



FIG. 37.

OF MENORRHAGIA FROM FIBROUS TUMOURS.—The uterus is particularly prone to the development of fibroid tumours. They occur at all ages after puberty. They are seen in young girls under twenty, and in the octogenarian, and may vary from the size of a pea to that of the gravid uterus at full term. They are in themselves innocuous, except mechanically, as when they exert an undue pressure upon the bladder, rectum, or pelvic nerves and veins, or when they produce hæmorrhages. They frequently prevent conception, but not necessarily and invariably so. They are classed according to the manner of their attachment to the walls of the uterus—as extra-uterine, intra-uterine, and intra-mural.

Extra-uterine fibroids grow from any portion of the external surface of the uterus, and may be pedunculated; or they may be sessile, with a broad immovable attachment to its outer muscular tissue.

The intra-uterine project into the cavity of the womb, and, like the first, may be pedunculated or sessile; and here we make a distinction in practice but not in theory, calling the one a fibroid polypus because it is pedunculated, the other a fibroid tumour because it is sessile, having a broad attachment usually to one wall of the womb; the one being remedied with comparative ease, the other with great difficulty.

The intra-mural are so called because they are embedded in the walls of the uterus, being interlaced and overlapped in all directions by its muscular fibres.

Fibroid tumours interfere mechanically with conception; for instance, they may antevert or retrovert the uterus, and throw the os out of its normal relation with the axis of the vagina. They may elevate the whole organ high up in the pelvis, so that the semen may never come in contact with the os even momentarily. They may compress the canal so as to produce a mechanical obstruction to the passage of the semen, or they may produce hæmorrhages which would be fatal to the life of the germ even if vivified. I have, however, occasionally seen pregnancies where there had been for years large fibroid tumours.

Of 225 women who had once borne children and then became sterile, 38 had fibroid tumours of various sizes, and variously seated—or one in $6\frac{1}{2}$. Two were fibroids of the posterior lip of the os tincæ; the remainder, of the body of the uterus. Of these,

Six were pedunculated	{	2 on the anterior wall,
		2 on the posterior wall.
		1 on the left side.
		1 on the right side.
Twenty were sessile	{	2 on the fundus.
		5 on the anterior wall—one very large.
		8 on the posterior wall.
		5 on the right side—none on the left.
Nine were intra-mural	{	1 in the fundus.
		7 in the anterior wall.
		1 in the posterior wall—very large.
One intra-uterine—very large and growing from the posterior wall.		

Of 250 married women who had never borne children, the cause of sterility was found to be compli-

ated with the presence of fibroid tumours in 57, being at the rate of about one in $4\frac{3}{4}$. Of these,

Five were pedunculated . . . { 2 on the anterior wall.
2 on the posterior wall.
1 on the fundus.

Twenty-one were sessile . . . { 8 on the anterior wall—one of them reaching round to the right side, and one to the left.
10 on the posterior wall—one of them reaching to the right side, and one to the left side.
2 on the left side.
1 on the right side, and very large.

Thirty-one were intra-mural . . . { 3 in the fundus—one very large.
23 in the anterior wall—two very large.
5 in the posterior wall—two very large.

None intra-uterine.

In 100 virgins consulting for some uterine disease, 24 had fibroid tumours, or one in $4\frac{1}{4}$. Of these 24,

Three were pedunculated . . . { 2 on the anterior wall—both very large.
1 on the posterior wall.

Five were sessile . . . { 2 on the anterior wall—one large.
2 on the posterior wall—one reaching round to left side.
1 on the right lateral wall—and very large.

Thirteen were intra-mural . . . { 11 in the anterior wall—three large.
2 in the posterior wall.

Two intra-uterine } 2 to posterior wall—and both very large.

One large fibroid attached to sacrum.

The polypoid fibroids are excluded, because they are considered separately in the previous section on Polypus. Were they included here, of course the intra-uterine fibroids would be greatly increased. This arbitrary arrangement is pathologically incorrect, but practically right.

To recapitulate—Thus, of 605 cases (100 being unmarried, and 505 being married and sterile) 119 had fibroid tumours, either large or small, connected in some way with the uterus, being nearly one in $5\frac{1}{4}$.

The following table embraces the whole at a glance:—

	Fundus.	Ant. wall.	Post. wall.	Left lateral.	Right lateral.	Total.
<i>Of these 119 cases of fibroid tumour:—</i>						
14 were pedunculated	1	6	5	1	1	14
46 were sessile	2	15	20	2	7	46
53 were intra-mural	4	41	8	.....	.....	53
3 were intra-uterine . . . . .	.....	.....	3	.....	.....	3
1 was sacral	1	.....	.....	.....	.....	1
2 were on the posterior lip (os tincæ)	2	.....	.....	.....	.....	2
Total	3	7	62	36	8	119

These tables show the great frequency of fibroid growths in connection with the uterus, a thing long ago established by West and others. It will be seen that (62) more than half of the whole number were seated in or on the anterior wall.

It will be remembered that I have said (page 84)

that we find intra-uterine polypi (which are only pedunculated fibroid tumours) more frequently attached to the anterior than to the posterior face of the cavity of the uterus. I only state the fact without pretending to explain the why or the wherefore.

I give these details simply because I have them, and not because I attach much value to such statistics. They are entirely from cases observed in private practice. Had I now access to the books of the Woman's Hospital, it is probable that these figures might be changed, but only relatively. Fortunately for my patients but two of these 119 cases were verified by *post mortem* evidence. Their diagnosis rests wholly upon the judgment of an individual, which is infallible in no man.

But I will claim, what I would allow to any one else, that the errors of judgment would be not of fact but of degree—for instance, here is a case of fibroid tumour of the anterior wall—it is as large as a Sicily orange. Of its situation and general outline there can be no doubt, but there may occasionally be a case in which we are a little doubtful whether it be intra-mural or merely sessile. And if the figures above could be varied in any way, it would be in some such unimportant relation as this.

The diagnosis of fibrous tumours is much more certain now than it was before the introduction of the uterine probe by Dr. Simpson. Twenty years ago how few of us could tell whether the uterus was anteverted or retroverted; whether its enlargement, if any, depended upon a mere hypertrophy of its proper tissue, or upon some adventitious growth either within, upon, or near the organ. Now, however, we diagnose uterine complications with the utmost precision—and all by the touch, the tent, and the probe.

As a rule, the diagnosis of fibroid tumours is not difficult. We are more apt to fail in detecting small tumours than large ones, and yet it is easy to map out very minute nodosities on the surface or in the walls of the womb. The whole secret of this consists in getting the body of this organ between the left index finger in the vagina and the right hand in the hypogastrium, as explained on pages 10 and 11, so that every portion of its surface is minutely traversed, and any deviation from its normal size is accurately measured.

If it be already anteverted, there is not the least difficulty in this. If it be retroverted, or even in its normal position, then it must be brought sufficiently forward to be grasped between the sensitive forces of the two hands. If the walls of the abdomen are very thick, there may be some little obscurity for a while, but a second effort will usually clear it up. If the patient holds the breath, and contracts the abdominal muscles, we may be compelled to etherize her—but this is rarely necessary. But, suppose we have a tumour in the pelvis the size of a small orange, or as large as the fist. Is it in the uterus? on the uterus? or quite detached from it? The sound determines the direction and depth of the uterine cavity, and shows its relation to the enlargement, and this in conjunction with the means of palpation already described. But even then we may be occasionally in doubt whether the enlargement is due to something in the cavity of the uterus, in its walls, or on the outside—and here the sponge tent comes to our aid, and enables us to explore the uterine cavity by the touch.

But suppose we have a tumour in the Douglas cul de sac. We ask ourselves the questions—Is it a retroversion or flexion? Is it merely hypertrophy of the

posterior wall? Is it a fibroid, interstitial, sessile, or pedunculated? Is it a prolapsed enlarged ovary? Is it a collection of pus, of blood, or of fæces? The history of the case will give the probable clue to many of these queries; but the application of the principles of investigation already laid down can alone accurately solve the real nature of the malady. Longer minute detail on this point would be profitless. Enough has been said to show the student that positive knowledge of this character can be acquired only by the ripe experience of self-training.

As an illustration of the seeming difficulties, but of the real facilities of diagnosis, I here resort to my best argument—a clinical report.

Mrs. —, from the State of Texas, aged twenty-four, married five years, was sterile. Her menses were regular, painless, lasting three days. She had some leucorrhœa, but consulted me on account of her sterility.

She had been treated by distinguished professors in four of our largest cities, and all, without exception, told her she had retroversion. On making an examination, I found the opposite state of things, viz. a complete anteversion, with a tumour filling up the Douglas cul de sac, and giving to the touch the exact sensation of density and size of a retroverted uterus, with hypertrophy of posterior wall.

But by the method of the consentaneous counter-pressure with the two hands, the position, size, and relations of the uterus and tumour were readily traced out as shown in this diagram (fig. 38). The left index finger, after exploring anteriorly at *a*, was carried on till it passed to the posterior cul de sac at *b*; then the points of the four fingers of the right hand were pushed firmly backwards and downwards, from *e* to *d*, carrying the abdominal

walls from their normal line at *e* deeply in the direction of the dotted line *e d*. When this hand was carried as far in this direction as could be done with convenience to the surgeon and comfort to the patient,

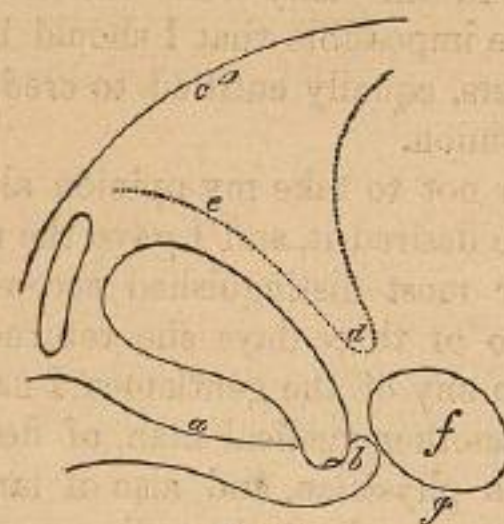


FIG. 38.

it was held there immovably fixed, while the index finger of the left at *b* was made to elevate the cervix uteri as if to bring the points *b* and *d* into contact. If the uterus be anteverted, as it was here, then the fundus will be pushed up against the palm of the outer hand at *e*, to be grasped, as it were, between the two opposing forces, and thus accurately measured—while the same discriminating pressure detects, at the same time, the presence of the tumour *f*. To be more positive on this point, the index finger was pushed backwards, carrying the posterior wall of the vagina to *g*, where it was able to elevate the tumour, passing it up against the points of the fingers at *d*, while they were still cognizant of the presence of the body of the uterus as already indicated. This examination made the case perfectly plain; but, to fortify these facts, the finger was passed into the rectum, which confirmed, but added nothing to

the evidence of the previous method. A sound was also passed to the fundus of the anteverted uterus, which would have removed all doubt if there had been any.

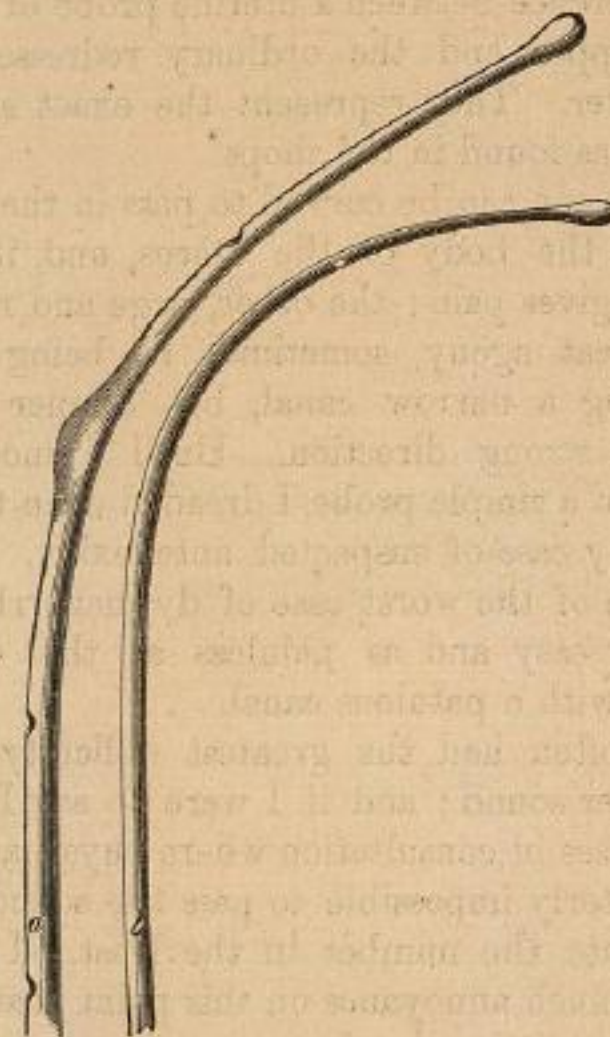
When I told this lady what the trouble was, she said it must be impossible that I should be right, when five or six others, equally entitled to credit, were all of an opposite opinion.

I asked her not to take my opinion alone, but to go to others if she desired it, and I gave the names of three or four of our most distinguished accoucheurs in New York. In two or three days she returned, saying she did not call on any of the gentlemen I named, but that she had seen another medical man, of deservedly great reputation as a physician, and also of large experience in the treatment of uterine disease, and that he pronounced her case undoubtedly one of retroversion.

Although this case would deceive any superficial investigator, there was nothing easier than its diagnosis by the plan of bi-manual palpation. How often have I seen uterine examinations made by the vaginal touch alone! And here is the great mistake. This is very well to determine the size and relations of the vagina, and the condition of the os and cervix, but so far as anything else is concerned, it is simply futile. It is merely groping in the dark. The value of the uterine sound cannot be over-estimated when used merely for purposes of diagnosis, whatever may be said of it as a redresser. If we are not able to determine the position, size, and relations of the uterus by the touch alone, the sound is infallible in giving us its depth and direction. If we find a tumour of any sort either before, behind, or to one side of what we usually regard as the normal

position of this organ, the probe will instantly tell us if it be the body of the uterus or not.

I use the sound simply as a probe to measure the



FIGS. 39 & 40.

depth of the uterus, and to show in what direction the fundus lies. For this purpose I have it made of virgin silver or of annealed copper, silvered. It is also smaller than Simpson's sound, and without notches or marks. It is made malleable because it is necessary to change the curvature with almost every case. It is smaller to make it universally applicable, whether the canal and os internum be large or small. It is without

indentations or marks, to enable us to keep it thoroughly clean.

These two diagrams (figs. 39 and 40) represent the relative difference between a uterine probe of malleable silver or copper and the ordinary redresser of hard German silver. They represent the exact size of the instruments as found in the shops.

The small one can be curved to pass in the suspected direction of the body of the uterus, and, if properly done, never gives pain; the other, large and rigid, often produces great agony, sometimes by being too large to pass along a narrow canal, but oftener by being forced in a wrong direction. Until I modified the instrument to a simple probe, I dreaded even to attempt its use in any case of suspected ante flexion. But now the diagnosis of the worst case of dysmenorrhœal ante flexion is as easy and as painless as that of an old retro flexion with a patulous canal.

I have often had the greatest difficulty with the German silver sound; and if I were to say I had seen a score of cases in consultation where physicians assured me it was utterly impossible to pass the sound, I would not exaggerate the number in the least. I have felt and seen so much annoyance on this point that I may be pardoned for a little minutiae.

The cases that usually give us most trouble are those of complete ante flexion, with a fibroid in the anterior wall. One will serve as an example of the class. Let fig. 41 represent an ante flexion with a fibroid, *a*, as large as an almond, in the anterior wall. If we should attempt to pass the large German silver sound, in its fixed position, to the fundus uteri, it would inevitably be arrested at *b*, it matters not how dexterously we may elevate the fundus with the index finger to

straighten the organ up at the time we make the effort.

I have seen such excessive pain thus inflicted that the patient could hardly be persuaded to allow a repetition of the process. And I have often passed the small malleable instrument under such circumstances when the

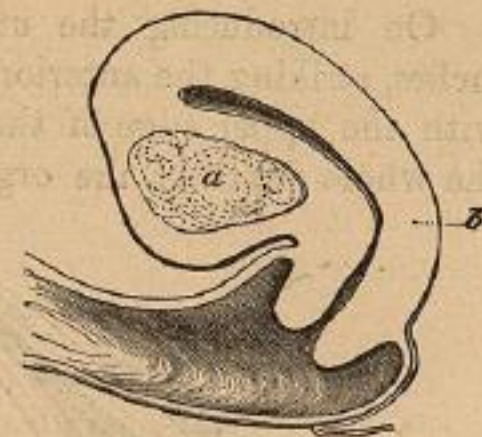


FIG. 41.

patient was not aware that it had been done. We should never inflict pain if it can be avoided; nor should we carelessly shock the nervous system of one so delicately organized, and that too, perhaps, when that organism is so intensified by diseased action as to exaggerate to an unbearable degree the slightest movement or even sound.

Valuable as the uterine probe may be for giving us the direction of the fundus uteri, it is not to be depended upon alone to measure its depth, if that should exceed four inches; and for the simple reason that the curvature necessary to pass it along the pelvic axes would make it strike against the anterior wall of the uterus before it could reach the fundus, if this should be six or eight inches deep.

As an illustration, take the following: A woman, thirty-five years old, the mother of two children, had been for several years subject to menorrhagia. The abdomen was about as large as at the full term of pregnancy. Palpation showed that it was due to an enormous tumour, which was either wholly uterine or uterine and ovarian. A physical exploration was necessary to determine this point. The diagram (fig. 24) illustrates the diagnosis.

On introducing the uterine probe, it passed four inches, striking the anterior wall of the uterus on a line with the upper edge of the pubes; but was this truly the whole depth of the organ? A gum elastic bougie

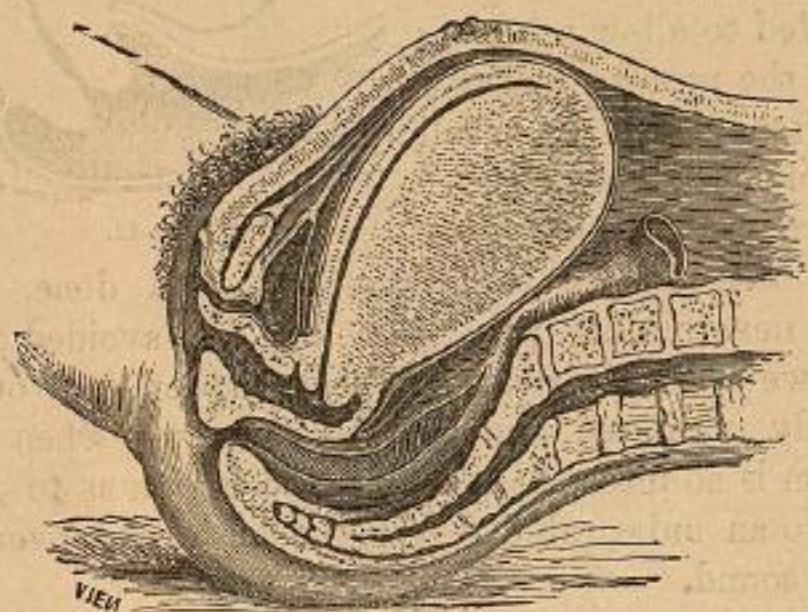


FIG. 42.

would settle this point. On making the effort, it passed easily more than eleven inches into the cavity of the uterus, measuring from the os tinæ. But it is not always easy to pass a bougie. If it is large enough not



FIG. 43.

to bend on itself, it may not pass through some narrow point, and so will deceive us. And if it be too small,

it will bend on itself in the vagina, and hence it will be difficult to pass it at all. To overcome these objections, take a bougie about No. 6, sometimes smaller, and run a strong wire in it, and give it a gentle curvature at the distal end, as shown in the diagram (fig. 43). Introduce this just within the os uteri, and then hold the handle of the wire, *a*, firmly in one hand, and push the bougie, *b*, along it with the other. The wire thus stiffens the bougie external to the uterus, but allows it to pass onwards to the cavity, taking, of course, the easiest route, and measuring accurately its depth. Whether this direction be in the central axis of the organ, anteriorly or posteriorly, would be afterwards determined by the sponge tent. In this case the bougie passed nearly its whole length into the cavity of the womb, marking a depth of over eleven inches. This proved that its enlargement was due to a fibroid. It was then a question whether this fibroid was intra-mural or intra-uterine. This was proved at once by a very singular fact, viz. that the gum elastic bougie, when introduced into the cavity of the uterus, could be felt through the thin walls of the abdomen, and thinner of the uterus, from just above the pubes, quite to the fundus far above the umbilicus (see fig. 42). This alone showed that the tumour projected into the cavity of the uterus from the posterior wall of that organ. Was it, then, an enormous fibroid polypus—*i. e.*, an intra-uterine pedunculated tumour, or was it a sessile fibrous tumour, with a broad attachment to the uterine walls? The sponge tent was to unravel that mystery. It was accordingly resorted to; the finger was then carried up into the uterus, and the anterior portion of the organ was found to be free, while on the posterior, about an inch above the os tinæ, we felt a large tense tumour, having attachments poste-

riorly at the cervix, which widened out on either side as the finger was thrown in front and around it. The finger detected its attachment posteriorly below, while the probing with the elastic bougie demonstrated it above; thus proving that the tumour grew from the posterior wall of the uterus, and that it had a base of attachment along this wall of probably not less than eight or nine inches. The tumour itself was unusually tense to the touch, and we concluded to explore it by puncture. In the presence of Dr. Emmet, Dr. Pratt, and Professor Elliot, I passed a trocar into it at its lowest point, and in the direction of its long axis, and there were discharged more than twenty ounces of a colored serum. The puncture was enlarged for two inches, to prevent its closing. There was at once a sensible diminution in the size and tension of the abdomen. The discharge kept up for some time; and this, together with occasional injections into the very fundus of the uterus, with the liquor ferri persulphatis, diluted with three or four parts of water, arrested very promptly the hæmorrhages, and the patient was dismissed in two months in a very comfortable condition, and with strength enough to walk six or eight miles. Indeed, so far as the hæmorrhages were concerned, she was cured. She returned in a few weeks with ruddy looks to report that she was in very good health, although the abdomen was seemingly as large as ever. It was evidently a fibro-cystic tumour, its first element remaining *in statu quo*, while its second was destroyed by the puncture and slitting up of the cyst. Within the course of a year afterwards this poor woman died of cholera of a few hours' duration, which her physician did not think in any way dependent upon the fibroid tumour.

We all know that fibroids of the uterus are harmless

unless they produce hæmorrhage or press injuriously on some of the pelvic viscera. I have seen many cases where there were fibroids larger than the foetal head, and the patients were not aware of their existence. I was consulted in Paris in October, 1863, by a lady who had been married fifteen years without offspring, and she wished to know the cause of her sterility. She had a pedunculated fibroid tumour, large enough to rest on the brim of the pelvis, which drew the uterus forwards and upwards, raising its fundus much above the level of the pubes. Her health was perfect in every respect, and she felt no inconvenience from the tumour, which will doubtless never shorten her life a day.

Of late years a good deal has been written on the treatment of fibroid tumours of the uterus.

Professor Channing, of Boston, claims to have cured many by internal medication; while Dr. Simpson seems to have great faith in the long-continued use of the bromide of potassium. Dr. Emmet and myself have tried this and other constitutional remedies in the Woman's Hospital and in private practice, and I am sorry to say we have not been as fortunate as the gentleman named above. On the contrary, I have never seen the slightest effect produced on such tumours by any internal medication. Dr. Atlee, of Philadelphia, and Mr. Baker Brown, of London, have each attacked uterine fibroids surgically and in a heroic way.

Dr. Atlee has had a success in enucleation which has not been equalled by any one else. He advocates a total eradication of the adventitious growth; while Mr. Baker Brown is satisfied with maiming or mutilating the tumour by what he terms a gouging process. His success has also been very great, not in curing the disease, but in curing its worst manifestation—hæmor-

rhage. And with this we should feel well satisfied; for, as a general rule, I do not think we should interfere with these tumours unless they endanger life. That there are cases in which we must interfere I readily admit; and the success of Atlee and Brown will justify such a course. I have not been so fortunate as they in attacking very large intra-uterine fibroids. I have lost two patients in the Woman's Hospital as a consequence of operative procedures; one from an attempt at enucleation, the other from the removal of a bit of the tumour;

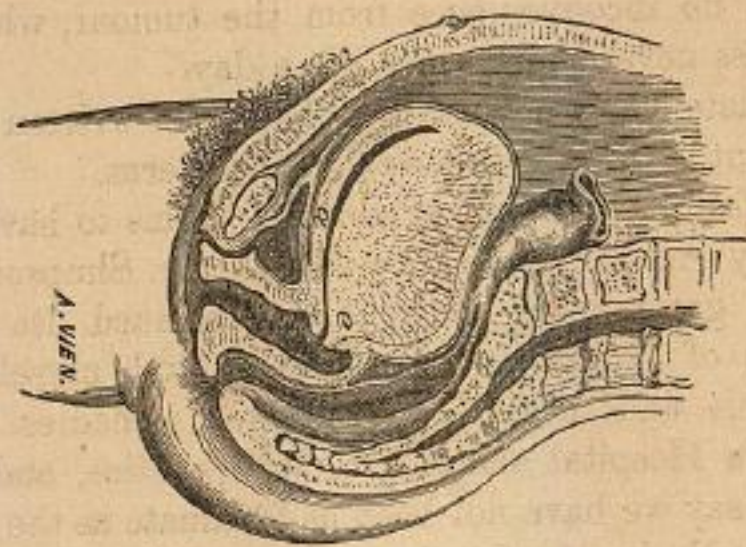


FIG. 44.

the one in imitation of Dr. Atlee, the other in imitation of Dr. Brown. The first was the case of an unmarried lady, twenty-eight years old. Menstruation occurred at sixteen, and continued regular and normal for ten years, when it suddenly became abundant and painful. Two years afterwards, in November, 1859, she was admitted to the Woman's Hospital. The flow was then profuse, exhausting, and attended with severe forcing pains, from which she suffered for a whole week before the menses made their appearance. The uterus

was about the size of the organ at the sixth month of pregnancy. The os and cervix were small, while the body of the organ was large, hard, and roundish. Its outline and relations are represented in fig. 44. The sound could be passed in the direction of the uterine cavity for only about four inches, being arrested at *a*, by striking against the anterior wall of the uterus. But the gum elastic bougie showed that the cavity was more than nine inches deep. Then the sponge tent demonstrated that the tumour was intra-uterine, with a broad base of attachment to the posterior wall, beginning just within the os, at *e*. The great pain preceding and attending each period; the excessive loss of blood at the time; the increasing prostration; and the entreaties of the patient, determined me to enucleate the tumour if possible. The first step towards this was to enlarge the canal of the cervix, which, as before stated, was very small. For this purpose it was split widely open up to the insertion of the vagina, and even to the os internum. The hæmorrhage was very profuse, but easily checked. The parts healed before the recurrence of the next flow, which was in no way modified by the operation. The forcing pains and the hæmorrhage were quite as great as before.

After this, the next step of enucleation was taken, viz cutting open the capsule of the tumour. Instead of making a long incision through this from above downwards, as practised by Dr. Atlee, I simply cut the capsule transversely at *e*, making an opening in it about two inches and a half long, and then passed a sound for six or seven inches in the direction of the dotted line *e b*, extensively lacerating the cellular tissue that bound the posterior wall of the uterus and the tumour together. I now think Dr. Atlee's plan

of incising the capsule would have been the best. The bleeding was very profuse, but it was wholly from the first incision, and not from the subsequent laceration. This was checked by a tampon.

After Miss M. recovered from the effects of this operation, it was thought advisable for her to go to the country, and wait the efforts of nature in forcing the tumour down through the artificial opening made in its capsule.

She returned in two or three months with the mouth of the uterus about two inches and a half in diameter, and a portion of the tumour projecting through it into the vagina. The pain and the hæmorrhage were rather worse, whether in consequence of the operation, or in spite of it, I do not know.

The attachments of the tumour were now further incised, and its adhesions extensively broken up, but unfortunately Miss M. was attacked with diphtheria, from which she barely escaped with her life. So great was her prostration from this disease and the hæmorrhages combined, that she was again removed from the hospital.

She returned six months afterwards (in October, 1860), but the hæmorrhages were in no way modified by the process of enucleation, which had been slowly going on for months. The uterus had greatly increased in size, notwithstanding the fact that the tumour, now filling up the whole vagina, was quite as large as the foetal head at full term. Indeed, it seemed that the removal of the obstructions at the cervix uteri only invited and promoted the growth of the tumour downwards, without dislodging any portion of it from the body of the organ. Its size was so enormous that it was thought advisable to remove all that portion of it

that projected through the dilated cervix, preparatory to the real enucleation and ablation of what occupied the body of the womb.

Accordingly, a cord was passed around it in the direction of the dotted line *a* (fig. 45), where it was severed. The hæmorrhage was fearful, and she lost a large amount of blood before it could be controlled by a tampon. She scarcely rallied at all from the effects of the chloroform, and died of exhaustion in thirty-six hours afterwards.

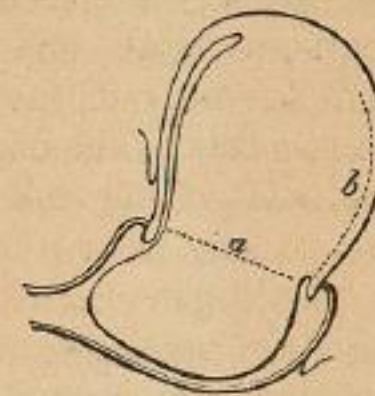


FIG. 45.

I think that death in this case was caused by the unexpected and immense loss of blood that suddenly took place in the brief space of time between the severance of the tumour and its removal from the vagina.

The prolonged use of the chloroform in all probability exerted a very pernicious influence.

The portion of the tumour removed was so large that it was with great difficulty extracted from the vagina.

Indeed, to do this, it was necessary to enlarge the ostium vaginae by perineal incisions, one on each side of the fourchette. A similar case to this was operated on at the Woman's Hospital the year before.

That part of the tumour projecting into the vagina was removed by écrasement, in October, 1859. Our patient recovered from the effects of the anæsthesia and the operation, and we expected to enucleate the remainder of the tumour, when she was suddenly attacked with peritonitis, four months afterwards, which carried her off.

In June, 1861, a widow lady, aged 30, who had been for two years subject to menorrhagia, was admitted into the Woman's Hospital. These periodical hæmorrhages were profuse and exhausting, and she had all the evidence of extreme anæmia. The os tincæ was small, and the cervix firm and indurated, while the body of the organ was felt to be as large as the two fists. The depth of the uterus was five inches. The enlargement and the hæmorrhage were evidently due to one of two things—either a fibroid tumour or a polypus. A sponge tent or two enabled the finger to pass into the uterine cavity, when a very firm and unusually hard tumour was found projecting from the posterior wall of the uterus, having a broad, strong attachment to its whole posterior surface.

A puncture was made in that portion of the tumour nearest the cervix, and a large quantity (eight ounces) of a clear, limpid, transparent, straw-coloured serum was evacuated. To make sure of a radical cure, a bit of the sac of this fibro-cystic growth was removed with scissors. It was elliptical, and about one inch and a half long by three quarters of an inch wide. This was done in imitation of Mr. Baker Brown's gouging process. I had seldom felt so well satisfied with an operation; but unfortunately irritative fever set in, and my patient died of pyæmia in the course of twenty days. These four cases are all that have been subjected to any operation for radical cure in the Woman's Hospital.

Two recovered from the operations, but both died within a year afterwards—one from peritonitis; the other from cholera of a few hours' duration. Two died from the immediate effects of operative procedures—one of these from exhaustion produced by loss of blood aided by chloroform poisoning; the other

from pyæmia. It may be thus literally stated that two died and two recovered; for death in the last two was due to accidental causes which were most probably independent of the operations.

The complete eradication of an intra-uterine fibroid with a broad sessile attachment is exceedingly hazardous, while the removal of an intra-uterine fibroid with a peduncular attachment is comparatively one of the safest operations in surgery.

But why take so much time with fibroid tumours? Could the removal of such immense tumours be followed by conception and safe delivery?

It might very well be a question, whether such a hazardous operation as the enucleation of a large fibroid tumour should be performed simply for the removal of sterility, and when the life of the sufferer was not jeopardized by severe hæmorrhage. But I could very well imagine cases where it would be justifiable. Suppose a dynasty was threatened with extinction, and the cause of sterility was ascertained to be an enucleable fibroid: here the perpetuity of a good government and the welfare of the State might depend upon the result. Or suppose an ancient family of great name, influential position, and large fortune, desirous of perpetuating these noble heritages in a line of direct descent: would such an operation be justifiable, if the parties, knowing the risks, were willing to assume the responsibilities?

But could we promise the possibility of conception after all had been successfully done?

As a rule, while there is menstruation there is ovulation, and any woman that ovulates can be impregnated, provided the spermatozoa and the ovum can be brought in contact at the proper time and place, and under favourable circumstances.