolong the operation, and in her feeble state render it deadly. This was done. Some friable adhesion of the omentum to the upper part of the tumour, and the broad parietal band formerly alluded to, were easily separated, the wound was enlarged, and the tumour removed entire, for it was too solid to break up. The intestines were very red, and I intended to put in a drainage tube through the vagina, to allow the secretion which might go on after the operation to escape. She got so feeble on sponging out the pelvis that I was glad to close the wound, and get her to bed. There was no loss of blood, and the whole proceeding did not occupy twenty minutes. She had severe chloroform vomiting, and some of the vomited matter seemed to get into the larynx, and a troublesome, incessant cough came on, which continued for nearly two

hours, completely exhausting her. Though she took stimulants freely, she never fairly rallied, scarcely spoke after the operation, and died in thirty-two hours. The tumour was nearly solid, and weighed 11 pounds. There were 60 pounds of ascitic fluid, which formed a complete jelly on cooling.

The following remarks, appended by Mr Spencer Wells to his twenty-fourth case of ovariotomy, are so applicable to the above case that I quote them entire:—"Is it right to perform such an operation as ovariotomy in unfavourable cases? It may be said that by doing so the surgeon not only risks his own reputation, but lowers the operation he performs in the estimation of the profession, and thus lessens the number of favourable cases who might be willing to undergo it, were it not known that one in two, three, or four who do submit to it die. It is quite clear that a surgeon, who will only operate on very favourable cases, ought to show far better returns than one who consents to stake his own reputation, in order to give a dying patient a small chance of recovery; and it may possibly be right to follow the more prudent course. But in a case where the poor woman says, as many have said to me, 'I suffer from a disease which must kill me. I cannot live very long. My life must be a life of suffering. If you operate, I know the risk I run, but *I may* be cured, and return to my husband and children, and I would rather die than live as I am.' In such a case as this, I do not envy the feelings of a man who, unless he saw the case was absolutely hopeless, would let any consideration for the general character of surgery, or for his own reputation as a successful operator, induce him to refuse the prayer of the poor dying creature who placed her life in his hands."

Case XXIX.—*Nearly Unilocular Ovarian Tumour. Pelvic Adhesions. Death four days after Ovariotomy.*

Mrs D., thirty-two years of age, was sent to me, in the spring of 1864, by Dr Kilgour, of Aberdeen, to consider the question of ovariotomy. The patient was a remarkably delicate, phthisical-looking woman, and had always had indifferent health. The tumour was small, not extending much above the umbilicus. It was unilocular, and there was no evidence of parietal attachments. The uterus lay very far back, and low down in the pelvis. The cervix was movable, but the body of the uterus was quite lost in the cyst; indeed it seemed to form part of it. She had got cold on her way by sea, and when I saw her she had a slight pleuritic attack, with some effusion. There was also some subcrepitant rale here and there through the right lung, especially below the clavicle. She had a good deal of cough, without much expectoration. The right side of the chest was contracted, and there was a history of old pleuritic attacks.

Under these circumstances, I recommended no interference, and she returned home. Her health improved during the summer, and no increase of size took place. In the following spring, however, she

had a severe pelvic peritonitic attack. Restless nights and rapid loss of flesh followed, and in the end of March I was disappointed to find her again back to me, very anxious, as she was before, to have the tumour removed. The tumour now reached to the ensiform cartilage, and the uterus was even more fixed than it was before. The general condition was also much less favourable than it had been a year ago. She was paler and more emaciated; still had some cough; her voice was husky, and her nights were restless.

She was tapped on the 28th of March, with immense relief. The cyst seemed quite loose, and the uterus now felt movable; and having just read in the Medical Times a case of ovariotomy by Mr Wells, in which, before operation, he described the uterus as feeling as if lost in the cyst, whereas it turned out that the pedicle was of good length, I was in hopes that the same might be found to be the case in my patient. Still her general condition was so unfavourable that it was thought better to wait the results of the tapping. The cyst, however, filled with amazing rapidity, and I most unwillingly operated on the 8th of March,—some symptoms of pleuritic irritation, which appeared the first day she was out of bed after the tapping, having subsided. The cyst was already half-filled; it was tapped and easily drawn out, but it was found to be so closely adherent to the bladder and anterior surface of the uterus that it was deemed unwise, in such a delicate subject, to attempt their entire separation, for this could not have been effected without a careful and tedious dissection. The bladder was, however, freed for several inches, and the clamp was placed round the neck of the cyst, which fortunately was thin walled, and it was secured outside. She rallied well; there was copious secretion of urine, and profuse perspiration. Next day, though the pulse had risen to 120, her expression was so good that her cheerful and smiling face made me almost hopeful. But by evening there was a copious secretion of red, somewhat fœtid serum. This continued to flow in large quantity, the pulse became more and more feeble, and she died on the fourth day after operation.

Case XXX.—*Multilocular Ovarian Tumour. Ovariotomy. Recovery.*

A. R., aged twenty-four, was sent to me on the 4th of May 1865, by Dr Fergus, of Glasgow, as a very favourable case for ovariotomy. Increase of size had been gradual since three years ago, but neither her comfort nor usefulness had been much interfered with till within a few weeks before. Her general health was good, but she was pale and thin about the chest and arms. The tumour was multilocular, extending under the ribs on either side, and to within two inches of the ensiform cartilage. The girth at the umbilical level was 38½ inches, and from ensiform cartilage to pubes 18 inches. The vagina was funnel-shaped, and the uterus was drawn up almost out of the pelvis to the left side, but it was quite movable. There was no evidence either of parietal or pelvic attachment.

As the period had just passed off, and as the secretions were healthy,

there was no occasion for delay, or for any preparatory treatment. Ovariotomy was performed, in the Edinburgh Surgical Home,[1] on the 6th of May. Dr Fergus was present from Glasgow. The incision commenced two inches below the umbilicus, extending downwards four inches. The upper central cyst was tapped, and a number of others emptied through it without removing the trocar. The tumour was then withdrawn, after freeing it from the omentum, which was partly adherent to the upper portion. The pedicle was secured about an inch and a-half from the right side of the uterus; a very broad expansion went off to the meso-coccum, upon which the clamp, when placed at the lower angle of the wound, made a considerable drag, and it was necessary to fix it in the centre of the incision. The edges were brought together by deep and superficial silk sutures, after sponging the pelvis from some turbid serum. The weight of the whole was 19½ lbs. There was a large deposit of recent lymph on the anterior surface of the cyst-wall.

She had no sickness, no pain, and required no opium. The sutures were removed forty hours after operation, and the wound healed without discharging a drop of matter. She was up most of the fourteenth day, and returned to Glasgow on the 29th of May, having been absent from her situation only twenty-four days.

CASE XXXI.—*Single Unattached Cyst. Ovariotomy. Recovery.*

An unmarried lady, from Dumfries, forty-eight years of age, of a very strongly marked nervo-bilious temperament, consulted me, in May 1864, as to the propriety of having ovariotomy performed. She had been tapped in March 1863, and the tumour had become nearly as large as before. First signs of ill-health came on after a severe chill eight years ago. She had then repeated attacks of pelvic and abdominal pain, with occasional vesical irritation, but no swelling was detected till four years after this. For some time she was treated for cardiac dropsy. Her girth at the umbilical level was 37 inches, and the tumour extended only 3 inches above it. It consisted of a single unattached cyst. As her general health was good, and as she was able to walk about and enjoy life, I strongly advised her to let things alone in the absence of any symptoms interfering either with life or her comfort. In the following October I again declined interference.

In May 1865, her girth had increased to 40 inches. She had become thin and out of condition; had restless nights, and was getting nervous about the operation some time before her. Ovariotomy was now fully justifiable, and as the house she had taken was noisy, being close to a rifle-practising ground, she came into the Home on the 6th of June, and the cyst was removed on the 8th. Dr Imlach, of Liverpool, and other friends, were present. The operation was

[1] A small, nearly self-supporting, institution, where patients suffering from ovarian disease may have perfect quiet, perfect cleanliness, and perfect nursing, conditions essential to even an average success after ovariotomy, and which cannot be obtained in a large hospital, and rarely in private lodgings.

most simple. The incision was barely 3 inches in length, and the pedicle, which was very long and slender, was secured by a small clamp about 4 inches from the right side of the uterus. The cyst, which weighed only 10 ounces, contained 26 lbs. of clear fluid. The wound was closed, as usual, by silk sutures.

She got very sick with the chloroform, and had severe attacks of bilious vomiting for the first twenty-four hours. She had little pain, and required no opium. She had a foul tongue, and a good deal of headache for the first ten days; otherwise she recovered well, and went home twenty-five days after the operation,—the cicatrix measuring only an inch and a-half in length.

CASE XXXII.—*Multilocular Ovarian Tumour. Ovariotomy. Recovery.*

M. M., aged thirty-two, was sent to me for ovariotomy, in July last, by Dr Campbell, of Dunse. The tumour was multilocular, of rapid growth, and reached to midway between the umbilicus and ensiform cartilage. It stretched more to the left side, but both loins were clear on percussion. No cyst of any size could be detected, and there was no evidence of adhesion. The girth was 35 inches. The uterus lay almost in the opening of the vagina, being pushed down by a part of the tumour which projected into the pelvis; it was slightly inclined to the left side, but was quite movable. Recently the patient's health had begun to be impaired, and she was able to do but little. Had her circumstances admitted of her leading a quiet life, the disease might have been temporized with. But this was not the case; and Dr Campbell and I felt justified in recommending ovariotomy as long as her health was fairly good.

The tumour was removed on the 24th of July. Dr Campbell was present. The incision commenced 3 inches below the umbilicus, and extended downwards 4 inches. There was no adhesion. After tapping some small cysts, the tumour was opened and broken up. The pedicle was short and thick, and was secured by a large clamp within an inch and a-half of the left side of the uterus. There was a decided strain upon the uterus and upon the tissues of the left side of the pelvis, and the upper part of the rectum was slightly drawn towards the clamp. By placing the clamp in the middle of the wound, this traction on the bowel was almost removed. Some bloody serum was sponged from the pelvis, and deep superficial silk sutures closed the wound as usual. The whole weighed only 12½ lbs., and it is the smallest ovarian tumour I have yet removed.

She had chloroform sickness in the afternoon, but little or no pain, and no opium was necessary. By evening flatulence was troublesome, and for the first three days there was great distention of the abdomen. This was most distressing during the second night after the operation, when the gas was from time to time forced up with great violence. Much relief was given by passing up a long rectum-tube, and allowing it to remain for some hours. After this she did fairly well till the seventh day, when uterine epistaxis came on, and

there was fœtid discharge round the clamp. As this was much depressed and some pain felt, it was removed next day, and the slough cut away. The stump of the pedicle sunk at once far inwards, and there was pain in the left iliac region. On the ninth and tenth days, she was flushed and looked yellow, had a dry tongue and quick pulse. The urine also became ammoniacal and concentrated. This condition, which was suggestive of septicæmia, passed off with profuse perspiration. After this she improved rapidly, and left the Home for Dunse twenty-three days after operation.

CASE XXXIII.—*Double Ovarian Tumour. Pelvic Adhesions. Ovariotomy. Recovery.*

In July last, Dr Gordon, of Old Aberdeen, took me to see Mrs K., æt. 42, who had been under his observation for about four years with ovarian disease. She had been a healthy woman, and had had only one daughter, now twenty years of age. She was fair complexioned, and her appearance, though somewhat anæmic, was still healthy. She was emaciated about the arms and chest, and had a remarkably dry skin. The abdomen was covered with a slight eczematous eruption. The girth at the umbilical level was 40½ inches, and from ensiform cartilage to pubis 19½ inches. Percussion was clear in right, dull in left lumbar region. The dulness of the tumour extended 2½ inches above the ensiform cartilage, and the liver was much displaced upwards. The uterus was not very movable, the cervix was elongated and large, and the whole organ felt heavy. The roof of the vagina felt soft, but the examination was somewhat hurried, and the diagnosis I gave was, "single unattached cyst of left ovary."

After this she came to town for operation, and on again examining the condition of the tumour in the pelvis, it was observed that there was some depression of the right side of the vagina. When the patient lay on her back the roof of the vagina was soft, when she was turned on her face the roof of the vagina became tense, and rose from the finger. It seemed, therefore, very probable that some pelvic adhesion existed. Ovariotomy was performed on the 16th of August, with the assistance of Dr Carruthers, of Cramond, and Dr James Carmichael. A large thin-walled cyst, containing 35 lbs. of fluid, was easily removed through an incision 3 inches in length. The pedicle, which was long and thick, was secured by a clamp. On putting down my fingers to examine the state of the right ovary, I came upon a second tumour, about the size of a newly-born child's head, fixed in the pelvis. The body of the uterus was seen to be very large, and closely connected with this second cyst. The incision was extended, and after a little manipulation I found that the pedicle was adherent to the side and back of the uterus. This was separated, and the ovary itself, apparently quite healthy, was seen lying close to the uterus. The other attachments to the side of the pelvis were then torn, the cyst tapped and drawn upwards, and I was able to free it from all its

attachments, except a broad firm band at its base, which resisted tearing. This was cut, and then ligatured, the ends of the ligatures being cut short and left behind; and by embracing the neck of the cyst in the clamp, it was secured outside. Free bleeding was now going on, partly from the surface of the uterus, but chiefly from a rent in the ovary. A clot, the size of a bean, was turned out of a Graafian follicle, and the bleeding point secured by a ligature; but the tissues were so friable, and the oozing from the cavity so general, that the more we tied the more it bled. The bleeding was finally stopped by transfixing the ovary, and tying in everything within half an inch of the bleeding points. After waiting till all oozing from the pelvis had ceased, the two clamps were arranged outside, the fundus of the enlarged uterus was brought up against the pubes, and the wound closed by silk sutures. The operation lasted upwards of an hour.

Severe inflammation at once followed the injury done in the pelvis by the removal of the smaller tumour. Vomiting set in immediately after the operation; there was great restlessness, and a constant moaning, which was very distressing. At the end of twenty-four hours, serum had begun to escape from the lower angle of the wound. This was at once opened by removing first the lower stitches, and then the lower clamp. Uterine epistaxis commenced on the second day, and continued four days. The pulse rose, the abdomen became enormously distended, and she suffered very severely from colicky pains, requiring opiates every three or four hours for the first fortnight. By the end of the first week the discharge amounted to several pints in the twenty-four hours. It was of a thin, dirty, pea-soup character, with flakes of lymph, and was of the most putrid, horribly offensive odour, felt in every corner of the house. On the tenth day, the pulse was below 100, and the state of matters was this,—the wound was lying quite open, forming an irregular cavity 3 inches in length: in front, was seen the fundus of the uterus covered by granulations; behind, this cavity was bounded by two folds of small intestine, coated with a thick layer of lymph, and shutting off the pelvis completely from the general cavity of the abdomen. The sides were bounded by the remains of the two pedicles,—the right had sunk about two inches, the left was still adherent to the wall. All this could be seen and fingered. On the fourteenth day, a large collection of matter, which had been gradually forming in the right iliac fossa, began to discharge itself into the wound. About this time diarrhœa came on, and continued at intervals for two or three days. This was looked upon as curative, and rather encouraged than otherwise, as she was the better of it, and it put an end to a tendency to drowsiness, which had been threatening for some days. All this time Douglas's space had been carefully watched from day to day. That it contained a large quantity of purulent fluid there could be no doubt; but there was no tension when examined either by the rectum or vagina, and I was afraid to put a trocar into it. After this she

gradually improved. By the end of three weeks the abdominal distention had nearly subsided, and though feeble, and the wound still discharging daily about a tablespoonful of matter, she was able to leave by the morning train for Aberdeen thirty-five days after operation. The journey was well borne, and when Dr Gordon called next morning she was up and dressed. I heard of her a few days ago. She was getting stout, and was in better health than she had been for many years.

CASE XXXIV.—*Thick-walled Single Cyst. Ovariotomy. Recovery.*

In July 1865, I saw at Glasgow, with Dr Wilson and Dr Fleming, a lady thirty-two years of age. She had been married nearly a year, and had enjoyed excellent health till the preceding May, when, on a visit to Edinburgh, she had an attack of menorrhagia. For this she was seen by Dr Matthews Duncan, who detected an ovarian tumour, of the presence of which she had, till then, been quite unaware. After this she increased rapidly, and when I saw her the girth at the umbilical level was 36 inches. The tumour was unattached, and seemed to consist chiefly of one cyst, though the fluctuation was more distinct at some points than others. The uterus was movable, but it was drawn slightly upwards by the tumour. Hitherto she had suffered no inconvenience, and her general health was as yet quite unaffected. The case was therefore clearly one for non-interference.

After this she went to the country, and though her health continued good, her girth increased at the rate of an inch a-month. Towards the end of September I was asked to perform ovariotomy. This was done, at her own home in Glasgow, on the 29th September. Dr Wilson gave chloroform, and Dr Fleming kindly assisted me. A thick-walled almost single cyst containing 15 lbs. of fluid was removed through a small incision. The pedicle was of fair length and moderate thickness, and was secured by a clamp about 2½ inches from the left side of the uterus. The proceeding was remarkable only for its simplicity, and the easy recovery that followed is an argument for early operation in ovarian disease.

CASE XXXV.—*Multilocular Ovarian Tumour. Ovariotomy. Recovery.*

M. S., æt. 56, was sent to me by Dr Husband in the beginning of November last. She had laboured under ovarian disease for four years, and had been frequently recommended by Dr Wilson to have the tumour removed. Though not a robust woman, she had enjoyed an average amount of health. Latterly she had suffered much from sickness, and had become exceedingly emaciated. Her nights were bad, and she could go on no longer. The pulse varied between 90 and 100. Her girth at the umbilicus was 43 inches, and from ensiform cartilage to pubes she measured 22½ inches. The uterus was small and freely movable; but it lay low in the pelvis, which was occupied by part of the tumour.

Ovariotomy was performed on the 10th of November. The tumour was nearly unilocular, and was removed through an incision 3 inches in length. A long slender pedicle, arising from the right side of the uterus, was secured by a small clamp, and the wound closed by two deep silk sutures, the clamp being placed between them. The large cyst contained 33 lbs. of fluid.

She was feeble for some days after operation. She slept profoundly the first night, better than she had done for a very long time. She had no pain, no sickness, and required no opium. She took her food well from the first day, and though one could hardly imagine a more emaciated individual, she regained strength rapidly, was on the sofa the greater part of the eleventh day, was walking about quite well on the fourteenth, and left the Home a few days after.

In addition to these cases, in the following table are included five which have been operated on within the last two months. Three of these have gone home; the others are quite convalescent.

Table of Forty Cases of Ovariotomy.

No.	Date.	Age.	Condition.	History, etc.	Result.
	1862.				
1	Sept.	49	Married,	Multilocular; 25 lb.; surrounded by ascitic fluid;	Remains well.
	1863.				
2	Jan.	55	Married,	Multilocular; 45 lb.;	Remains well.
3	Feb.	24	Married,	Multilocular; 63 lb.; tapped once;	Died 23 hours after.
4	March.	27	Married,	Multilocular; upw. of 120 lb.; tapped 4 times;	Remains well.
5	May.	22	Unmarried,	Multilocular; 33 lb.; tapped twice;	Remains well.
6	July.	52	Married,	Fibro-sarcomatous, and cystic; both removed;	Died 5th day.
7	Aug.	23	Married,	Multilocular; nearly 80 lb.; tapped 7 times;	Died 38 hours after.
8	Sept.	23	Unmarried,	Multilocular; 40 lb.; tapped twice;	Remains well.
9	Nov.	16	Unmarried,	Semi-solid; very large; tapped twice;	Remains well.
	1864.				
10	Jan.	55	Married,	Semi-solid; 23 lb.; tapped twice;	Remains well.
11	Feb.	40	Unmarried,	Multilocular; 37 lb.; tapped once;	Died 6th day.
12	March.	50	Married,	Large single cyst;	Remains well.
13	April.	68	Married,	Cystic and adenoid;	Remains well.
14	May.	23	Unmarried,	Semi-solid; 24 lb.;	Died 9th day.
15	May.	35	Unmarried,	Large single cyst;	Remains well.
16	May.	29	Married,	Multilocular; 65 lb.; tapped 4 times;	Died 46 hours after.
17	May.	47	Unmarried,	Semi-solid; 35 lb.; tapped twice;	Remains well.
18	May.	27	Unmarried,	Multilocular; 35 lb.;	Remains well.
19	July.	30	Unmarried,	Semi-solid; 36 lb.; tapped once;	Remains well.
20	July.	33	Unmarried,	Very large single cyst, containing 55 lb. of fluid;	Remains well.
21	Sept.	34	Married,	Mutilocular; 23 lb.; tapped twice;	Remains well.
22	Oct.	44	Unmarried,	Single cyst; tapped twice;	Remains well.
23	Nov.	52	Married,	Multilocular; 56 lb.; tapped 3 times;	Remains well.
24	Dec.	51	Married,	Multilocular; 57½ lb.; tapped twice;	Remains well.
25	Dec.	44	Unmarried,	Multilocular; tapped once;	Died 3d day.
	1865.				
26	Jan.	36	Unmarried,	Multilocular; 30 lb.;	Remains well.
27	Jan.	54	Unmarried,	Multilocular; tapped once;	Remains well.
28	Feb.	34	Married,	Solid; 11 lb.; 60 lb. ascitic fluid; tapped 4 times	Died 32 hours after.
29	March.	32	Married,	Nearly single cyst; tapped once;	Died 4th day.
30	May.	24	Unmarried,	Multilocular; 19½ lb.;	Remains well.
31	June.	48	Unmarried,	Single cyst; 26 lb.;	Remains well.
32	July.	32	Unmarried,	Multilocular; 12½ lb.;	Remains well.
33	Aug.	42	Married,	Both removed; 36 lb.	Remains well.
34	Sept.	32	Married,	Multilocular; 16½ lb.;	Remains well.
35	Nov.	56	Unmarried,	Multilocular; 35 lb.;	Remains well.
36	Nov.	23	Unmarried,	Multilocular; 33 lb.; tapped once;	Remains well.
37	Dec.	21	Unmarried,	Semi-solid; 20 lb.;	Remains well.
38	Dec.	32	Unmarried,	Multilocular; both ovaries removed;	Remains well.
	1866.				
39	Jan.	18	Unmarried,	Unilocular; cont. 38 lb. of fluid; tapped once;	Remains well.
40	Jan.	32	Unmarried,	Unilocular; containing 42 lb. of fluid;	Remains well.

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