

ABDOMINAL HYSTERECTOMY.

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THERE is no more interesting study than the history of the operation for removal of the uterus, for the cure of fibroid tumor, when it is considered from a time standpoint. Removal of the uterus for any cause whatever was not long ago considered a very grave operation. The elder Keith, standing as a firm believer of the legitimacy of the operation in his surgical day, stating its dangers and his wholesome dread of its performance, seriously reminds us of the prophets of old—a Jeremiah with his lamentations, a David with his song-singing, for the delivery that surgery in these cases gave, and now more emphatically gives, to women otherwise doomed to misery in all of its manifold states and stages.

Looking over the field, we have seen the contest between those who were content to palliate, while they knew that every day of temporizing was an approach to the inevitable end, and those who, while they appreciated the dangers of operation, knew also that to wait only deferred the inevitable, and therefore, rather than to wait, chose to escape and make a road for escape, since one did not exist in the ordinary course of nature. We have seen also that they who have achieved the best results are those who have gone to work with an eye single to remove what was by them considered a foreign body, in the way least complicated, least prolonged, and least problematical. They studied their ground, as the surveyor his course; went at their work mathematically, not theoretically. The surgery of the uterus, whether for its entire or partial removal, is a work of differentiating accidents from constant conditions. That operation must eventually be considered the best that will on the average meet the indications most completely. There is no use in studying and pondering over the various combinations of instruments possible to use in this operation, in order

to strike something novel, for any such work of the imagination is going to be ruled out before the very first array of solid surgical difficulty that the next complicated operation brings. Just here it is impossible to pass over the ridiculous argument against the clamp or the serre-neud as an objectionable instrument to the operation for abdominal hysterectomy. It is called clumsy, unscientific, barbarous, dangerous, and what else little matters. Scientifically considered, what is the serre-neud? Well, as I take it, it is nothing else than a wire ligature. Now, the whole truth is that the clamp is only clumsy if it is clumsily used. If I attempt to put it on a stump as big as my thigh I will confess that it is clumsy and that I am clumsier. If I succeed in bringing my stump down to the size of my wrist, then down to the size of my two fingers, it no longer appears as the clumsy instrument that is barbarous and unscientific, no more than is the ligature around a large ovarian pedicle. The matter is, that to make the stump in hysterectomy is the foundation of success in the operation, and that if this is not as it should be, no manner of operation can be successful. Right here come in the dangers so often brought forward to discourage the extraperitoneal treatment of the stump—to wit, hernia and drag. If the stump is brought down, as it is always possible to bring it down, the danger from hernia need be no greater than in any other abdominal operation, and the drag is not to be feared. But in this I have somewhat anticipated and must go back. The justifiability of the operation is now less questioned than formerly among those best qualified to speak authoritatively. This is true, first, because the operation and its technique is better understood and performed than it was formerly, and, second, because in the pathology of these tumors, for some reason, there has been a change for the worse. Formerly the fibroid was for the most part the thing feared, together with its concomitants of pressure and adhesions. To these there must now be added the increased danger of malignant degeneration. Why this should be I do not know. I only know that in my experience it is so; and this being the fact, it remains to insist that a reason for operation still more exists than if the simple fibroid alone was to be considered. It used to be the fashion to measure the danger of any tumor by its size. Now we know better. If only size were to be consid-

ered, some of the most pernicious growths would be allowed to remain and many lives would accordingly be lost. Small tumors are just as dangerous as large ones in a majority of cases. In the first place, if they are left alone they often become big, and in the second place the shape of the tumor often does more to determine its dangerousness than mere size. In fibroid tumors of the uterus the fantastic feature in shape is often present, and the irregularity of contour may cause a comparatively small tumor to encroach in this direction and that upon organs which, if it were symmetrical, would not be interfered with at all. Shape, then, is a great determining feature in the ease or difficulty with which a fibroid growth may be removed. If it is irregular its irregularity will give less trouble when it is small than when its size is considerable. In addition to this, it is a feature that runs into time and extent of operation. It is rather surprising now to note the frequency with which fibroid tumors occur, and of a dangerous type. It used to be considered that these growths were most common in colored women, but this is not true. Mr. Tait says that in the blacks of Africa fibroids are unknown. Black women more frequently are found in our dispensary service, coming to be treated for these tumors; but it is surprising how many of these tumors are found among the better classes, where for a long time the woman will suffer in silence and finally only disclose her trouble after the growth is considerable. Here, too, the tumor itself often is not regarded, but the mischief it has caused. Edema, pain, pressure upon the bladder or intestines or upon the diaphragm, may have rendered, alone or together, life miserable, and the poor sufferer is no longer able to hide her pain and discomfort. What I wish here to insist upon again with renewed emphasis is that in this respect—*i.e.*, so far as causing complications is concerned—the small tumor is just as apt to figure as a determining factor as the large. If the tumor is a regular, symmetrical one the complications are apt to come on late; if it is small and nodular, irregularly filling up the pelvis and abdomen, the complications grow apace with its irregularity and the bias of its nodosities, and there is no saying when the symptoms may become suddenly urgent. It is in these smaller tumors that we most frequently have advised the let-alone plan. In this connection, however, we are to remem-

ber that these growths are most intolerant of irritation of all kinds, and that therefore there is reason to avoid even the so-called harmless electrical puncture. Puncture is capable of causing excessive irritation, the irritation in its turn gives rise to adhesions, and these always increase the complications and difficulties of any operation. These statements of mine, in reference especially to the electrical treatment as increasing the difficulties of tumors afterward to be operated on, have given rise to a great deal of discussion, doubt, and acrimony. My opinion is, however, unchanged from a surgical standpoint, for the simple reason that in a given number of cases in which there has been no other interference than that of operation, the conditions have been found to be the simplest—I mean so far as complications are concerned—while in another series where persistent electrical application had been persevered in for some time, the complications have, in all instances, been exaggerated. Certainly, when this history repeats itself almost invariably, it is at least a justification of the ground I hold.

If this is not so some other reason equally plausible must be advanced to take its place. The complications found in relation with all fibroids render their treatment by any exploratory mechanical means extremely pernicious, so far as safety is concerned; and so also to the operator, so far as his success is concerned. More than once what has been considered a simple cystoma has turned out to be a fibroma which has undergone cystomatous degeneration. Hence it appears that simple puncture, as a preparatory treatment of a supposed cystoma, is not a simple procedure in the light of this difficulty of diagnosis, apart from all other considerations. I have known an operator to start out with the idea of removing an ovarian cyst, make his incision, plunge in his trocar, and almost at once have the consciousness of meeting his Waterloo, temporarily at least; for he had to allow his patient to come partially out of the ether, while he hurriedly, being without a neud, had to seek a rubber ligature to secure the stump. This experience is still vividly before me, and is recorded here, not to note the failure of any single man, but to insist that, in this operation as in all abdominal work, we are to be ready for any emergency that may come; and here emergency is the rule. Combined hard and soft tumors are by no means rare. They are apt to give rise

to a good deal of difficulty in diagnosis. Fluctuation may not be present in the fluid portion, but only a peculiar resiliency, while the hard mass in connection with the elastic one may simulate to some extent a pregnancy. Indeed, here we come to a real condition, not a theory. In many cases where the Porro operation is indicated this is the very state of things found. We have a hard tumor or a number of them blocking up the pelvis or extending above the pelvic brim, thus interfering with the delivery of the child. If the woman has gone on to quickening the complication can be readily recognized; but if in the early months, or with a dead fetus, we are put to our wits' end to explain the situation, especially if the tumor has been of rapid growth, concomitant with pregnancy, and never before noticed. In such cases the minutest history must be gotten, and this, in connection with all subjective and objective signs, help us to a diagnosis.

One of the most common complications to be expected with fibroid growths is the dermoid cyst. This peculiar tumor is always an unpleasant complication of any condition alongside of which it may be found. It is uncertain in its nature, painful in character, apt to be complicated in its adhesions, its contents irritating, sometimes offensive; when this is the case the utmost caution must be used to avoid infection. Tubal disease in the presence of fibroids is most common. This is to be taken into consideration when it is argued that a fibroid can be treated *per se* without resort to surgery. Now, in relation with all fibroids identical tubal disease does not occur. There may be simple inflammatory disease, or there may be hydro-salpinx, or there may be a true pus tube, or a combination of any two of these. What we are to remember—and this cannot be too strongly insisted upon—is that the danger of the existing complications may be paramount, in its way, to the danger of the fibroid itself. None of these tubal adhesions, with all that this implies, are remediable save by direct interference, as the surgeon finds them. As to what the theorist has to say about them I do not much care. I have, at the operating table, too often asked the question, Would this be relieved by treatment, or that benefited by rest, or by massage, or electricity, or by any other means known outside the pale of surgery?—asked the ques-

tion, I repeat, in just those cases in which it is the fashion to preach conservatism and disparage surgery, with the reply: "Certainly not; in such cases it would not apply." Too little experience is almost as bad as no experience; for the operator that begins in ignorance of the work of those who built their faith upon long watching, careful study, and infinite painstaking, must only build up a creed to abandon it when he finds himself driven to the wall by ignorant surgery, which is always bad surgery. All fibroid growths are to be watched carefully for malignancy. This is not to be lost sight of under any circumstances. If we attempt to lull ourselves into repose by imagining a tumor entirely benign, we shall often be deceived in the sequence. Another complication of the fibroid is the irreducible ovarian cyst. Here we may infer that the two masses are one, and, if the error is not early corrected, we shall have the serious error before us of attempting to include an ovarian cyst and a fibroid tumor in one neud. I have in mind a neophyte who, after seeing a fibroid removed by the extraperitoneal method, a day after followed the same technique with an ovarian cyst! Such is the demonstration of surgery to too many lookers-on. Another altogether different condition, which may puzzle the acutest diagnostician, is a tumor of the kidney crowding itself down upon the uterus. Here the commonest manifestations of fibroid tumor of the uterus are present—edema, emaciation, irregular bleeding from the weakened condition of the patient. The uterus cannot be separated from the tumor, and on combined palpation resists and falls with it. In such a condition it is easy to see how any lack of surgical resource is fatal to both patient and operator, and how different is the condition to be dealt with from what has been anticipated. Bearing in mind the rapidity with which some forms of myomata develop, it is again evident that a thick-walled ectopic sac may simulate one of these tumors. I have in mind one of my own cases, in which everything in the history pointed to a fibroid tumor. I opened the abdomen, discovered the tumor, plunged in a trocar, only to find that an ectopic fetus, nearly at term, could not be run through a cannula, and at once delivered—one of the most difficult ectopic sacs I have ever dealt with. Under the same head it may be

worth while to hold in mind that after a fetus has died in ectopic pregnancy, when the sac envelops the uterus and it is no longer possible to get delicate tactile effects on account of the absorption of the fluids, a fibroid may be thought present when in no wise accountable for the condition.

Finally, when we have had chronic recurring attacks of peritonitis, when all the pelvic contents are fused together on account of these attacks, there may be great difficulty in differentiating the parts in order to tell what part or organ is accountable for the symptoms as they express themselves to our examining sense.

From the multiplicity and variety of the complications here referred to, it will at once be seen that all cases require the most careful sequential history, more than an ordinary study of the objective and subjective phenomena, by which, by exclusion, the least likely disease may be set aside, while the more probable phase of disease is concluded by differentiation and exclusion, if there is an absence of positive symptomatology. The features here indicated render it apparent that every surgeon bold enough to attempt to remove a fibroid uterus ought also to be ready to attack any condition known to surgery.

Having looked at the diagnosis of the condition, it remains still to consider the method of operating for their removal. As I have already said, there has not been, and there is not yet, a consensus of opinion in reference to the best method of removing these growths. The objections to the clamp—the instrument that has given us the best results—are, I consider, puerile. The ideal method is that which gives the best results, aside from the inherent beauty of its conception and execution.

Of the many operations and modifications proposed for the removal of the fibroid uterus, there is little need of here considering but three—to wit, the operation by the clamp or *serre-neud*; the operation for the removal of the entire uterus; and that of stitching the peritoneum across from side to side, leaving the cervix open in order to allow the escape of pus and ligatures in a few days. Of this latter operation it is only fair to say that the results have been apparently good; but that it is good surgery, or more ideal than the use of the clamp, to do an operation with the expectation of pus to

escape from the vagina, is not at all to my understanding. A word, also, as to the originality and novelty of the method. It is the same one exactly proposed, four years ago, at the meeting of the American Medical Association held at Newport, by Dr. Dudley, of New York. Byford's method of making vaginal fixation of the stump, although recommended by this careful surgeon, I do not think will ever come into general use, first, because it is not so easy as the clamp, and is certainly not safer. The entire removal of the uterus is an operation that takes away the keystone of the arch from the vaginal vault, and is in this particular a faulty operation. The procedure is not a difficult one, but I do not prefer it for anatomical reasons. In my own work I have almost entirely used the clamp, or, more properly speaking, the nend. I like it because I get results that are nearly perfect. I like the clamp because it gives absolute control over the stump. There is no danger of its slipping, for by the aid of the pins the possibility of this accident is precluded. Moreover, the nend—and I shall use these terms interchangeably, as may happen—is rapid as compared with sewing the stump by using a temporary clamp, and with it there is no need of wasting time with uterine or ovarian arteries, for of itself, when correctly applied, it controls both these as well as controls the stump.

The pedicle or stump, in these cases, is the keystone of the whole operation. To this I briefly referred in the beginning of this paper. The objections as to dragging and the size of the stump ought no longer to obtain, for when a pedicle is well made and brought down to a proper size there is no difficulty as to its disposition and drag.

The following comparative statistics have kindly been furnished me by my friend Dr. R. P. Harris:

Porro operations in United States	Improved Cesarean operations
since April 1st, 1880 (all) 23	since October 6th, 1882 (all) 65
Patients recovered 12	Patients recovered 33
Patients died 11	Patients died 27
Children living 14	Children living 56
Children dead 9	Children dead 9
Since January 1st, 1890 11	Since January 1st, 1890 27
Cases recovered 9	Patients recovered 21
Children living 7	Patients died 6
	Children living 25
	Children dead 3

August 29th, 1892.

STATISTICS OF ABDOMINAL HYSTERECTOMY.

Operators.	Cases.	Deaths.	Per cent.	Methods.
GERMAN OPERATORS.				
R. Chrobak, Vienna.....	{ 55	5	9	Extraperitoneal.
	{ 4	0	0	Total extirpation, abdominal.
	{ 18	0	0	Retroperitoneal fixation of stump
P. Zweifel, Leipzig.....	50	6	12	Intraperitoneal, own method.
S. Ascher, Hamburg...	{ 10	4	40	Intraperitoneal.
	{ 5	2	40	Extraperitoneal.
Kaltenbach, Halle.....	{ 8	3	37	Intraperitoneal.
	{ 22	1	4.5	Extraperitoneal, Hegar's method.
Hegar, Freiburg.....	81	10	32	Extraperitoneal.
Leopold, Dresden.....	{ 22	5	22.7	Intraperitoneal.
	{ 34	7	20	Extraperitoneal.
Schröder.....	164	49	29	Intraperitoneal.
A. Martin, Berlin.....	135	46	34	Intraperitoneal.
Brennecke.....	22	1	4.5	Intraperitoneal, Schröder's meth.
R. Dick.....	11	2	22.2	" " "
E. Albert, Vienna.....	50	8	6	Extraperitoneal and total extirpation (he does not give the individual numbers for each method)
H. Fritsch, Breslau.....	{ 27	11	40.7	Intraperitoneal.
	{ 33	5	15.3	Extraperitoneal.
FRENCH OPERATORS.				
Terrillon, Paris.....	{ 26	3	11	Extraperitoneal.
	{ 32	3	9.3	Intraperitoneal.
Em. Lauwers.....	{ 8	2	66	Intraperitoneal.
	{ 13	0	0	Extraperitoneal.
ENGLISH AND AMERICAN OPERATORS.				
Thomas Keith, England.	38	2	5.2	
Lawson Tait, England...	88	10	11.8	Extraperitoneal.
G. G. Bantock, England..	56	19	16	Extraperitoneal.
Spencer Wells, England..	{ 20	10	50	Extraperitoneal.
	{ 28	10	38	Intraperitoneal.
Thornton, England.....	54	20	37	Extraperitoneal.
Joseph Price, Philad ^l phia ¹	{ 91	6	6	Extraperitoneal.
	{ 2	0	0	Total extirpation.
H. T. Byford, Chicago...	{ 4	0	0	Ventral fixation.
	{ 17	4	28	Vaginal fixation.
	{ 25	5	20	Extraperitoneal.
E. W. Cushing, Boston..	{ 3	3	100	Intraperitoneal.
	{ 6	2	33	Extraperitoneal.
	{ 7	2	28	Combined laparo-vaginal.
H. J. Boldt, New York...	{ 3	0	0	Intraperitoneal.
	{ 9	2	22	Abdominal total extirpation.
J. C. Irish, Lowell, Mass.	19	5	26.3	Extraperitoneal.
M. D. Mann, Buffalo....	12	1	8.3	Extraperitoneal.
P. F. Mundé, New York.	12	4	33	Extraperitoneal.

¹ Including 6 puerperal hysterectomies, or Porro operations; 6 recoveries. See note foot of page 750.