UTERINE FIBROIDS COMPLICATING PREGNANCY.*

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It is not my intention to engage in any elaborate dissertation on the etiology or pathology of uterine fibroids following pregnancy, or to suggest any new methods of management of this condition, but simply to offer some cases for consideration coming from my personal practice, with a view to inducing, if possible, a general discussion which may throw some light on the plan of treatment to be pursued in the management of these cases.

When one considers the fact that uterine myomata do not as a rule tend to develop in early adult life, and that they are almost invariably accompanied by marked changes in the menstrual function, together with serious inflammatory changes in the lining membrane of the uterus, it is quite surprising how many women having fibroid tumors in their uteri become pregnant. I believe uterine fibromata exist much more frequently as a complication of pregnancy than is commonly believed. Myomata were observed by Pinard in eighty-four out of 13,915 consecutive labors, .06 of one per cent., and it has been generally believed that women suffering from this condition are relatively sterile. My own observation to the contrary is borne out by our experience at the Manhattan Maternity Hospital. Myomata have been recorded in ten out of 235 consecutive cases coming to a general lying-in service, such as that carried on at the Manhattan Maternity Hospital; and, indeed, this is probably a lower proportion of cases than really exists, because it refers only to cases occurring in the hospital proper; while cases occurring outside of the hospital in the dispensary and in the charge of physicians and students not so well qualified to recognize complications of this sort, are frequently not reported. A careful examination of the latter group would probably add materially to the proportion of cases of pregnancy complicated by uterine fibroids.

At any rate, this indicates a much larger proportion of cases in which this serious complication exists than is currently reported by observers in general. Many of these cases abort early in pregnancy. The tumor shrinks rapidly after the uterus is emptied and the average practitioner does not even suspect the presence of the growth or its influence upon the pregnancy, and attributes the abortion to some accident or some other pathological condition. This

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is illustrated by three cases in the ten occurring at the Manhattan Maternity Hospital and reported herewith. In a woman with an interstitial submucous or subserous fibroid complicating pregnancy, in practically every case there is rapidly increasing growth of the tumor. This, I am sure, in the cases which have come under my observation, has been a true hypertrophy and not edema of the growth, as has been suggested by Williams. Interstitial and submucous fibroids grow more rapidly than subserous growths because the blood supply is more extensive and because, as a rule, they belong to the myomatous rather than the fibromatous variety of tumor. And it is readily seen that it is these tumors which, if left until the patient comes to term, that are most apt to prove serious complications of labor.

It is sometimes difficult to establish a diagnosis of pregnancy where uterine fibroids exist, as hemorrhage may occur at intervals which may be mistaken by the patient for the menstrual period, so that the idea of pregnancy may never suggest itself. When there is a sudden and rapid increase in the size of the tumor we should consider the possibility of pregnancy. This is well illustrated by a case referred to me by Dr. Coll, which had also been seen by Dr. Martin Burke. The patient was an unmarried woman, 45 years of age, parlor maid by occupation. She presented the usual symptoms and signs of uterine myomata. Because of the rapid growth of the tumor she was referred to me by Dr. Coll for operation. None of the three physicians who saw her thought of pregnancy at all, and it was only after I had begun a hysterectomy that this condition revealed itself to me. A complete hysterectomy was done with comparative ease and the patient made excellent recovery.

Just here I want to report cases occurring recently in my own practice which illustrate some of the dangers dependent upon this condition that threaten the life of the patient at the time of delivery.

CASE I.—Mrs. J., referred to me by Dr. Polk, in the eighth month of her second pregnancy. Up to this time the patient had had a comparatively comfortable pregnancy, but had begun to suffer considerable dyspnea because of the great size of her abdomen. Examination revealed the presence of several large interstitial myomata, one being situated in the posterior wall of the uterus just above the cervical junction, apparently blocking the canal completely. I am thoroughly in accord with the accepted belief in cases of this kind, and urged that a Cesarian section be done, and if necessary, the uterus be subsequently removed. This plan of treatment was absolutely refused and there seemed nothing else to do but to induce labor at once. A gradual dilatation was accomplished more readily than I expected and delivery was completed with great difficulty by means of podalic version. The child did not survive the procedure and the emptying of the uterus was immediately followed by a very profuse hemorrhage. The uterus could be made to contract only very feebly, and after the manual removal of the placenta, and as much of the membranes as possible, the cavity was packed with sterile gauze. The patient was exsanguinated and it required all the arts at my command to bring about a reaction. Within a few days the patient had recovered from the effect of the hemorrhage and made a slow but satisfactory recovery. She has a uterus full of fibroids and is, in spite of the loss of her child and almost her own life, quite sure that I was wholly wrong in suggesting what seemed to her so serious an operation as Cesarian section. She is very fortunate to escape with her life, even with the loss of her child, and it is reasonable to suppose that both lives might have been saved if the operation of Cesarian section had been performed.

CASE II.—This case occurred in my service at the Manhattan Maternity Hospital and resulted fatally for mother and child. Mrs. H., para I, 38 years old, family history negative; was admitted July 6, 1906, in the ninth month of her pregnancy. Her general condition was good. Examination revealed a normal condition except for the presence of numerous interstitial and subserous fibroids. There was a vertex presentation in the Loa position; external genitals and pelvis were normal. Careful examination resulted in the finding of the signs which pointed towards a placenta previa, and in support of this the history showed that the patient had had a slight hemorrhage on November 5, a second hemorrhage on January 1, a slighter one, not profuse, and lasting only a few hours. No treatment had been resorted to except to put the patient to bed and keep her quiet. This patient was seized with a profuse uterine hemorrhage on January 13, and manual dilatation assisted by incision of the cervix was resorted to and the child delivered alive but very anemic. The membranes were adherent and were removed with very great difficulty because of the irregularity of the cavity, and the uterus was packed with sterile gauze. The incisions in the cervix were repaired as well as those in the perineum. This patient developed a rapid rise of temperature, the following day it reaching 104.4, with a pulse of 150, and on January 15, 48 hours after delivery, she died. The child died the following day.

CASE III.—E. M., aged 39, para I; multiple fibroids, small. Patient in labor 72 hours; pains weak and irregular; constant oozing throughout labor; manual dilatation; high forceps; profuse post partum hemorrhage; uterus packed; puerperium uneventful; involution somewhat slow; on discharge, fibroids could hardly be felt.

CASE IV.—A. H., para IV; aged 32; abortion at three months, this being her second abortion; bleeding through both pregnancies; small fibroids on the posterior uterine wall.

CASE V.—A. F., LOA, 19 hours and 57 min. in

labor. Fibroid size of an orange on posterior wall; placenta and membrane tightly adherent; manual extraction. Profuse hemorrhage, uterus packed; puerperium normal. Post partum fibroid could be distinguished with difficulty at time of discharge, three weeks later.

CASE VI.—E. W., para XI; aged 39, small multiple fibroids; breech; labor five hours; adherent placenta with manual extraction. Profuse post partum hemorrhage; usual treatment; normal puerperium. Never had had any miscarriages.

CASE VII.—C. F., para II; aged 28, small multiple fibroids; irregular bleeding throughout pregnancy, with frequent attempts to go into labor in the last three months; each time seen by member of the staff and treated. In labor 17 hours and 20 minutes; hemorrhage profuse; placenta and membranes firmly adherent, and removed manually. Uterus packed, puerperium normal.

CASE VIII.—M. W., para III; aged 35, multiple fibroids. Two previous abortions at two and five months respectively. eclampsia; accouchement forcé; manual extraction of adherent placenta and membranes on account of the profuse hemorrhage. Death of mother six hours later.

CASE IX.—A. S., aged 34, para X; two miscarriages, multiple fibroids; eclampsia; death of mother.

By reference to these cases it will be seen that, in eight of the ten cases occurring in the service at the Manhattan Maternity Hospital, complicated by uterine fibroids, very serious complications followed. In three of them the life of the mother was lost and in addition to that, the life of the child in two cases. These women, after being admitted to the hospital, were in as good condition as it was possible for women to be about to be delivered. There was present always a resident physician, thoroughly competent to observe all conditions and well equipped to carry the patient through any contingency that might arise. He had at his command a competent staff of assistants and nurses, so that in all probability these women were under better conditions than the average patient in private practice. I mention this because it might be suggested that these hospital cases differ from those cases which we see in private practice. The only difference, to my mind, is that their chances for recovery are better than those in private practice in the hands of the best of us, because, as I have said, they have always at hand competent people to meet any emergency that may arise.

In addition to these results, which seem to me startling, occurring in cases which have gone to term carrying uterine fibromata, we find in this list three cases which had from one to three abortions prior to the pregnancy which brought them to the hospital. I want here to report a case occurring in my service at Bellevue Hospital:

CASE X.—E. F., aged 33, married 11 years; five pregnancies. Family history negative. Previous history and menstrual history unimportant. Her five children were born in normal labors at full term without complications or sequelæ of any kind. For six weeks prior to admission to the hospital the patient had been troubled with dull, aching pain in the right lower quadrant of the abdomen. The pain had been dull, continuous; at times sharp and shooting, worse on working and walking. Two days before admission the patient was seized, while scrubbing, with a sudden severe pain in the right lower quadrant of the abdomen, followed by an unusual nausea and vomiting. Dull pain and tenderness has persisted ever since. Physical examination reveals a mass on the right side of the pelvis extending upwards to the anterior surface of the liver and projecting beyond the median line, with great tenderness of the abdomen and marked tympanites. Vaginal examination reveals a tumor crowded well down into the pelvis, about the size of a fifth month pregnancy. Patient's temperature 103, pulse 124, respiration 34. History points towards a pregnancy about the fifth month. This, in addition to the sudden onset of the pain and the marked symptoms which accompanied it, together with the physical signs which I have related, led me to suspect an ovarian cyst with a twisted pedicle, complicating the four or five months' pregnancy; although the patient had been sent to me by the physician who had charge of her, as a case of acute suppurative appendicitis. I opened the abdomen at once and discovered a tumor twice the size of the fetal head, lying above the uterus, the uterus the size of a five months' pregnancy being crowded down into the pelvis and the tumor reaching up to the under surface of the liver and being almost of the same color and consistency as the liver itself. This tumor was adherent to all the surrounding parts by reason of an acute peritonitis existing at that time. When it was separated it was found to be a pedunculated fibroid twice the size of a fetal head, with a small pedicle not larger than the thickness of the thumb, in which there were two distinct twists. The circulation was completely shut off by the twisting of the pedicle. A ligature was placed about the pedicle and the tumor removed. The woman aborted the second day after operation, the fetus being about the fifth month of pregnancy. Placenta and membranes were removed and uterus was packed with sterile gauze. The patient made an excellent recovery and at the end of a month was discharged as cured.

In commenting on this last case, which is somewhat different from those presented before, and which was presented for the purpose of permitting this suggestion, it would seem absolutely clear that if this patient had been in the hands of some one who had discovered the presence of this uterine fibroma, and who might have secured an abdominal operation and its removal, in all probability she

would have gone to term without any difficulty, as the tumor lay above the uterus and was freely movable, and attached by a very small pedicle. The contemplation of such disastrous results in labor as we have seen in the cases which I have reported here, and which we can without doubt, charge to the presence of the uterine myomata, brings before us the question as to what is best to be done as a prophylactic measure against such serious and frequently fatal results. While I believe that I have at times seen some benefit from the persistent use of the animal extracts in the treatment of uterine fibroids in non-pregnant cases, I have seen absolutely no benefit where I have employed them in this condition during pregnancy. I am therefore forced to the conclusion that if anything is to be done to prevent the development of such results as I have stated here that it must be of a surgical nature, and I personally have reached the conclusion that it would be a wise thing, in practically every case of uterine fibroids, to make early in pregnancy an exploratory incision and, if it were possible, to remove these fibroids by tying off pedunculated tumors, or by myomectomy. And if the tumors were so situated as to probably result in the development of large fibromata which would in all probability interfere seriously with the delivery of the child at term, and which it would seem could not be removed without great danger to the mother, to remove the uterus and its contents by means of hysterectomy. Now in view of the large number of women who do go to term with uterine fibroids and who are successfully delivered in spite of this condition, this might seem like an extremely radical suggestion, but the results which have been obtained by competent operators, as quoted by Edgar and Williams and other obstetricians, in myomectomies in pregnancy, together with my own experience along this line, lead me to believe that in a large number of cases, the fibromata can be removed speedily and successfully by means of myomectomy without danger to the mother, and in a large percentage of cases, without serious danger of interference with the pregnancy. I have recently resorted to this procedure in three cases with the most gratifying results; two of these cases were multiple subserous and small interstitial fibroids from the size of a pigeon's egg down to the size of a small marble. In one case I removed four lying along the posterior and superior aspect of the uterus in a case of pregnancy of three months' duration;

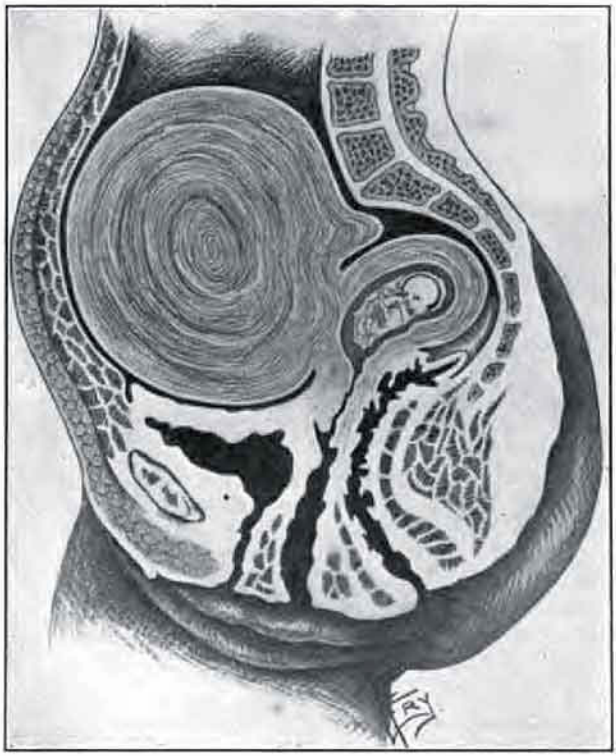

Fig. 1. Mrs. R. B. T. The Pregnant Uterus with Tumor in Situ.

in another case I removed five, four of them being simple subserous fibromata easily shelled out through a very small opening in the peritoneum, the tumors themselves no larger than the end of the thumb, with the exception of one the size of a hen's egg in the posterior face of the uterus and involving considerable depth in the uterine wall. This was removed and required five catgut sutures to close the opening. These women have not yet been delivered, but their pregnancies have certainly not been interfered with by the procedure, and they seem to be progressing satisfactorily, three months having now gone by since the operations.

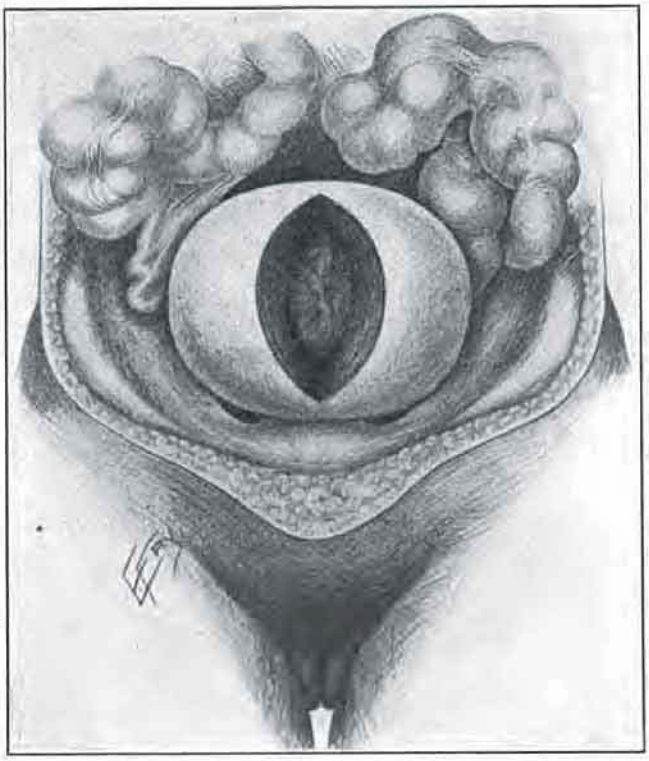

Fig. 2. Mrs. R. B. T. Uterus After Removal of the Tumor.

The final case which I desire to present in support of this argument is one referred to me by Dr. Charles A. Knight, of Peekskill. Following is his report of the case:

"Mrs. R. B. T., aged 32; menstruation began at 12, always regular, and for about ten years, no pain. After that she had pain at her menstrual periods with hysterical attacks and general ill health. She first consulted me July 17, 1906; she had some pain in her right side, was extremely nervous, thin and badly nourished, and apparently in general ill health. She gave a history of profuse menstrual periods lasting twice the usual time and being twice as profuse as they were in early menstrual life. An examination revealed a small tumor on the right side of the anterior face of the uterus which moved with the uterus, but was apparently closely attached to it. I believed it to be a small interstitial uterine fibroid. She was in a delicate condition, and while I believed she ought to be operated upon, it seemed that she ought to be put on some plan of treatment to improve her general health before operation was resorted to. I saw her several times during the next month; she had improved some, and from that time did not return to my office until September. She was considerably improved and expressed her belief that she was doing very well. Examination showed no increase in the size of the tumor. In October, a month later, she came again and said that she did not menstruate in September and that she believed she was pregnant. An examination showed an increase in the size of the uterus and a very marked increase in the size of the tumor. The patient lived in the country several miles from my office and I saw no more of her until the first of November, when I was called to see her and found her suffering from an attack of pelvic peritonitis. She was very ill for two weeks, when the inflammatory disturbance gradually subsided; she then consented to an operation. At this time her uterus had increased to the size of a three months' pregnancy and the tumor had increased from the size of a lemon to the size of a small fetal head. She was suffering from

a great deal of pelvic pain and constant bearing down which she described as resembling her menstrual pain when she had had it. On December 5 she was seen by Dr. Barrows and the operation was done at once. On opening the abdomen a large uterine fibroid was found springing from the anterior face of the uterus and being imbedded in the uterine wall so that it was evidently of the interstitial variety. Beneath this tumor and crowded down into the pelvis was a pregnant uterus at about the fifth month. It was first thought it would be best to remove the tumor and uterus together, but sarian section, being of about the size, and the incision in the face of it corresponding practically to an incision in a Cesarian operation. Patient had on the day following the operation a slight uterine hemorrhage and some pain. Morphin was used freely and the pain and hemorrhage ceased. There was never any rise of temperature or any other unpleasant symptoms and the patient returned to her home in four weeks after the operation, well. I saw no more of her until May 5, 1907, when I was called to attend her in labor. She had a normal labor of six hours and was delivered without any assistance of

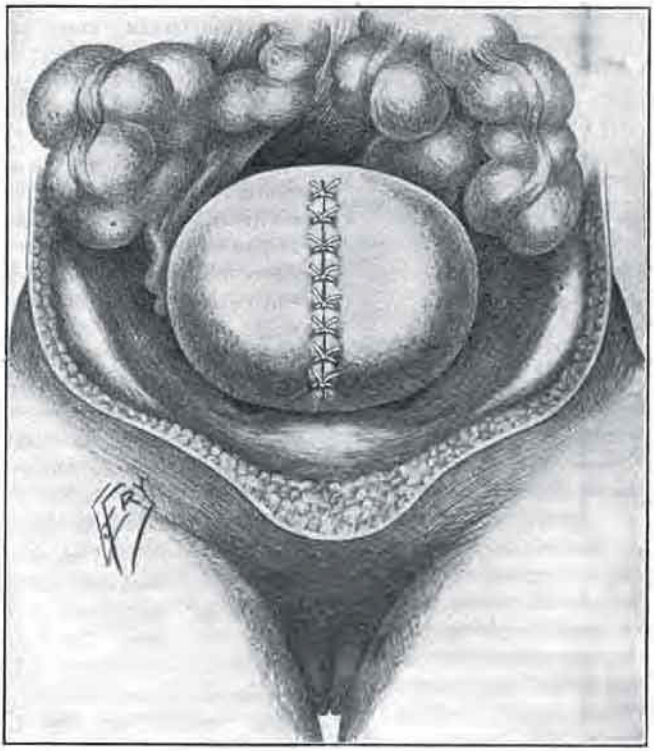

Fig. 8. Mrs. R. B. T. Uterus After Closure of the Incision.

the tumor was obstructing the field of operation so much that Dr. Barrows brought it upward with the idea of removing it first, simply for the purpose of facilitating the subsequent removal of the uterus. It was then found that the tumor could be shelled out from the anterior wall of the uterus with comparative ease, there being very little hemorrhage and this procedure was adopted. It was a fibromyoma of good firm consistency, not of the soft myomatous type, and weighed, as was determined subsequently, 9½ pounds, being the size of a human head. This left in the anterior face of the uterus a space of about 4 x 5 inches which went well down to the fetal envelope. The hemorrhage was checked easily by a few catgut ligatures and the wound was brought together by eight sutures of chromicized gut. After the operation was completed the uterus looked not unlike a uterus which had been subjected to a Cesarian section. Patient had an eight pound living child. Her recovery was perfect and she is now in excellent health. Her general nervous symptoms have disappeared and her health and strength have been restored."

This case of Dr. Knight's, I think, ought to furnish us a lesson that is worth considering, and I may say that I was led into this operation practically by chance. I was amazed at the ease with which this tumor was shelled out of the anterior face of the pregnant uterus and at the very small amount of bleeding which followed its extraction and I was, of course enormously pleased by the final result which Dr. Knight has reported to me.

Now the question of recommending such a procedure as this has in its favor, of course, to begin

with, the saving of a human life, and in the second place, the rapid and prompt recovery of the mother and the general restoration of this woman's good health with all her organs intact.

The one objection which might be raised to this extensive myomectomy during pregnancy would seem to me to be a question as to whether there might not be some serious danger of a separation of the uterine wound at the time of delivery, but I see no reason myself why wounds made in the uterine wall should not be as firm as those made in other structures and I really believe this would be a poor argument to offset so brilliant a result as was achieved in this case.

I offer this, then, with the hope that it may elicit a discussion which may crystallize in my mind my rather uncertain theories as to the proper course to be pursued when we come upon a case of pregnancy complicated by uterine fibroids.

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