Fibromyoma Complicating Pregnancy; Fibroma of Vaginal Wall.

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FIBROMYOMA COMPLICATING PREGNANCY.

Nettie S., age 39, colored, married, admitted to the Cook County Hospital Oct. 19, 1895; family history negative; was married two years ago, no children, no miscarriages nor abortions; has always enjoyed excellent health with the exception of the present trouble. Menstruated at about 14, was regular, fairly profuse, lasting about four days; no clots, never hemorrhage. Present illness began in July, 1895, with a cessation of menstruation. It has not reappeared since. Has not had sexual intercourse for three or four months. After the suppression of the menses, noticed a tumor just below the umbilicus. This has rapidly increased in size since that time. It has not been accompanied with pain. There has been no backache; the greatest discomfort has been produced by pressure of the tumor against the edge of the ribs. No urinary symptoms; there has been no discharge.

Physical examination: Patient well nourished; large physique, considerable adipose, abdomen very markedly distended and irregular in contour. Nodular growth can be felt in the abdomen, extending above the umbilicus, and especially to the right side, where it presses against the margin of the ribs. One of the nodules below the umbilicus is about the size of a child's head, of hard consistence and fairly movable. The whole mass can be moved laterally about two and one-half inches, but not up or down. In the median line, from two inches below the umbilicus to the symphysis, fluctuation can be felt. It is apparently deep-seated, and surrounded by an irregular margin. No fetal heart-sounds nor placental souffle can be heard. Vaginal examination reveals a large hard mass, entirely filling the pelvis. The os can be felt above the symphysis. By pressing the tumor up, the sound can be introduced into the uterus two and one-half inches, but not farther, it being extremely difficult to get the os in position for the introduction of the sound. The tumor in the pelvis is very firm, smooth on surface, and of very hard consistence.
Diagnosis: Uterine fibroid, with cystic degeneration. The rapidity of growth and the absence of the history of hemorrhage somewhat oppose the diagnosis of fibroid, but this was explained subsequent to the operation.

Celiotomy: Oct. 25, 1895. Tumor found to be free from adhesions. On lifting it out of the abdomen, through a very long incision, and turning it to elevate the large nodule out of the pelvis, the left broad ligament ruptured close to its attachment to the tumor. There was profuse hemorrhage for a few seconds. The ligament was clamped with a long pedicle forceps, broad ligaments ligated and excised. The uterus was situated on the anterior surface of the pelvic portion of the tumor, and was about six and one-half inches in length. An elastic ligature was placed upon the stump, allowing the cervix to remain, so as to treat the pedicle externally. Two large pedicle forceps were placed above the ligature; uterus amputated. There was no blood in the pelvis. The parietal peritoneum was sewed to the cervix, all the way around, just below the elastic ligature. The abdominal wound was closed down to the pedicle, packed around with iodoform gauze and dressed antiseptically.

Time for operation, thirty-two minutes. The mass weighed six pounds six ounces; it consisted of a large irregular fibroid, growing from the posterior wall of the uterus. The uterus was enlarged about six inches and contained a sac of fluid. When opened, a fetus of about three months was found in the sac, which had not been ruptured. The question of pregnancy had been thoroughly considered before operation, and thought impossible from the patient’s statements and the absence of physical signs.

The impregnation accounted for the great rapidity of the growth, it being borne in mind that the patient had never noticed the tumor until July.

The patient made an uninterrupted convalescence; she did not vomit from the anesthetic, and at no time did her temperature reach 100 degrees. The highest pulse rate was 96, and that was immediately after the operation. There was no secretion from the stump, which remained perfectly dry for fifteen days, when a slight serous exudate appeared at its base—the line of separation. The pedicle sloughed on the twenty-seventh day after the operation; patient is now sitting up in bed. This completes a series of ten consecutive abdominal hysterectomies with ventral fixation of the pedicle, for large fibroids, not previously reported, all of which recovered.
That pregnancy should complicate uterine fibroma, is not surprising, as Gusserow, in quoting Bayle's statistics, states that twenty of every 100 women over 35 years of age have fibromata of greater or lesser size; and Klob states that 40 per cent. of all women over 50 years of age have fibromata.

That pregnancy does not appear more commonly with fibroma, is accounted for, 1, the fibroma itself tends to sterility, as it produces a pathologic condition of the endometrium, except in the sub-peritoneal variety; 2, that the fibroma does not attain a consider able size in the majority of cases, until after the child-bearing period is past; and 3, that the fibroma in the great majority of cases does not produce any disturbance during the period of gestation, and in many cases does not complicate labor. If it has attained a marked size before impregnation, its development is greatly enhanced by the pregnancy. The variety of fibroma in which the muscular element predominates over the fibrous, increases most rapidly under the stimulus of pregnancy. The tissue becomes
edematous and doughy, as may be noted in the posterior wall of the uterus and the portion of the tumor attached to it, in the specimen presented.

The uterine fibroid of large size rarely admits of the completion of the period of gestation. It usually terminates in abortion, hemorrhage, impaction in the pelvis, labor pains, placenta previa, rupture of the uterus, death of fetus or sepsis. That the presence of fibroma with pregnancy may not deserve surgical attention, was well established by Theodore Landau (Volkmann's *Sammlung klinische Vorträge*, No. 26, Neue folge). He expressed himself in the following words:

"A myoma which rests in or on an impregnated uterus, does not of itself, demand the attention of the surgeon. Only when the tumor produces unpleasant symptoms is active interference indicated. The principal of these unpleasant symptoms are mechanical or pressure symptoms, as incarceration of the uterus in the pelvis, galloping increase in size of growth, nephritis, uremia, ascites, etc., as well as the reflex manifestations of pressure, cardiac, respiratory and gastric. When these disturbances are sufficiently severe to demand the physician's attention, the question arises—What shall be the procedure? Will it be an enucleation of the fibroma, an induced abortion, an abdominal hysterectomy, or an abdominal extirpation of the fetus, without the removal of the uterus and appendages? The selection of operation will depend on whether the immediate emptying of the uterus is necessary, and if so, whether it is possible for the fetus to pass from the uterus, through the cervix and vagina; or, whether it is desirable to have the tumor itself removed, at the same time that the patient is freed from the fetus. When the pelvic passage is blocked, the only question to be considered is laparotomy."

This statement was made three years ago. The improvements in technique and statistics of abdominal hysterectomy have produced an entire change in the
conditions which guide us in our selection of procedure. It is questionable whether induced abortion in the presence of a large fibroid is not as serious a procedure to-day as an abdominal hysterectomy in the hands of an expert operator. It is certain that if the tumor itself demands removal, it is better that the tumor, uterus and fetus in situ should be removed at once, without attempting a previous abortion. The recognized dangers in parturition of a myomatous uterus are atony, hemorrhage, peritonitis, gangrene of the tumor, rupture of the uterus and retention of the placenta. These dangers are all present with abortion, some in a lesser and some in a greater degree than in labor at full term. The dangers of sepsis and hemorrhage are very much greater in induced abortion, while the dangers of rupture and gangrene of the tumor are less. Gusserow reports a death from intraperitoneal hemorrhage in induced abortion, from rupture of the veins around the tumor.

The statistics for simple myomectomy, without
removal of the uterus collected by Landau, represent eighteen cases at different periods of gestation, ranging from twelve weeks to seven months, and in the hands of fourteen different operators, show four deaths and seven miscarriages. It was first performed by Péan, Dec. 15, 1874. It can be seen that the mortality for this operation is 22 per cent. and for abortion about 40 per cent. (Würkert\(^1\) collected twenty-seven cases with seven deaths), not encouraging from either standpoint, notwithstanding the beautiful results produced by Schroeder, Landau, Frommel (four cases and one death), and others. The same author collected eighteen cases of supravaginal amputation of an impregnated myomatous uterus at different periods of gestation, ranging from two to eight months, by different operators, with seven deaths, a mortality of about 39 per cent. (first performed by Kaltenbach, March 21, 1880). The operations of enucleation and amputation, from these statistics, are to be considered very grave undertakings, both for the life of the fetus and the life of the patient. Still, these statistics were collected before 1890, and the operation of abdominal hysterectomy in that period had a much greater mortality than now. It is to be hoped, therefore, that the statistics of the future, as well as of the past two years, will show a great improvement in the results of the amputation of the gravid myomatous uterus, over the period preceding 1890. Landau concludes: "Hysterectomy should be the operation of selection, in submucous, intramural and multiple fibroid, enucleation coming in question only where the tumor is pedunculated or of small size, and subserous."

The difficulties of operating on the impregnated uterus, contrary to belief, are less than in the non-impregnated, and Hoffmeyer says whoever has seen an operation on the gravid uterus must admit that this statement is true. The vessels are larger, the uterine body is lifted up out of the pelvis and the

\(^1\) Centralblatt für Gynécologie, No. 45. Page 1056, 1893.
ligaments are more easily reached in the impregnated than in the non-impregnated uterus. The danger following the operation, the same author says, should be less, if care be taken to remove all of the placenta and membranes.

For operation, fibromata are conveniently divided into 1, impacted pelvic myomata. These are the most favorable for operation and they usually originate from the cervix uteri and can be enucleated through the vaginal wall, without opening the peritoneal cavity. This procedure, says Chrobak, should always be followed, except where the tumor is larger than a child's head. 2, Extra- or retro-vaginal impacted fibroids. These may originate in the cervix, or in the lower portion of the corpus uteri, and are usually in the process of the enlargement of the uterus, lifted out of the pelvis into the abdomen (Spiegelberg), and are removed by laparotomy. This may occur, even though they be retro-vaginal primarily, and originate from the cervix. 3, Abdominal fibroids. The latter usually originate from the body of the uterus, and are removed by celiotomy.

When should the operation be performed? In the process of enlargement, the uterus lifts itself out of the pelvis; the fibroid may remain in the pelvis or accompany the uterus. The symptoms of impaction, as a rule, are transitory, as the uterus accommodates itself to its surroundings. If, however, these symptoms persist, they must be relieved, either by lifting the uterus and tumor out of the pelvis, or by enucleating the tumor. The rule laid down by Schroeder is that the operation should be postponed as late as possible. He says the prognosis of hysterectomy is more favorable, particularly of retro-cervical myoma, the later in pregnancy it is performed, and most favorable, if performed at the end of gestation, because at this period we jeopardize the mother less, and favor the preservation of the child. When the period of gestation is complete and abdominal section is indicated, we must then decide whether it shall be
Caesarean section, Porro or hysteromyomectomy. The statistics of the Caesarean section with fibroma show the results to be extremely discouraging; the majority of the cases terminated fatally, even with Sänger's method. The Porro, without the removal of the tumor, can be accomplished in only a small number of cases and should not be attempted. Hysteromyomectomy is the most desirable as well as the most favorable, both to the mother and the child. The question of treatment of the pedicle, whether it be extra or intra-peritoneal, or a total extirpation, must be decided by the individual operator, as each can obtain better results with the method with which he is most familiar. True, the extra-peritoneal variety tends to longer convalescence, but it has the advantage of leaving the peritoneum practically without an abrasion. Glusserow collects in all 228 cases; the mother died in 123, a mortality of about 54 per cent., and 67 children, a mortality of 30 per cent. This includes the operations performed in the pre-antiseptic period, and a few in the antiseptic period, but does not include any cases of the aseptic era. Chrobak in 1893 successfully treated a case of this kind, in which he performed the total extirpation on the three-month impregnated uterus with internal treatment of the stump. From Schroeder's standpoint, the most desirable time to operate is at the completion of the period of gestation, and the most favorable operation a hysteromyomectomy.

In the case here presented, the indication was for immediate hysteromyomectomy, as it was not possible to even sound the uterus from the vagina, and delivery through the vaginal route could not be thought of. The tumor was producing pressure symptoms, and pregnancy had only existed for three months. The broad ligaments were quite well elevated above the brim of the pelvis; the laceration produced in the left was caused by the great distance to which the uterus

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2 This can also be accomplished by the total extirpation, with only a line of suture in the peritoneum in the floor of the pelvis.
had to be elevated before the tumor, which was situated deep in the pelvis, could be turned out. The application of the ligature and clamps was less difficult than in the average abdominal hysterectomy where pregnancy was not present. The statistics collected by Gusserow are certainly not encouraging for allowing the pregnancy to continue to the full period of gestation. It would seem that the operation at the seventh month should give more favorable results to the mother and scarcely less to the child, as the mortality to the latter is already 30 per cent. The cases reported by Dr. Thad. A. Reamy, of Cincinnati; Dr. Wm. J. Taylor, of Philadelphia; Dr. Henry B. Stehman, of this city; Dr. Chrobak, of Vienna, and
the case here reported, are illustrations of the results that may be obtained in early hysteromyomectomy where the tumor is complicated by pregnancy.

**Fibroma of Vaginal Wall.**

In the year 1882 there appeared from Keinwächter, an article on "Vaginal Myoma and Fibroma" (published in the Zeitschrift für Heilkunde, Band iii, S. 335, Praag), in which he collected fifty-three cases. It is the largest collection that I have been able to find. Breisky, in the year 1886, added five to this number (Die Krankheiten der Vagina, Deutsche Chirurgie, Lief. 60, S. 163), which included the cases of von Hermann, two from Gaye, one from Casewell, and one of his own. In addition to these, I find one from Hasenbalg (Zeit. für Geb. und Gym., Band 23, Heft 1, p. 52), and one from Archibald Donald (Med. Chron., January, 1889, p. 103). The one reported by E. Hasenbalg was polypoid in shape. Of the total number, twenty-nine were in the anterior, twelve in the posterior, five in the side; others not given. The tumor may reach a considerable size. Oliver and Jacob's cases weighed a kilogram. In two old cases reported by Baudier and Gremler, the tumors weighed ten pounds. They are more frequently sessile than pedunculated. The development of the tumor is extremely slow. It may be observed at all ages. Martin reports a case in a child at birth. Tractzl found one in a child 15 months old. It produced obstruction of the urethra and rectum. They are most commonly detected at middle age, and are often found in old people, where they have existed for many years. The symptoms produced by them are merely mechanical, i. e., pressure upon the bladder, urethra, rectum and surrounding tissues. One case was reported that was accompanied by uterine hemorrhage. The diagnosis is not difficult to make, the greatest care being necessary to differentiate it from cysts in the vaginal wall close to the urethra, and fibroma of the cervix uteri. It presents a smooth, hard surface and can be distinctly separated
from the uterus in the majority of cases. When located in the anterior vaginal wall, it usually begins at the urethra, close to the sphincter, and spreads laterally between the mucous membrane, as in the following case, viz:

S. B. was admitted to the Mercy Hospital Oct. 17, 1895.

Family history negative. About four years ago, patient noticed that a tumor projected from vagina. It grew with moderate rapidity, and when about the size of an apple, it ulcerated on the surface and gave a very offensive discharge. The tumor up to this time had not caused any unpleasant symptoms, with the
exception of a heavy, dragging sensation in the pelvis. She was operated on at that time (two years ago) and the protruding portion removed. About six months ago, she discovered that a prominence still remained in the anterior wall of the vagina. There was no pain nor discomfort. It has gradually increased in size; there were no urinary symptoms.

Examination: The smallest portion of the tumor is apparently attached to the wall of the urethra, in the median line. It extends from that point to the left, out to the margin of the pelvis. It can be distinctly separated from the uterus, to which it is not attached. The largest portion presses upon the left side of the pelvis, in front. Rectal examination shows that the tumor is about an inch from the cervix uteri, and hugs the left pelvic wall closely.

Diagnosis: Fibroma of vaginal wall.

Operation: An incision was made in the anterior vaginal wall, beginning at the urethra, and extending to the left an inch and a half. The surface of the tumor was exposed, and it was readily enucleated with the finger from the submucous vaginal tissue. Cavity packed with iodoform gauze. Uninterrupted convalescence. The tumor measurements are, $9\frac{1}{2}$ c. long, and 5 c. in diameter; the thick end being 4 inches and the smallest $2\frac{1}{2}$ inches. It weighs 57 grams.

Microscopic examination: Myxofibroma of the vagina. The tumor is a typical fibroma, the seat of fatty and mucoid infiltration. The sites of fat masses are shown at A. The mucoid infiltration is not even. This material did not stain with iodin, nor with methylene violet. With eosin it stained somewhat more deeply than the other tissues though not markedly so; it was soluble in water. The conclusion was that it was mucus. The number of vessels in the tumor had been very large. Two factors, endarteritis and infiltration obliterated many of them, and greatly diminished the caliber of others. Some entirely obliterated are seen at B. Others partially excluded at C.