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A Contribution to the Clinical Study of uterine fibroids

[Reprinted from the AMERICAN GYNÆCOLOGICAL AND OBSTETRICAL JOURNAL for May, 1895.]

A CONTRIBUTION TO THE CLINICAL STUDY OF UTERINE FIBROIDS.*

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There is, perhaps, no subject in the domain of gynæcology which has of recent years excited so much interest and discussion as that of the management of uterine fibroids.

The theory of Gottschalk that the occurrence of these growths is favored by every form of local irritation which tends to produce circulatory disturbance explains, I think, a fact well borne out by clinical experience ; viz., that *uterine fibroids are on the increase.* This view of the possible origin of fibroids invests the management of all conditions of uterine disease with new importance and extends its significance to the progress of involution during the puerperium when all such measures should be employed as are essential to the overcoming of any tendency to subinvolution, or to the prevention of inflammatory or septic complications.

The systematic examination of the puerperal woman two weeks after her delivery, with a view to the employment of such gynæcological treatment as may be indicated for the restoration of the pelvic organs to their normal state, will often serve to avert the dangers attendant upon subinvolution ; for, it is early in the lying-in that this condition can best be combated, the pelvic absorbents then being sufficiently active to aid materially in the work. Recent lacerations should be repaired immediately after delivery.

The cases I desire to report to the Society to-night have been selected from among a number that have come under my personal care in the wards of the Woman's Hospital, and are of interest as serving to emphasize the character of the complications which may arise in the history of uterine fibroids.

The first four of these cases involve the perplexing question of the

* Read before the Philadelphia Obstetrical Society, April 4, 1895.

management of pregnancy complicated by the presence of these tumors. Suturgin, in the *Annual of the Universal Medical Sciences* for 1891, claims that scarcely one fifth of the cases complicated by such tumors terminate without surgical interference, and that about one third of the mothers and one half of the children die during or soon after labor. It has been claimed that pedunculated tumors may be freed by careful manipulations from any obstructing position they may occupy and not materially affect a labor; also, that an interstitial myoma of the upper zone of the uterus, even of considerable size, usually offers no mechanical obstruction to labor and should not be touched unless untoward symptoms arise which render an operation imperative. The utter uncertainty as to prognosis, even in tumors thus favorably placed, is shown in the cases I shall narrate.

Case I.—M. B. was a colored woman aged twenty-nine years, and a primigravida. She came to the hospital February 28, 1889, with the following history: A small tumor had been observed by herself in the lower part of her abdomen during the preceding June. This had rapidly increased in size during the winter, and was the cause of frequent severe colicky pains, for which she sought relief. An examination demonstrated the existence of a tumor about the size of a large orange which was inseparable from the uterus, being attached to the posterior portion of the fundus to the right. The uterus itself was enlarged to the size of a four months gestation and its consistence was suggestive of pregnancy. Colostrum was found in the breasts. The patient was kept under observation for the next five months, during which time the tumor increased with remarkable rapidity. The entire period of gestation was one of such intense suffering as to necessitate the almost continuous use of opiates for the relief of pain, particularly during the latter month or two of pregnancy when pressure upon the liver and diaphragm produced most distressing pain and dyspnœa. There was no pelvic contraction so that the fœtal head engaged without difficulty. On the 27th and 28th of July the patient suffered with irregular and very severe uterine contractions, but there was little impression made upon the os uteri. At 12.30 P. M. on the 29th the membranes ruptured and the amniotic liquid came away colored with meconium. Douches of warm bichloride solution and manual dilatation were resorted to, to hasten the labor in the interests of the child. When the os was sufficiently dilated for the application of forceps, the child, a girl weighing 3010 grammes, was extracted without much difficulty at 9.40 P. M. Though asphyxiated it was resuscitated and lived to be discharged in good condition from the hos-

pital, three weeks after its birth. Immediately after the extraction there was quite a free flow from the uterus, which was, however, readily controlled. A few perineal stitches were introduced to repair a slight laceration. The patient soon aroused from the anæsthetic and asked intelligent questions about herself. About two hours later, at 11.25 P. M., she went into a sudden state of collapse from which the most vigorous measures failed to resuscitate her. The autopsy revealed no internal hæmorrhage, and, beyond a slight congestion of the kidneys, no lesion of any organ of the body existed. A large fibro-

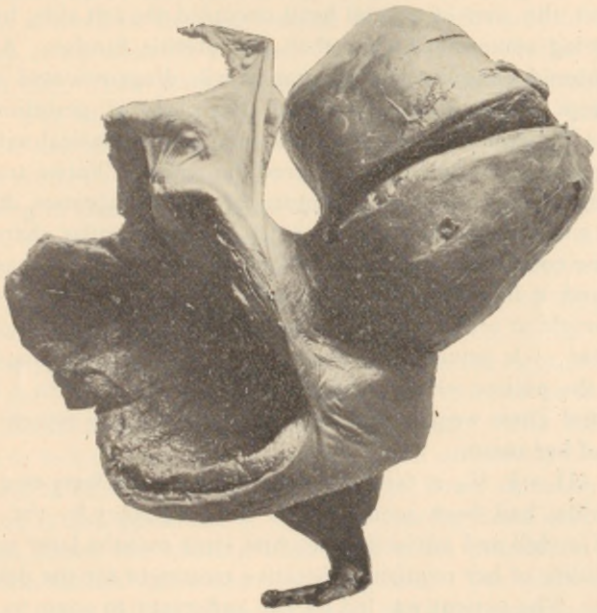

FIG. 1.—Fibro-cystic tumor of uterus attached over placental site.

cystic tumor was found, connected with the uterine fundus. A few recent adhesions existed between the tumor and the anterior abdominal wall. The cæcum was found lying across the pedicle. The placental site was over the uterine attachment of the pedicle, which accounted no doubt for the rapid growth of the tumor. Upon opening the cavities of the heart, numerous bubbles of air escaped. This air it was supposed had entered the uterine sinuses, which, owing to the peculiar situation of the placenta, could not be properly closed. A sudden movement on the part of the patient had probably produced

sufficient suction in these sinuses to draw in the air-emboli, thus causing death from paralysis of the heart.

Case II.—B. H., aged thirty-one years, also a colored woman and a primigravida, came to the hospital April 1, 1889, complaining of difficult micturition and severe abdominal pain. Patient had always suffered from menorrhagia and dysmenorrhœa until within the four months preceding her coming to the hospital, when the flow had been scant. She had noticed at the same time a swelling in her left side, which was excessively tender. The uterus was found enlarged, the fundus reaching the umbilicus and inclined to the right side. A tumor about the size of a fœtal head occupied the left side, its upper border being somewhat higher than the uterine fundus. A pedunculated fibroid complicating pregnancy was diagnosticated and the patient kept under observation until the close of gestation. Her symptoms of pain, nausea, dyspnœa, etc., were identical with those in the case just reported, and required the same palliative treatment. Labor began with premature rupture of the membranes, dilatation was slow and had to be aided manually. The irregular character of the uterine contractions with indications of threatened fœtal asphyxia, necessitated a high-forceps application. The child, a boy of over normal weight at term, was asphyxiated when born and could not be resuscitated. A primary trachelorrhaphy and perinæorrhaphy were done for the patient whose puerperium was without event. She left the hospital three weeks after delivery promising to return for the removal of her tumor.

Case III.—J. V., a farmer's wife, white, aged forty-two and a primigravida, had been seen early in her pregnancy by the late Dr. William Goodell and advised to see him some months later regarding the possibility of her requiring operative treatment for the delivery of her child. The patient was led by her sufferings to come to the city to see Dr. Goodell on July 6, 1890. As the doctor was not in town, she came to the Woman's Hospital and was examined by myself. She then appeared to be in the eighth month of her pregnancy. She had been married one year. About six months previous to her marriage she had noticed a small lump in the right inguinal region which she said increased markedly in size before each menstrual epoch. It gave her no especial discomfort. Upon examination after admission, the uterus was found to be studded with multiple fibroids. A pedunculated tumor about the size of a large orange was attached to the right side of the uterus low enough down to be distinctly appreciated at the inlet by examination *per vaginam*. One a little smaller was attached

to the left side somewhat higher up, while numerous nodules of varying sizes were discovered over the anterior surface of the uterus.

An eminent gynæcologist who kindly examined the case with me upon the occasion of a visit to the hospital, expressed it as his opinion that a uterus so full of fibroid growths would probably contract very irregularly and be subject to rupture ; therefore, that a Porro operation would offer the best chances to mother and child. The patient anticipated any operative procedure by a premature rupture of the membranes at 4.30 P. M., July 8, 1890. The pediculated tumors were kept pushed up by manipulations *per vaginam* during the labor and the head allowed to descend—which it did sufficiently to be within the grasp of the obstetric forceps. Extraction was effected by 5 A. M. the next day. The pains throughout the labor were irregular and severe. The child, a girl baby weighing 2710 grammes, was in good condition and still continues to live and thrive.

The mother's convalescence was uneventful, the tumors rapidly decreasing in size. About three weeks after her delivery she left the hospital, determined to return for a hysterectomy. On August 25, 1891 (thirteen months after her first delivery), she returned to the hospital, again pregnant eight months. The history of the preceding pregnancy as to pain and discomfort was repeated.

The uterine tumors, particularly the one to the right, were larger than in the preceding year, and thus offered more of an obstruction to the descent of the presenting part—the head. After waiting long enough to find that the head would not mold sufficiently to engage in the superior strait, I performed version. Some difficulty was experienced in the extraction of the after-coming head which became extended, hence the child, a boy, made some premature efforts at respiration before extraction was completed. The child was larger than the former child, the head firmer. It lived twenty-four hours and then died of secondary asphyxia. The mother's convalescence was uneventful. On April 30, 1893, about a year and a half from the time of her last discharge from the hospital, the patient returned, pregnant for the third time. The head of the fœtus descended with less difficulty as the pedicles of the tumors seemed somewhat elongated, hence they could be more readily pushed up from their encroachment upon the inlet. The child, a girl baby, weighing 3100 grammes, was extracted by forceps—in good condition. It still continues to live and thrive. The mother again made a good convalescence. Since her return to her home she has written me that the tumors have greatly decreased in size.

CASE IV.—A. B., a colored woman, aged twenty-nine years, a primigravida, was sent to the hospital on November 20, 1893, for the removal of a uterine fibroid which caused her much bladder irritation and pelvic pain, with aggravated nervous symptoms of a reflex character. The patient had suffered with menorrhagia up to October, 1893, after which the discharge had entirely ceased, and the abdomen increased rapidly in size. Upon examination the fundus of the uterus was found to be one finger's breadth from the costal margin anteriorly on the left side and within three fingers' breadth on the right. There was more decided resistance on the left side of the uterus than on the right. Some colostrum was found in the breasts, the uterine cervix was softened, nausea and vomiting existed. A possible pregnancy complicating the fibroid tumor was diagnosticated. The fœtal heart sounds could not be heard before December 11th, when they were appreciated near the right lumbar region. Hospital care relieved the patient of some of her most distressing symptoms, and, after consultation with some of the other members of the hospital staff, she was allowed to go home, until nearer the close of her gestation, when she was advised to return for a possible Porro operation. On February 24 and 25, 1894, the patient suffered with severe uterine contractions and came to the hospital at 2 A. M. February 26th. There was no decided shortening of the uterine cervix, hence an effort was made to quiet the contractions by the use of opium suppositories, with rest in bed. At 7 A. M. on the 28th the pains returned with renewed vigor and could not be thus controlled. Dilatation went on rapidly and the fœtus was spontaneously expelled. The placenta being retained, an anæsthetic was given and the hand carried into the uterine cavity. The placenta was found to be adherent to the right side of the anterior wall of the uterus opposite the site of the tumor. It was carefully separated and removed. During the manipulation it was found that the tumor was a large submucous fibroid, which entirely filled the uterine cavity when its walls contracted down upon it. In looking at the specimens from this case it would seem almost incredible that gestation for so advanced a period of pregnancy could have existed with so large an intra-uterine growth. The portions of the uterine wall not occupied by the tumor were so thinned by the distention to which they were subjected, that it was a marvel no rupture occurred. After delivery the uterus and vagina were thoroughly irrigated with a bichloride solution. An iodoform suppository was introduced into the vagina, and the usual antiseptic occlusion dressings applied.

The child was alive when born and lived about half an hour. It opened its eyes and used its limbs. The length was forty centimetres, weight five hundred and twenty grammes. The face, limbs, and back were covered with lanugo. There was no vernix caseosa. No toe-nails. Beginning development of one or two finger-nails. The aural and nasal cartilages were undeveloped. The fontanelles were large and separation of nearly one centimetre existed in the sagittal suture. The skin was very thin and transparent. The placenta was largely covered with areas of thickened decidua, and there were some spots of fatty degeneration. Until the second week, following the

FIG. 2.—Submucous fibroid of uterus complicating pregnancy. Six months' gestation.

delivery, the puerperium was without event, except for the persistence of pain, localized in the inguinal regions and supposed to be induced by uterine contractions excited by the presence of the tumor. There was no rise of temperature, the pulse ranged between 75 and 80. On the thirteenth day following her delivery there was a sudden rise of temperature to 102.6° and the pulse to 104. A slight odor was noticed to the lochia. The uterus was irrigated with a bichloride solution and the patient's temperature fell to 100°. Vomiting of a greenish mucus set in and continued so persistently that the patient

had to be nourished entirely by bowel. Uterine irrigation was employed daily and the patient and her friends urged to give their consent to an operation for removal of the pelvic organs. This was not gained until six days after the manifestation of the first septic symptoms. During this time the tumor increased markedly in size, general peritonitis set in and prostration was extreme. After the friends gave their consent to operative interference a consultation was held immediately, but it was deemed unadvisable to proceed as the patient was then moribund. She died within six hours after the consent of her friends had been obtained. An autopsy made three hours after death proved that operative interference at that late date would have done nothing for her, and afforded a most striking illustration of the rapidity of the action of sepsis during the puerperium. The abdomen was distended and tense, filled with about a quart of a dirty-gray fluid, emitting a foul odor which, upon microscopical examination, was found to be full of pus. The entire parietal peritonæum was covered with fibrinous lymph. The intestines were matted together and injected in patches, and their mucous coat considerably thickened. The great omentum was thickened, injected, and adherent to the intestines. The spleen was flabby, necrotic, and highly congested; its parietal surface was a light-green color with small foci of pus. The liver, soft and necrotic, showed fatty degeneration, as also did the kidneys. The uterus was greatly enlarged, its fundus three fingers' breadth above the umbilicus. The whole organ was glued to the surrounding tissues. Adhesions on left side were apparently of older formation than on the right. Both left tube and ovary were tightly adherent to the parietal peritonæum and rectum by their outer and to the uterus by their inner surface. The right tube and ovary were adherent to a less extent. Considerable purulent fluid welled up from the left broad ligament and ovary as the pelvic cavity was entered. Section of the uterus showed the cavity to be occupied by a single submucous myoma in a state of degeneration. The endometrium was in a condition of gangrenous endometritis. Death, it was decided, was due to sepsis from gangrenous endometritis resulting from the breaking down of the tumor which infected the endometrium.

A patient is at present under my care, having fibroids complicating a pregnancy. She is colored, aged twenty-six, and pregnant for the second time. She miscarried at five months last July. The miscarriage she states was followed by childbed fever. The present pregnancy has been prolonged to the end of the seventh month,

simply by continuous rest in bed, the foot of the bed being elevated to relieve pelvic pressure, and opiates almost constantly employed to quiet uterine contractions. The sum of human suffering and calamity represented by the history of the cases just cited, incline me to the belief that should we be able to prolong this pregnancy to term, a Porro operation would be the most satisfactory method in the management of the case ; or, should the patient at any time be delivered *per via naturales*, we should be prepared to do hysterectomy at the earliest manifestation of septic complication.

As time is limited, I shall refer but briefly to the other specimens presented to the Society to-night.

One of these—a large, œdematous myoma—was removed by me four weeks ago, from a patient who had been so exsanguinated by successive hæmorrhages, as to be reduced to a condition bordering upon pernicious anæmia. She is a white woman, forty years of age, married and childless. The growth had been noticed nine years. Her blood was examined upon admission to the hospital, with the following result : Red cells, irregular in shape, agglutinated, and numbering about 2,400,000. Hæmoglobin twenty-five per cent. Upon the recommendation of Professor Frederick P. Henry, who saw her with me, she was placed upon treatment for anæmia prior to any operative procedure. Rest in bed, with the foot of the bed elevated to relieve pelvic pressure, ferruginous tonics, bone-marrow, and forced feeding were employed. The vagina was kept continuously tamponed with iodoform gauze. The blood was examined every two or three weeks. The patient was thus kept under treatment from the middle of October, 1894, until March 6, 1895, when the operation was done. On the 26th of February the examination made of the blood showed the increase of red blood-corpuscles to 5,300,000, their shape regular, while the hæmoglobin was increased to fifty-five per cent. The operation was therefore decided upon. The entire uterus was removed by amputation at the vaginal junction, the peritonæum being drawn over the stump.

A separate nodule—subperitoneal—was an outgrowth from the supravaginal portion of the cervix and occupied Douglas' *cul-de-sac*. The peritonæum was stripped from this and it was peeled out, after the remainder of the uterus was cut away. The ovaries were greatly enlarged, and the ovarian plexus of vessels on both sides greatly engorged. The patient received a pint of normal salt solution by cellular transfusion after operation. Her recovery has been very satisfactory.

Another specimen removed by me on January 12, 1895, is of interest as showing the condition of calcareous degeneration in a uterine fibroid—the largest tumor I have ever seen which has undergone this change. The patient is fifty-nine years of age, married and childless. The tumor lay in the hollow of the sacrum and caused great distress from pressure. The uterus was amputated at the vaginal junction. The patient made a good recovery.

The other two specimens were deep-seated fibroids removed by the same process by myself, during the preceding year. They had caused much hæmorrhage and pain. I have brought them here to-night simply in illustration of a class of cases in which I think management of the stump according to the old method would have been exceedingly difficult, if not impossible. The patients made an excellent recovery.