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ON

POLYPUS UTERI.

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EDINBURGH: PRINTED BY OLIVER AND BOYD.

MDCCCLXVII.

REPRINTED FROM THE EDINBURGH MEDICAL JOURNAL FOR DECEMBER 1867.

ON POLYPUS UTERI.

THE following record of forty cases of polypus uteri, which have occurred in my practice during the last few years, may perhaps merit a place in the *Journal*. All of them have been successfully removed, and the patients restored to perfect health in a very few days. I have only met with two varieties of tumour, viz., the purely fibrous, and the fibro-cellular or vesicular; but by far the greater number were of the former or fibrous variety, only a very few were of the latter or vesicular form. The fibrous were uniformly hard, more or less globular, smooth, and insensible; the fibro-cellular were less regular in shape, only partially firm, but still insensible to the touch. In size they have varied remarkably, from that of a walnut to that of a child's head, and even larger, the more ordinary size that of a large orange. In two cases their size required a midwifery forceps for their extraction; and in one case the perinæum was ruptured where no forceps were used. The place of attachment has been generally from the fundus, or some part of the cervix uteri; if from this latter, more often from its posterior part; the smaller generally from the lip, or very near it, but as often from one lip as the other. Generally there was a manifest stem or stalk, but some of the larger were sessile, springing from a large surface, and adhering throughout to the wall of the uterus. All the large intra-uterine were sessile. The vaginal had more or less of a stem, yet it was often very large.

With the exception of four cases, they were single tumours. In the exceptions, two had two tumours removed at one time, a third at an interval of twelve months, and the fourth case had a perfect quarry—one large tumour being removed in 1856, two in 1859, one in 1862, and five in 1863. The smallest of these quite equalled a small hen's egg.

The symptoms were very uniform, and the history nearly alike in all, viz., increased catamenia at first, then hæmorrhage to a greater or less extent, with leucorrhœal discharge, and at length the health gave way, and all the consequences of so continuous a drain upon the system followed, viz., prostration, anæmia, and dropsical effusions; and these effects were often irrespective of the size of the tumour, for I have seen often more blood lost, and greater prostration and disturb-

ance to the constitution from tumours not larger than a pigeon's egg, than from one weighing some pounds. The diagnosis of the extra-uterine, or those which had passed either partially or wholly into the vagina, was very clear and easy. They were uniformly insensible when pricked or scratched; and any tumour found in the vagina possessing this character, proceeding from where it might, and with a history such as I have mentioned, was submitted to treatment for its removal with the uniform result of the patient's speedy restoration to perfect health. With regard to intra-uterine tumours, the diagnosis was less easy, as there was not the same tactile evidence for a guide; still, if any case of uterine hæmorrhage resisted the ordinary means of subduing hæmorrhage, it was at once submitted to the test of the uterine sound and sponge, or tangle tents, so as to produce dilatation of the os uteri—methods indispensable in all cases of this description—and the result was the discovery of an intra-uterine tumour. I need scarcely urge the necessity of making a vaginal examination in all cases of prolonged hæmorrhage from the uterus or vagina, and thus, as happened to myself some years ago, save a valuable life. I was met by a distinguished surgeon just as he came out of the house of his patient. He said he had been visiting a poor woman dying from excessive hæmorrhage from the womb, which he could not restrain, and asked me to see her. I detected a large polypus, which I tied the next day at his request. She soon regained her strength, and has been well ever since. He had never examined her.

In the foregoing case the tumour was palpable to the touch, therefore was easily recognised; but when the tumour is intra-uterine, it requires some tact to recognise it. Much will depend upon the amount of education the finger of the examiner has received; for what may be very sensible to one, may not be detected by another; besides this, firm pressure must be maintained above the pubes, so as to press the uterus down into the pelvis—the patient at the time lying on her back, and the knees drawn up and expanded. The mode of removal was various, any single method, in my experience, is not suited to all, though, in by far the greater number of cases, simple excision will supersede every other method; but in some cases it is not necessary, as in the smaller sort arising from the lip of the uterus; and in the larger and sessile, springing from a large surface in its interior, it is quite ineligible. The danger attending this plan—viz., hæmorrhage—has been much exaggerated, as I never saw in a case of purely fibrous tumour, whatever its size may have been, such an amount of blood lost as even to require plugging the vagina, though I make it a rule always to do so for a few hours. But in the cellular variety the circumstances are very different; they are much more vascular, whatever be their size, and have, in every one of my cases, been accompanied with such profuse hæmorrhage at the moment of removal as to require immediate attention.

This circumstance, however, has not prevented my pursuing the

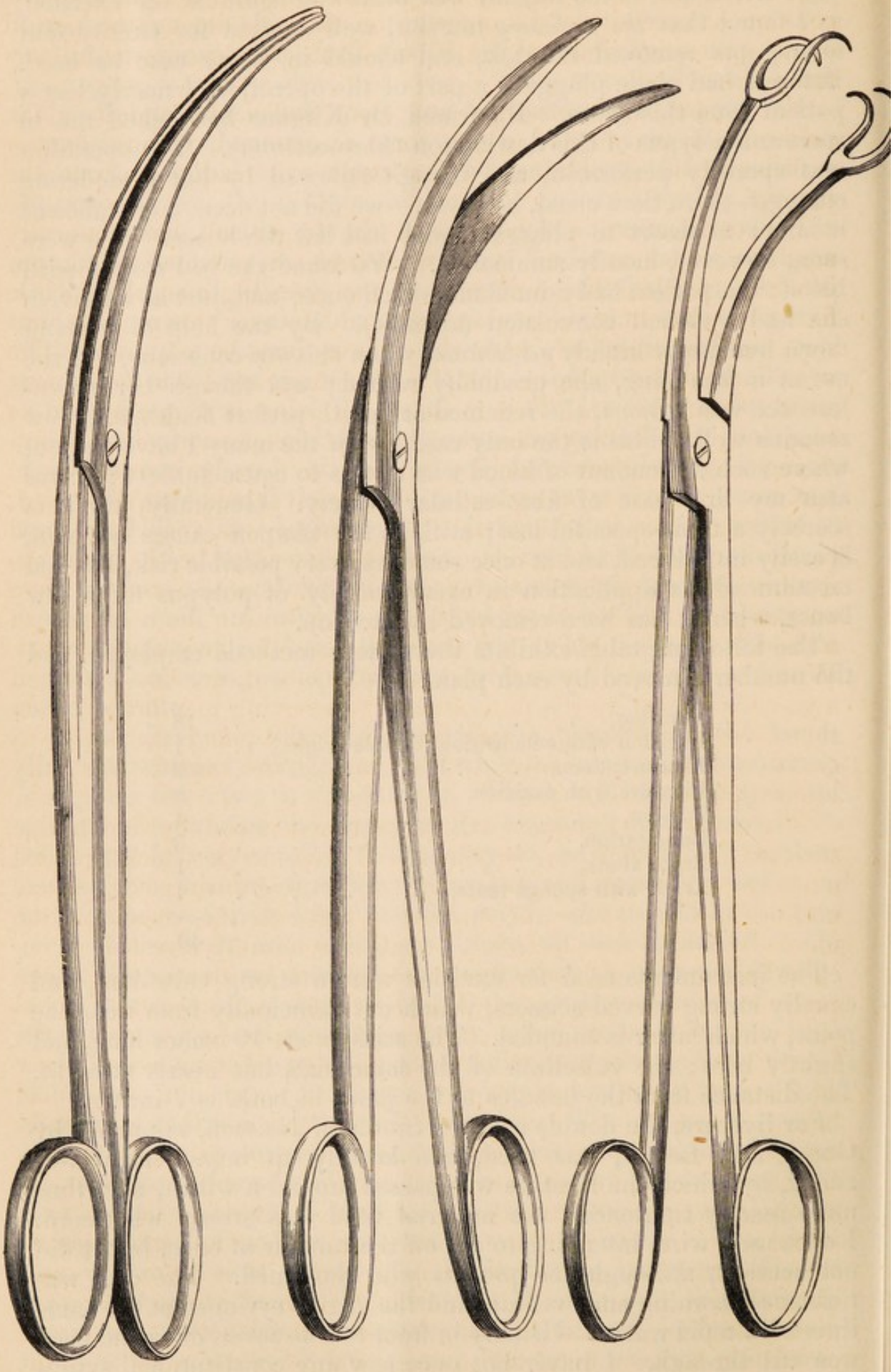
same treatment, if the tumour was otherwise suitable for excision, as I found that *the ordinary* tampon, well applied for twenty-four hours, has removed all risk, and should in every case be used. Before I had made plugging a part of the operation, I nearly lost a patient from this cause. My friend Dr Kilgour had asked me to remove a polypus of this description (fibro-cellular). The operation was speedily performed, and though followed by but a moderate oozing,—more than usual, however,—we did not deem it of sufficient moment to resort to plugging, and had left the house. We were soon, however, hastily summoned. We found the bed soaked with blood; the patient had fainted more than once; and, just as I arrived, she had a violent convulsion (anæmic). By the help of pouring down her throat brandy *ad libitum*, when she was conscious, and the use of a firm plug, she gradually rallied; and though her convalescence was tedious, she regained at length perfect health, and now remains well. This is the only case, out of the many I have treated, where such an amount of blood was lost as to cause anxiety; it was also my first case of fibro-cellular variety. Generally, there is scarcely a table-spoonful lost; still, as the tampon causes no pain, is easily introduced, and at once removes every possible risk, I would recommend its application in every variety of polypus for a few hours, when it has been removed by excision.

The following table exhibits the various methods employed, and the number removed by each plan:—

Excision,	18
Excision with enucleation (double origin,)	1
Ligature alone,	9
Ligature with excision,	3
Torsion,	4
Enucleation,	3
Ergot alone,	1
Ergot with sponge tents,	1
	40

The instruments used for excision were a strong vulsellum, and equally strong curved scissors, which cut principally from near the point, which latter is rounded. The scissors are 10 inches long, and slightly bent; the vulsellum of the same size, but nearly straight. The distance from the handles to the joint, in both, is 7 inches.

For ligature, the double straight canula of Neisson, improved by Gooch and Levret, was used, and latterly an improvement was added, by which the ligature was passed around a winch, and thus more readily tightened; the material used was strong whip-cord. I once used wire, intending to cut off the tumour at once, but it did not succeed, although the process was shortened. The cord was tightened morning and evening, and the vagina syringed at the same time with tepid water. Usually in from four to seven days the neck was cut through. I never but once saw any constitutional symptoms follow, but the length of time required, and especially the care



Vulsellum and Scissors for Excision of Polypus; one-third less in size than original.

requisite to prevent injury by the patient impaling herself, and the consequent necessity of keeping her on the side during the period of its application, induced me to substitute the scissors in all my future cases.

For torsion, the vulsellum was alone sufficient; and it is far preferable to two fingers, which some recommend, because once a sufficient hold is obtained, a few turns will readily separate the tumour.

For enucleation, a scratch with the finger-nail has generally answered, and once begun, it is easily completed, provided the tumour is within reach. The rent made in the investing membrane while fixing the vulsellum, is another and ready spot for this purpose, but sometimes a slight snip with the scissors may be required. The vulsellum is here indispensable, both for dragging down the tumour as well as fixing it. This mode of operating is so speedy and so bloodless, that I always now first attempt enucleation; but, in my experience, there are very few tumours so loosely invested as to admit of this mode of operating; still I think it should always be tried.

My first case was accidental. The tumour was very large, and partly intra-uterine. I excised what I believed to be the neck, as it allowed of its descent to some extent, but it was found to have another and broader attachment higher up within the uterus, with a bridge of strong fibrous tissue between the two attachments. With the first incision of this second attachment, my finger entered a vacuity formed by the tumour and its investing membrane; from this point the separation was cautiously made, and the mass was easily and quickly removed. This part of the tumour was fully larger than a turkey's egg.

The mode of using ergot will be best understood by a detail of the cases in which it was employed. The principle which first led me to employ it was, that, believing, as I do, that during every severe uterine pain in labour the circulation through the vessels of the uterus by which the placenta is supplied is entirely arrested, it occurred to me that if I could first create uterine contraction, and then continue this contraction for a length of time *continuously*, I would arrest the circulation for such a length of time as to prevent the tumour receiving sufficient or any nourishment; that the consequence would be the death of some part of the tumour; and that, once it had begun, it would go on dying and decomposing, and thus eventually the whole mass be brought away. It is on this principle of continuous action that ergot destroys the life of the child in labour, for so long as there are intermissions of ease, I never saw danger from it, but so sure as the pains are constant and without any intermission, the child will die, unless immediately born. It is from the same cause that, in impetuous labour, called "tetanic," where *no* ergot is given, children are lost, the too long-continued action preventing circulation between fœtus and mother, and hence due aëration of the blood for its life and nourishment. This theory I acted on, and

succeeded in removing from two patients a tumour of enormous size, in a very few days, which filled the whole uterus, and distended the abdomen to a size far larger than that of a woman at the full time of pregnancy.

I conclude with detailing a few cases illustrative of the various methods adopted.

Polypus uteri removed by Ligature, showing the danger of passing the Ligature too high, thus including a portion of the Uterus.

Elizabeth Ad—s, aged 42, unmarried, came under my care Nov. 10, 1853. Is exsanguined, weak, and unable to make the least exertion without fainting. Only a few months before her admission into the Infirmary she was examined per vaginum.

On examination, the finger comes immediately in contact with a large round, smooth, and insensible tumour, protruding through the os uteri, which is very much dilated and thin. From the small vagina its attachment can with great difficulty be reached; but by the help of some relaxation, produced by chloroform, it was ascertained to be adherent below, about two inches within the cervix at its anterior aspect, but the extent of adhesion could not be reached above—the tumour seeming to have no neck, and to spring from a broad base. On the 14th, a vulsellum was firmly fixed high up on the vaginal portion, and a strain made upon it, but without producing any sensible change. A ligature with Gooch's double canula was, with great difficulty, passed over the tumour. Immediately on its being tightened, she complained of more than usual pain, with a feeling of sinking and faintness; but as there had been so much difficulty in encircling the tumour, it was allowed to remain. She passed a restless night, with frequent attacks of faintness and sickness, with continued pain. The ligature, however, was tightened, the vagina syringed with tepid water, and an anodyne given. The tightening of the ligature daily, with the frequent washing the vagina to remove the putrid discharge, was continued for five days. The constitutional irritation, however, had now become so alarming, attended with exhaustion, loathing of food, great thirst, and rapid pulse, that, fearing a fatal result, the ligature was removed, and she was ordered strong beef tea, with brandy and wine. The following day, though still faint and low, she had not been sick, had less uneasiness, and had taken a good deal of the stimulants. The tumour was much diminished, and the discharge continued profuse. On the second day after, or seventh from the application of the ligature, while at stool, the remains of the tumour, as large as the closed fist, came away in a putrid state. From this time she gradually recovered, though her convalescence was much retarded by an attack of diarrhœa.

This case affords an instructive lesson. In my anxiety to encircle the whole mass, which was sessile, I had included a portion of the

uterine wall in the ligature, no doubt by the weight of the tumour inverting a portion of the uterus. This seemed evident from the severity of the pain, and feeling of faintness immediately induced when the ligature was tightened.

I should have removed it at once and fixed it lower down, as the success of the operation would still have been secured, without endangering the life of my patient. The late Dr Wm. Hunter lost more than one patient by including a portion of the uterus in the ligature, which he ascertained by examination after death; and Gooch is very strong on this point, and expressly says that we are not to be anxious to include all the stalk, as he found it sufficient to get over the body of the tumour to insure the success of the operation; that the stalk will drop off in a few days, like the umbilical cord in a child, or be decomposed and pass away in the discharges. And I have found, in more than one instance, that even though there is no neck or stalk to the tumour, but growing from a broad base, that if the ligature can be made to include but the greater part of the tumour, the remaining portion will, in a few days, slough away, and a cure be effected. The next case illustrates this.

Large Polypus removed by Ligature, a portion of which had only been included in the Ligature.

Isabella W——, an unmarried farm servant, aged 45, was admitted into the Infirmary, 24th March 1856, with an enormous tumour distending the vagina, and pressing out the perinæum, as in the last stage of labour. From its size, it was impossible to pass the finger over the tumour, or to reach the os uteri. Above the pubes a well-defined tumour was felt, and pressure on the vaginal tumour was communicated to that felt in the abdomen. She has been losing blood in more or less quantity for upwards of two years, and though for some time under treatment, had never been examined until a few days ago. The symptoms, both constitutional and mechanical, were very urgent and distressing. Seldom could any urine be passed without the use of a long flexible catheter, and the pushing up the tumour, nor could the rectum be emptied without injections. Two days after her admission, a ligature was passed around what was supposed to be the bulk of the tumour, with more ease than was anticipated, by Gooch's double canula; but on tightening it again the same evening, the ligature broke. There had been no pain from the operation; no hæmorrhage, but complete retention of urine, and some little manipulation was required to reach the bladder by the catheter. On renewing the strangulation two days after, considerably more difficulty was experienced, from the tumour having swollen, consequent upon the first tying; it was not hence possible to include so much of it in the ligature. The ligature was tightened morning and evening, and tepid water thrown up the vagina each time. On the third day from this

second attempt, the discharge became copious, brown, and fœtid—proofs of its decomposition. From this time all uneasiness passed away, she no longer required the catheter, and the bowels acted of themselves. On the ninth day, finding by examination that the os could be distinctly traced, with the adherent tumour passing within the cervix, it was determined to excise what remained, but by slight traction at the canula, and some pinching by the finger, the whole came away.

The tumour was now greatly reduced in size, and much resembled an hour-glass in shape; the central narrow part, which was about equidistant from both ends, was tightly encircled by the ligature. The fœtid discharge continued for a few days; and she was discharged cured in the third week from her admission.

Polypus uteri removed by Ligature and Excision.

Elizabeth T——, unmarried, aged 47, housemaid, full habit of body, but extremely sallow in complexion from loss of blood, was admitted 7th March 1854, with the ordinary history and symptoms of polypus uteri of two and a half years' duration. The tumour is of considerable size, round, smooth, and insensible, filling up the vagina, and descending to within an inch of the external orifice. The vagina is relaxed, hence the finger can be easily passed around the tumour, and its neck felt passing within the os and cervix, to the latter of which it is attached at its back part fully two inches within. On the twelfth, chloroform was administered, which produced great relaxation of the vagina. The vulsellum, when fixed, brought the tumour still nearer the perinæum, so that the ligature was easily passed over it and tightened; when, finding that the peduncle was small (not thicker than two fingers), it was at once excised above the ligature, and the mass brought away: not a table-spoonful of blood was lost. The tampon was used for twelve hours. The tumour was as large as an ordinary orange. No bad symptom followed, and she was discharged on the 20th, cured.

With the experience I now have, this tumour might have been at once excised. By the vulsellum it was brought quite to the perinæum, thus enabling the neck to be entirely embraced by the finger.

Polypus uteri removed by Torsion.

Two cases were in connexion with pregnancy, and no doubt both of them had been the cause of abortion.

Mrs S——, mother of four children, miscarried at the fourth month, with not more than the ordinary loss of blood. The discharge had ceased, and the patient was on the sofa on the fourth day. A few days after, while dressing, she was alarmed by rather a copious discharge of blood from the vagina. She got sick and

faint, but without the slightest pain. By the time I saw her she had recovered, having taken some brandy, and applied cold cloths to the abdomen. On a careful examination, nothing could be detected. The os was open, but barely admitted the point of the finger; nor did the uterus appear larger than it ought at this period of its involution. She was therefore kept in bed, and directed to continue the wet applications, and to avoid stimulants and animal food. These means were adopted lest the cause of the hæmorrhage should be the presence of another ovum in utero. It could be no part of the aborted ovum, because the whole mass, fœtus, placenta, and decidua came off "entire." For the next ten days the bloody discharge, though very moderate, was nearly continuous. Tinct. cannabis gtt.xv. every four hours was first tried, then ergot in 5 gr. doses every three hours. By these means occasional uneasiness, then regular pains in her back, were produced. On examining now, the os was found more open, so as easily to admit the finger, and a smooth something was felt pressing through it. A vulsellum was cautiously carried along the finger through the os, and the tumour grasped. Torsion was made, and a firm polypus, the size of a walnut, was removed in a few seconds: from that moment the hæmorrhage ceased.

A second case occurred shortly after, in August 1858, under similar circumstances. The patient, Mrs W——, had borne three children, and now had miscarried between the fifth and sixth month. The child cried, but soon died. The loss of blood was not more than usual, and had nearly ceased, but in a few days it returned with some violence, and, notwithstanding the ordinary means, it continued to recur at intervals for several weeks. For some reason she would not permit an examination until the exhaustion and prostration made it imperative. At this time I was asked to see her along with Dr Ogston, whose patient she was. The os was found open, so as freely to admit the point of the finger, but nothing could at first be detected; at length, by firmly pushing down the uterus from the abdomen, something was felt to touch the tip of the finger. A vulsellum was cautiously guided within the uterus on to the tumour, and with difficulty grasped. Finding no pain produced, the instrument was more firmly pressed and twisted. In a few seconds the tumour was brought away; it was firm and cartilaginous, and fully equalled a walnut. The hæmorrhage ceased from that moment, and in due time she menstruated.

In this case it required very strong pressure above the pubes to bring the tumour within reach of the finger, so as to be felt, and no less care in carrying the vulsellum so far within the uterus, over so small a tumour, so as to avoid injuring the uterus itself. The safe method in all cases, whatever be the size of the tumour, is to press the closed vulsellum or forceps (but I prefer the former) gently and steadily up on to the tumour, and allow the instrument to expand

of itself as it embraces the tumour, and not to attempt to grasp or try its hold until a sufficiency is within the blades, which can be judged of by the expansion of the handle; because once fixed, there it should remain. If this is not attended to, from the limited space and the almost impossibility of liberating both blades to get another hold, it becomes very embarrassing.

Polypus uteri (two) removed by Excision.

Christian M'Q——, aged 43, married, came in from Turriff in September 1861. I removed a large polypus by excision from this patient seven years before, since which, until four or five months ago, she has remained well. A polypus was now detected partly within and partly outside the uterus. The os was very much dilated, but it could be traced all round; it was pulled down by the vulsellum and excised. A second was felt, but could just be touched by the tip of the finger; it was brought down by the same means and excised. Each tumour fully equalled a hen's egg. The vagina was plugged for twenty-four hours. She returned home on the ninth day.

Polypus removed by Excision.

Mrs W—— was sent in by Dr Fettes of Laurencekirk in May 1865. She had been losing blood between three and four years at intervals, and latterly it had never ceased draining away. I removed a polypus the following day by excision; it sprang from the posterior part of the cervix, and was partly through the os, which was greatly dilated. It was perfectly globular, larger than an orange, and with a gristly stalk as thick as a thumb. No blood followed; no plug was used; and she went home on the third day, a distance of forty miles by train.

Large Polypus removed by Excision.

Miss W——, aged 34. I saw this lady with Dr Fiddes first in February 1863, again in June 1864, and lastly in August 1866, when the tumour was excised. Previous to my first visit in 1863, she had occasionally profuse catamenia, often mixed with coagula, and general derangement of her health, and attended with frequent and lengthened attacks of pain in the region of the uterus, preventing sleep at night, and rendering her very miserable during the day. This necessitated the use of anodynes, which still further deranged her stomach. Per vaginam the uterus was felt enlarged at the fore part, but the os was close and otherwise natural. Externally, several hard nodules were felt on deep pressure above the pubes, which were tender on pressure. Various means were tried, and for a time she seemed to improve, but this amendment was but temporary. These changes continued to recur again and again: they always left her less able to bear the succeeding attack.

Examinations were occasionally made to ascertain the changes that might be taking place, as we were satisfied that one or more large fibrous growths occupied the cavity of the uterus. At length, in August 1866, the os had begun to expand, the cervix was thinner, and the tumour was felt pressing through the os. Along with this there was more severe pain, and constant discharge of blood. In a few days more the tumour had forced its way considerably through the os, and now distended the vagina. The patient was greatly exhausted, emaciated, without appetite, frequently sick, and passing sleepless nights, and with a rapid and feeble pulse; immediate relief was therefore imperative by its removal. The fixing of the vulsellum and the excising of the peduncle were not attended with so much difficulty as was expected, as the peduncle was found not at the top, but some way down on the side of the tumour, and was, besides, very small. There was, however, great difficulty in getting the tumour through the external parts. A midwifery forceps was sent for, but I succeeded, before they were brought, by forcibly squeezing the vulsellum, which had a very firm hold, and using a see-saw motion, and bringing the tumour up towards the pubes, just as when the head is about to be born. Unfortunately a slight rupture of the perinæum took place on its escape; no hæmorrhage followed; the plug was used for twelve hours, and she made a capital recovery. I saw this patient two months ago, rosy and fat, and menstruating regularly. The tumour was as large as a child's head, nodulated, which accounted for the belief of several tumours existing when examined through the abdominal walls.

A still larger tumour I removed about three years ago by excision.

Margaret B—— aged 36, a large-made woman, 14th July 1864. The distention of the vagina and size of the tumour were so great that there was no possibility of carrying the finger any distance over the tumour, and the pressure upon and thinning of the perinæum made it questionable whether it ought not to be divided before attempting the removal of the tumour. Instead of doing this, having fixed the vulsellum, I determined to cut off as much as was within reach; thus, by freeing the vagina at first, I expected that the remaining portion would be more easily reached. But I was agreeably surprised to find, after a very few incisions had been made, that the tumour could be turned round and round in any direction. This arose, as in the last case, from the peduncle being low down in front, and which had been cut amongst my earlier incisions. No amount of traction could bring the tumour through the external parts. Incision of the perinæum was suggested, but I preferred the ordinary midwifery forceps. These were applied, and by pressing the handles closely, so as to compress and elongate the tumour, extraction was made as in an ordinary forceps case. No untoward symptom followed. She went home in a week to the parish of Leslie, and has continued well. The

day before she left the remains of the peduncle came away, not much decomposed. It was thicker than two fingers, and fully three inches long. *Tumour weighed* 16 ounces.

Ann F——, cook-maid, aged 45, May 1863. I was called to this patient in great haste by the lady in whose service she was, in consequence of her fainting from loss of blood while pursuing her avocations in the kitchen. Suspicions of pregnancy, suggested by the family, induced me to examine her per vaginam at once. The presence of a large tumour dispelled this suspicion. I cut it off the following day; it was as large as a billiard-ball, and adhered to the back part of the cervix by a long stalk. She was at work in ten days.

The following case was of much interest, from the frequent recurrence of the disease, with the success attending the different methods of treatment adopted on each attack.

Case of Recurrent Polypus removed by Excision. Ergot and Enucleation.

Mrs W——, aged 33, corpulent, but flabby, with pale complexion. I first saw this patient in June 1856, along with the late Dr Steel, whose patient she was. She had been losing large quantities of blood for some months; was hence pale and bloodless. Every means had been tried, but with only temporary benefit. No evidence of local disease could be detected per vaginam. The external orifice was so small that a finger was with difficulty introduced, and could just touch the os, which was close; but as there was a manifest fulness on the hypogastric region, without any definite tumour, a fibrous growth was suspected. This was made evident by dilating the os by sponge tents of different sizes for twenty-four hours. A rounded something could then be touched within the os. A vulsellum was guided carefully beyond the finger, and opened upon the tumour, and traction made. Little or no advantage was gained by this, and that little seemed more from the descent of the uterus itself, as the tumour did not protrude in the smallest degree. The scissors were then carried up, closed, on to the tumour, guided by the finger, and with the curve of the instrument pressed upon the tumour, made to take a sweep over its surface as far as could be safely attempted, my object being to ascertain, if possible, the site of the peduncle, which any unusual resistance to its free movement would indicate; and knowing from experience that generally the attachment is towards the posterior part, I began there, and fortunately at once succeeded. A very few incisions enabled me to rotate the tumour, showing its separation, when it was at once brought away. The tumour was perfectly globular, as hard as cartilage, as large as a hen's egg, and with a long slender peduncle. She recovered well. I saw no more of this patient until the end of 1858, when, in consequence of similar symptoms, another polypus was

suspected, and preparations were made for its removal; but though the os was dilated with sponge tents, and the tumour felt by the tip of the finger, the external parts were so small and rigid, and the tumour so far distant, and completely within the uterus, I did not think it safe to proceed to its removal by excision without enlarging the vaginal orifice by the knife As this was not acceded to, I recommended ergot in repeatedly increasing doses. This succeeded; the tumour came away in a disorganized state, and she remained for some time well, until May 1859, when two similarly sized tumours were excised. Again, in March 1862, one was excised; and lastly, in August 1863, five were removed by enucleation alone. I was at this time enabled to bring the first tumour partly through the os, and thus could feel one end of the vulsellum; and by insinuating my finger into the rent made in the covering, and by dragging forcibly at the same time, it was easily enucleated and brought away. A similar proceeding was adopted with all the others. Three of the tumours equalled a billiard-ball, and two that of a pigeon's egg. This patient died in 1866, three years after, of disease of the kidney; but from the date of the last operation there had been no indication of returning uterine disease.

The last cases I shall detail were removed by ergot. Both were of enormous size. One patient looked more like a woman with ovarian dropsy, from the extreme distention of the abdomen. Both cases were sessile, and both entirely intra-uterine.

Mrs S——, aged 44, mother of two children—tall, and of an exsanguined sallow look. I saw her first in January 1855. The history was similar to most cases of the kind. The catamenia had been in excess for eight years, and always mixed with coagula, and followed by a copious watery discharge, so that for upwards of eighteen months she had never been more than eight days dry during the month. Three years ago she first noticed that her belly was fuller and swollen; this has gradually increased, so that now the whole abdomen is large and tense, occupied by a solid mass, extending from the pubes to the ensiform cartilage. It is uniform and hard, and only tender along the inner edge of the right ileum. *Per vaginam*, the os is with great difficulty discovered, being merely a slight dimple or depression in the roof of the vagina, and very far back. The space between this and the pubes is large, bulging, round, and firm, showing clearly that what distends the abdomen is contained within the uterus, from the complete obliteration of the neck. *Per rectum*, the same rounded, hard, and insensible mass presses as far as can be reached upon the sacrum. The long continuance of such a drain has brought on a train of other distressing symptoms. She is extremely weak; even when at her best, she cannot walk twice across the room. She has an irritable stomach, entire loss of appetite, constipated bowels, and constant difficulty in emptying the bladder; and when the catamenial periods come on, any attempt at raising her head from the pillow is

followed by fainting. Added to these, she has for the last few months suffered from severe grinding pains during the flow, particularly referred to the spot already noticed along the inner edge of the right ileum. She had tried various means, and as many medical men here and elsewhere, but with little or no benefit. One month she would be better, the next much worse, but withal a steady increase of her abdomen. My first object was to lessen the discharge, and shorten the periods, as I confess at this time I had no expectation of effecting a cure by the removal of a tumour of such a size. She took large doses of tinct. cannabis, 30 drops every three hours as soon as the discharge appeared, and continued this during the flow. By this means, the period was curtailed to four days, but the coagula were immense. Cold was steadily kept upon the abdomen during the whole time. At the next period, the same means were pursued, but with no better result. I then gave her ergot in powder, with the view of producing permanent or continuous contraction of the womb,—hence of its vessels,—and thus cut off the supply of blood to the tumour. I hoped, also, that the medicine would, as it sometimes does, act in dilating the os, and thus render any subsequent operation, if necessary, more easy. She commenced taking five grains every two hours. On the second day, some contractions began, with regular intervals, like labour pains. On the afternoon of the same day the pains increased in severity, and with a sense of forcing. On examining per vaginam, I was agreeably surprised to find the os more within reach, and open to the size of a shilling. On the third day, the pain was very severe, nearly continuous, and accompanied with so much pain and tenderness at the lower part of the abdomen that it was only by persuasion that she continued the powders, feeling satisfied that they were the cause of her suffering. Towards midnight the suffering was intense, requiring fomentations, hot laudanum, and opiates; while she had constant nausea, faintness, and an almost uncountable, small pulse. Next day (the fourth) the pain had greatly subsided, and the ergot was recommenced. The os was now open to the size of a crown-piece, very dilatable, and the tumour distinctly felt pressing through it. During this period there had been comparatively little discharge. On the morning of the sixth day from commencing the ergot, she was alarmed by the urgent desire to strain, and the feeling that something was coming away. On my seeing her, I found a long mass, as thick as my wrist, of putrid matter like intestine, hanging at least a foot out of the vagina, and passing from within the uterus. On attempting to extract it, it broke away just within the os. I was now satisfied that if her strength could be maintained, the whole mass would be removed. The ergot was now stopt, and strong beef-tea and brandy given at intervals, as she still was at times faint. Similar long masses of fibrinous putrid matter continued to be removed two or three times a day for the next five days, until on the last day

they were mere long membranous shreds. During the whole period the quantity of watery discharge was something marvellous, as it ran through blankets and mattress on to the floor, arising, no doubt, from the softening and decomposition of the tumour; so that the remains of it which passed from the vagina could have formed but a very small part of the bulk of the tumour.

The result was in every way gratifying. She gradually recovered her strength, and what was more satisfactory, menstruation returned with moderation and regularity, until it finally settled in her forty-sixth year. This lady died in August last; and, anxious to learn her subsequent history since 1855, and cause of death, I communicated with her son, an esteemed clergyman in the south of Scotland, with whom she resided. In his reply, he says: "She never had any return of the tumour, nor suffered in any way from any thing connected with that. Indeed, except neuralgia, she enjoyed very good health until quite recently. But the immediate cause of her death was a violent attack of British cholera, which was very sudden."

The next case was equally interesting. The tumour was of enormous size, extending from pubes to near the scrobiculus cordis; yet notwithstanding her size, she was enabled to continue her avocations as a cook in a family of distinction until a few months ago. Another peculiarity was, that her ailments were mostly from pressure upon the bladder and rectum, neither of which acted without help, for she had lost no amount of blood to tell upon her general health. Her catamenia were merely in excess, and only now and then accompanied with coagula.

Ann A——, aged 33, unmarried: a cook. This patient was sent in by Dr Manson of Banff for my opinion of her case in September 1866, with a fibrous tumour of considerable size. He stated that she had twice had retention of urine, and fæcal accumulation, from pressure of the tumour both back and front. The tumour was first observed four year ago. On examination, I found the os small, thin, and rigid, the wall of the cervix very thin, and spread over the tumour, which bulges in the vagina. The sound passed easily 5½ inches. I suggested the use of bromide of potassium, dilatation of the os, and then breaking up or gouging the tumour, or ergot. Nothing, however, appears to have been done, as he did not again see her. My next interview was at the request of Dr Harvey, whose patient she now was in the Infirmary here, in May 1867. The tumour had much increased in size, the catamenial periods were more prolonged, attended with pain, and her general health had given way. There was now very considerable difficulty in detecting the os, from its extreme thinness and intimate adhesion of its edge to the tumour within, so that several of my friends failed in detecting it. At length, after a minute search, a small crescentic edge was suspected, and here, by persevering and gently insinuating the nail of the finger, a slight separation was

effected. This was continued for half an inch, and then passed around until the whole circle, which was as large as a shilling, was separated. A sponge tent was introduced. She then commenced taking ten drops of the liquid extract of ergot of the pharmacopœia every two hours. On the following day, she had gnawing pains in her back and vomiting after taking the drops. They were therefore omitted for twenty-four hours and a larger tent passed within the os. The next day, being less sick, she was examined under chloroform, and the tumour further detached by the finger as far as could be reached, but from the smallness of the external orifice, this did not exceed 2 inches. The ergot was increased to twenty drops. On the fourth day, the drops were increased to thirty every two hours. During the night she slept little or none, from the pain and continuous straining efforts; and next morning she saluted me with the remark, "that she was sure she was to be delivered of something." On examination, a mass as big as the closed fist was protruding through the os, which I removed. After this she had no pain for some hours, and the drops were increased to forty every two hours. From this time, numerous similar rounded pieces, varying in size, continued to come away, or were removed by the hand, for ten days, accompanied with a copious watery fœtid discharge. I need not prolong the details. She gradually recovered her strength; and on the twenty-first day from the commencement of the treatment, she left the hospital quite well. I saw this patient yesterday (15th October). She has grown fat, and been in perfect health, has menstruated healthily, while the os, cervix, and size of the uterus is perfectly normal. The weight of the tumour preserved is six pounds twelve ounces: it is purely fibrous in its character.

EDINBURGH: PRINTED BY OLIVER AND BOYD.