

Emmet (T.A.)

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OF
FIBROIDS FROM THE UTERUS
BY
TRACTION.

BY THOMAS ADDIS EMMET, M. D.,

Surgeon of the Woman's Hospital of the State of New York.



NEW YORK:
G. P. PUTNAM'S SONS,
FOURTH AVE. AND TWENTY-THIRD ST.
1875.

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It is my belief, as the result of observation, that fibrous tumors become pedunculated only when situated at a point where the force of gravity can be exerted. This force acts as a source of irritation to excite the muscular fibres of the uterus to contraction. I have also noted that the muscular fibres throughout the whole organ do not contract equally.

From some change of structure, due to the long-continued presence of the tumor, the fibres forming the outer wall of the uterus and covering these growths lose to a great extent their contractile power. In corroboration it has been noted when marked uterine contraction is exerted an apparent sinking in of the sub-peritoneal surface takes place, corresponding in extent to the interstitial tumor beneath. If the contraction is prolonged, the extent of the depression will lessen just in proportion as the tumor may be forced into the uterine canal. About the circumference of this neutral space of uterine tissue, forming the outer wall of the tumor, the muscular action is more marked than at any other point—a natural result that the greatest action should be in proximity to the seat of irritation. This neutral surface, when thus encircled by a contracting band, continues to be crowded in upon as rapidly as the space below becomes vacated, and the tumor pedunculated in proportion to its advance into the uterine canal.

This depression I have felt distinctly when the uterus was in a state of active contraction; but it has been a question in my mind if any real displacement of this neutral space takes place. I am rather inclined to the opinion that a ridge is formed around by the damming up, as it were, of the contracting muscular tissue about this surface, which acts as an obstruction.

When a tumor is situated at or near the fundus we can hasten the termination of the case by exciting the muscular fibers with the use of ergot, as is the accepted practice; or we may aid the action of gravity by dilatation of the outlet, or by incising the cervix.

But there are many cases where the tumor is not so favorably situated, where the action of gravity can not be exerted, and where uterine contraction, if excited, is lost and inert in displacing the tumor from its bed.

For the relief of a large number of these cases it has been my practice to excite uterine contraction by making traction on the growth. This action I have continued until the tumor becomes pedunculated from being crowded out of its bed by muscular contraction closing in around and behind the mass. As an illustration of this action we may imagine the removal of a body by traction from a mass of india-rubber, where the contractility of the substance would be sufficient to close in behind, as the advance was made, and obliterate the canal on the withdrawal.

My attention has been directed to this subject for a number of years, but the development of my views to the present stand-point has been very gradual. But I cannot demonstrate this progress better than to present somewhat in detail several prominent cases, which have stood by the way as so many sign-posts.

In 1863 a patient was admitted to the Woman's Hospital with a fibrous tumor, distending the uterus to the size of full term, a portion of which filled the vagina and had already begun to slough. I could form no idea by a digital examination as to its attachments. I applied a pair of forceps, with the view of delivering the mass until I could reach the base, around which I intended to have applied the chain of the *écraseur*. My efforts, however, were fruitless, as the tumor was too large above to enter the pelvis. Fearing to leave the patient in this condition, I passed, with the aid of Gouch's canula, a stout twine around the mass, as high up as I could, within the uterine cavity. To the end of the cord I made a slip-knot and strangulated the mass to control the hemorrhage which I anticipated. Steady traction was made on the cord by an assistant, for fear that hemorrhage would occur should the noose become relaxed. I proceeded to remove the mass, piece by piece, with the aid of a large tenaculum and a pair of properly curved scissors. After I had taken away a large portion, I was surprised that the vagina continued to be occupied by about the same sized mass as at the beginning. But I was so

much occupied with the work immediately before me, that I did not notice the gradual decrease in the size of the uterus until near the close of the operation. As I advanced the cord was cut by accident. There was no bleeding, so I introduced my hand within the vagina and proceeded with the operation by pulling down, with the tenaculum, portion after portion, until the pedicle was reached. I thus removed the whole tumor with scarcely the loss of an ounce of blood after the traction had been commenced. I noted the blanched appearance of the mass remained the same after cutting the cord as the strangulated portion did after the blood which it contained had escaped. It was a matter of the greatest surprise to me, for which I could offer no explanation, that the pedicle for such a mass should not have been larger in diameter than the index finger. Previous to the operation I had supposed the greater portion of the tumor was buried within the uterine tissue. At the termination of the operation the uterine canal was barely five inches in depth. The mass contained a number of cysts of various sizes, and the quantity of fluid which escaped could not be estimated, but the pieces of the tumor weighed together nearly seven pounds. The patient recovered without a bad symptom.

From this time I have seldom used the *écraseur*, but have removed with scissors any growth within the uterine canal which I could reach. I have had no fear of hemorrhage, for this case taught me that it could be controlled in the manner I have described.

A few years after this case I assisted a physician in Newark, N. J., to remove a large tumor from the uterus. A portion of the growth presented through a well-dilated os, and the lower portion of the attachment was within reach on the anterior wall, some two inches within the canal. I passed the chain around the growth, but as it was being attached to the instrument it slipped from the fingers, and it became necessary to re-apply it. The chain was again adjusted by her physician, and finally attached to the *écraseur*, after great difficulty, from the fact that it seemed to include a much larger portion of the mass than before. The hemorrhage was excessive from the beginning, and increased to such an extent that it became necessary to remove the mass as rapidly as possible. To control the bleeding, ice-water was injected into the uterine cavity to excite contraction. This was promptly established, but the bleeding was not arrested, and the condition of the patient became critical. As soon as the *écraseur* had cut through and had been withdrawn, I passed my hands within the uterus, and found its cavity occupied by two tu-

mors, the one above overlapping the other. When I applied the chain it passed between them and encircled the lower one, but a portion of both had been included in the last adjustment. Passing my hand over the abdomen, I felt a sub-peritoneal fibroid, as large as a hen's egg, on the anterior wall near the fundus and to the left. I was satisfied the uterus could not contract sufficiently to control the hemorrhage with so large a mass attached to its wall and filling its cavity. I therefore attempted to break down and tear away with my fingers the remains of the tumors. This brought on violent uterine contraction, but irregular in course, so that the organ assumed somewhat of the hour-glass form. I felt the canal suddenly encroached upon, and on placing my hand over the abdomen found the external tumor had disappeared. Involuntarily I attempted to enucleate the presenting mass, by opening the capsule with my thumb-nail, when it split, and the tumor escaped so suddenly from its bed that my first impression was that rupture of the uterine wall had occurred. The uterus now contracted uniformly and rapidly, so that the remaining masses were soon removed, and the hemorrhage arrested. This patient convalesced slowly from the great loss of blood, but ultimately recovered under the close watching of her physician.

February, 1867, a patient was admitted to the Woman's Hospital with a large fibrous tumor imbedded in the greater portion of the anterior wall of the uterus. The tumor encroached on the uterine cavity, but only so far as to give a marked curve to the canal, as nearly the whole was interstitial. The case was under the care of Dr. John G. Perry, then one of the assistant surgeons, who, by my advice, continued the use of sponge-tents for some two months or more. After an absence of several weeks she returned to the hospital in consequence of continued pain from uterine contraction. The os was found dilated to some four inches in diameter, with the tumor presenting as a child's head. A broad attachment could now be felt just above the vaginal junction, somewhat less in width than the portion of tumor occupying the canal, while previous to leaving the hospital merely a uniform projection existed. June 3, I operated by passing well up into the canal a large tenaculum, and by steady traction drew down or rolled out into the vagina a large portion of the mass. I took out with a pair of scissors a large wedge-shaped portion, and as the traction had already excited uterine action, I removed piece after piece, as the tumor could be drawn down, until the uterus had been emptied. When the pedicle

was divided it was less than half an inch in diameter, and was formed by the capsule covering that portion of the base of the tumor which was nearest to the uterine outlet at the beginning of the operation. The location of the pedicle at this point, I have noticed, has been without an exception. I have referred to the recorded history of the case, and find that the depth of the uterus was not noted, but my impression is that it was eight inches previous to the operation. The lower portion of the base was felt just within the cervix, and the attachment of the tumor extended from that point to the fundus. The base therefore could not have been less than seven inches in length, with a width of from three to four inches. I purposely commenced the traction as high up as possible, and away from the lower portion of the base. I excited muscular action at the fundus, where it seems always to be greater than in any other part of the organ. As I rolled out the tumor from above, its separation advanced from this point downward as the uterus contracted on the diminishing size of its contents. The portions of this tumor weighed together four pounds and a half.

A case similar to the first one given was admitted to the hospital in 1869, in the service of Dr. George T. Harrison. The vagina was filled by a portion of the tumor, which had begun to slough, and the patient already presented the symptoms of blood-poisoning. I used a cord for the purpose of making traction in the beginning, but afterward drew down the tumor as I have described, and removed it piecemeal. The pedicle was not larger than the index finger, yet previous to the operation I am certain that fully one third of the tumor was interstitial. This seemed to be the case, at least so far as the opinion could be based on the passage of the sound as an indication of the depth of the uterine canal. This tumor was also filled with cysts and their contents lost, but the portions removed weighed a little over five pounds.

March, 1874, I received from Dr. D. E. KISSAM, of Brooklyn, a patient in my private hospital who had long suffered from excessive hemorrhage. She was so anæmic that for nearly a month I carefully controlled the loss of blood, and directed my attention to improving her general condition before I deemed it safe to attempt any operative procedure. The uterus was very much anteverted, enlarged at the fundus, and somewhat pear-shaped. The sound passed five inches posteriorly to the base of the tumor and three inches in front of it. When the condition of the patient admitted I dilated the uterine canal fully, and reached the lower portion of a

tumor with a base below of some three inches. Every other day I dilated the canal and passed high up within it an ergot suppository. These were made by Dr. Squibb of gelatine, glycerine, and the aqueous extract, in equivalent to one hundred grains of the powder. At night one was introduced into the rectum, and on the intervening day, in the morning and at night, they were administered by the bowel. Marked uterine contraction followed the use of these suppositories, but the effect was more decided when introduced directly within the uterine canal. A practical point has been overlooked in the treatment of these cases, should it be proved that the absorbing power of the uterine mucous membrane is always as active as it seemed to be in this instance. Iodine, for example, as we all know, is taken up so as to be detected by the taste of the patient almost instantaneously. This is the only case in which I have used these suppositories within the uterus, but do not think they could have acted merely as a foreign body from the rapidity with which they were dissolved. The uterus became broader at the fundus, from before backward, and altered in shape so much that a projection was formed on the posterior wall as the tumor was crowded in that direction; but no advance was made toward the uterine outlet, nor did the base lessen in diameter. At the end of some ten days I felt satisfied that nothing more could be gained by delay. Although the os below was kept fully dilated, the expulsive power was lost, as in a shoulder presentation. No advance could be made, as, from the situation of the uterus and the tumor, the action of gravity could not be exerted. I decided to remove the tumor with scissors, and placed the patient under ether: but at the end of an hour I was obliged to abandon the attempt. I could barely reach the most depending portion of the tumor with my finger, and failed in getting a loop or any contrivance around the growth by which I could draw it down. March 3d. a week after, in the presence of Drs. Kissam, George T. Harrison, and Bache Emmet, I again made the attempt. I first retroverted the uterus, and then gradually drew it down to the vaginal outlet. When necessary the uterus may be thus with safety brought within reach, if no cellulitis has existed, and if it is done by gradual traction without jerking. The uterus was held in this position by a stout tenaculum in the hands of an assistant. I then passed the index finger within the uterine cavity as a guide, and seized with a double tenaculum the fibroid high up posteriorly. By steady traction in the course of half an hour I succeeded in drawing a portion of the tumor

through the os, and for the first time was able to pass my finger around the base. The tumor was a half spheroid in shape, situated near the fundus in the anterior wall, about three inches in diameter at the base, and unusually dense in structure. To give more room I removed with the scissors the portion which had been drawn out from the os. I introduced my hand within the vagina and the fingers into the uterine cavity, and made traction on the mass with a tenaculum in the other hand. I requested Dr. Kissam to place his hand over the fundus to steady the organ and press it down into the pelvis. The uterus was now contracting with great force, and as I crowded my fingers in around the base to aid the process of pedunculation, if I may use the term, I could feel the contracting wave passing in a spiral or an oblique direction around the uterine walls. The muscular contraction was more marked immediately around the base, as it seemed to crowd up on the tumor. Suddenly Dr. Kissam informed me that the uterus was becoming inverted, and I noticed at the same time that the base of the tumor was lessening in diameter. I passed my hand over the abdomen, and as the uterus contracted I could feel the cup-like depression distinctly through the relaxed abdominal wall. I was pleased at the prospect of the inversion, for I felt satisfied after enucleating the tumor I could easily replace the uterus. I therefore redoubled my efforts to bring about this condition, but noticed the size of the depression diminished as the base of the tumor became smaller. This depression may have been accidental, or it may have been more marked in consequence of the violent uterine contraction, and in extent would necessarily bear a relation to the size of the tumor imbedded beneath. These are points which must be settled by future observation. But in watching this case, with my fingers encircling the base of the tumor, while the uterine tissue was contracting around it, I realized for the first time the manner in which a growth becomes gradually pedunculated as the force of gravity comes into play. It was now evident to me that the traction which I had practised for years, without appreciating cause and effect, had produced the same result. I also appreciated that the uniformly attenuated pedicel, which I had always noticed had been a natural result of the traction I had employed, and not accidental. Early in the operation I called the attention of the gentlemen present to the appearance of the portion of the tumor which I had drawn out beyond the labia. As I made traction to excite the muscular action of the uterus, the

mass became blanched, and remained so as long as the action was kept up. After the uterus, however, had begun to force the tumor out of its bed, this bloodless appearance became permanent. In this case, as is the rule, the pedicle was formed at the lowest point of the base nearest to the uterine outlet. It was unusually small, and when divided was not larger than an ordinary lead pencil, and yet the base was about three inches in diameter at the beginning. This was fully appreciated by the gentlemen who assisted me, for on making the examination but a slight pit or depression could be detected with the finger to mark the point of attachment. The operation lasted an hour and a half, and when completed the uterus was three inches and a half in depth. After the operation I carefully replaced the uterus with the finger to its normal position in the pelvis. This patient made a rapid recovery, and within a week has visited me in perfect health.

December 8, 1874, as I was about to commence my clinic at the Woman's Hospital, Dr. Whitwell, the house surgeon, informed me that he had been obliged to substitute a patient just admitted, for operation, whom I had not examined. While she was being etherized I learned that during her last labor, three years previous to admission, her physician had been obliged to remove a large growth from the uterine cavity, which had obstructed the delivery. Menstruation had been free, lasting a week; and for a profuse leucorrhœa, with a constant bearing down and a backache, she had sought relief. The doctor had examined the case and reported the existence of a large mucous polypus projecting from the os uteri. The speculum exposed a soft vascular growth as large as an English walnut, with an attachment to the posterior lip almost as great. There had been double lateral laceration of the cervix, and although this growth was outside of the uterine cavity, it really sprang from a surface which formed a part of the cervical canal before the accident. The appearance of the tumor was unusual and led to farther examination. I found the uterus very wide from before backward for its apparent depth, and from the rectum detected a deep depression near the fundus, as if from inversion. But the passage of the sound forward five inches indicated the presence of a fibrous tumor in the posterior wall, extending nearly to the fundus without encroaching on the uterine canal. The growth was very soft, and bled profusely in consequence of the tenaculum tearing out on making the slightest traction. I therefore resorted to my favorite means for the purpose—a cord with a slip-knot. The tissue of the

pedicle, which had been drawn out, was dense, and I soon discovered that it was inclosed within a sheath having an origin beyond the submucous surface. I divided with the scissors the sheath around the supposed pedicle, close to the uterine surface, and proceeded to make traction as I separated the tissues with my index finger. I was soon satisfied that it was a portion of the fibrous tumor occupying the posterior wall of the uterus, and having advanced so far I had no alternative but to enucleate the whole tumor. In the course of half an hour I succeeded in drawing out from its capsule a mass some four inches in length, round, and of nearly uniform thickness throughout of an inch and a half in diameter. In the beginning, while making steady traction, I confined myself to separating the tumor from its capsule as it presented itself at the opening. The hemorrhage was profuse and increased so rapidly when I had withdrawn about half of the tumor that I hastened the operation by introducing my finger and breaking up its attachment in advance. After the mass had been removed I found the cavity was two inches and a half in depth, with the remaining posterior wall of the uterus so thin that I was surprised it had not been ruptured. An equally thin septum existed in front, between the cavity and the uterine canal, which had not been entered. The traction had excited the muscular uterine tissue to action, and the size of the organ had materially lessened: but the posterior wall being so thin, the contractile force seemed lost in that direction. Notwithstanding the depth of the cavity had been shortened an inch and a half, it was my impression its capacity had been but little diminished, since its width was greater than that of the tumor after its removal. A portion of the capsule presented at the opening, which I seized with a tenaculum, and drawing down all which was loose, removed it with the scissors. The patient was now placed on the back, over a bed-pan, and the cavity washed out with a quantity of very hot water, by means of a Davidson's syringe. She was afterwards replaced on the left side, and Sim's speculum introduced, as at the time of the operation. The cavity was dried by a large sponge probang, and as soon as it was withdrawn two drachms of Churchill's tincture of iodine was injected. By use of the hot water the size of the cavity was greatly reduced and the bleeding diminished, but the iodine contracted it still more, and entirely arrested the hemorrhage. Some pledgets of cotton saturated with glycerine were introduced into the cavity, now about an inch and a half in depth, and the vagina was moder-

ately tamponed with cotton dampened with a solution of alum. On the second day after the operation all dressings were removed and the cavity carefully syringed out with warm water, to which had been added some carbolic acid. This treatment was continued from day to day without a bad symptom presenting, and the cavity rapidly decreased in size. December 19th, eleven days after the operation, the temperature suddenly rose to 103°, and symptoms of blood-poisoning were detected. A speculum examination was made, and a sloughing mass exposed, which at first glance appeared to be the posterior lip. I found that it was a portion of the capsule protruding, behind which a cyst had formed, containing about two ounces of a thick gelatinous fluid. After puncturing the cyst I removed the remains of the capsule by means of seissors and by tearing it away with a strong pair of forceps. There was some bleeding, but the quantity was not excessive. Curiosity prompted me to pass my finger to the bottom of the cavity, when I detected another fibroid, a little smaller than a pigeon's egg, just projecting sufficiently to map out its size. This I seized with a strong tenaculum, and as traction was made by Dr. Whitwell I cut it out from its bed with a pair of curved seissors. The uterus contracted promptly on its removal, and it was beyond question due to the presence and position of this little fibroid that the cavity had not been more reduced in size at the time of the first operation. I again injected the iodine, and as it excited the uterus to further contraction the bleeding was entirely arrested. January 7th I found the cavity from which this tumor had been removed now obliterated, and the uterus three inches deep. On the 12th instant she was discharged cured from the hospital.

The pathologists teach us that these growths have a uniform origin and a similarity of structure, into which the uterine tissue becomes incorporated. Yet from observation I had become impressed with the belief that so soft and vascular a growth, as in this instance, had always its origin and extent limited to the sub-mucous tissues. I have met with but one other instance where this condition was an outgrowth from the dense tissue of a true fibrous tumor. I did not recognize the connection at the time, and although the case has no bearing strictly on the mode of treatment under consideration, yet its teaching is of great practical value to the subject at large.

June, 1871, I dilated the uterus of a patient in the Woman's Hospital, and detected near the fundus a soft tumor, about an inch

in diameter, which I considered a mucous polypus partially pedunculated, and the cause of hemorrhage. On the anterior wall, near the fundus to the right, was felt through the abdominal wall a subperitoneal fibroid a little smaller than a hen's egg. This tumor seemed to one side, and accidental in its connection with the growth within the canal. Dr. T. G. Thomas, a member then of the consulting board, was present, and examined the case at my request. From its shape and position it was impossible to encircle it with the chain of the *écraseur*, and too soft to be drawn down with a tenaculum sufficiently within reach of the finger as a guide for its removal. I therefore decided to destroy it by cutting open with a pair of scissors the portion protruding, and I believe the procedure met with Dr. Thomas's approval. The operation was easily done, and by the injection of iodine the slight bleeding was promptly arrested. The discharge was very profuse after the third day. To guard against blood-poisoning I directed the nurse to introduce the nozzle of the syringe just within the patulous os, and gently wash out the uterine cavity at the time of administering the usual vaginal injections. This was done for a week or ten days, and the patient was apparently doing well. One morning, during the administration of the injection, the patient suddenly complained of great pain and discomfort. On removing a nearly-empty bed-pan the nurse realized that some serious accident had occurred, and I was sent for. The patient died in a few days from a violent attack of peritonitis. The post-mortem disclosed the fact that the subperitoneal fibroid had become displaced, leaving a smooth opening, as if made with an inch-auger, from the uterine canal through the fundus into the peritoneal cavity. The tumor was found lying behind the uterus in a bed of lymph. It was soft, and the portion which had been imbedded in the uterine tissues was ragged and sloughing. Over the opening through the fundus the intestines had become adherent in the attempt to repair the injury. At the time I supposed two distinct growths had existed, and in their development the intervening uterine tissue became absorbed, so that they lay in contact. It was thought, as the growth within the uterine cavity disintegrated, the capsule of the outer tumor became involved and loosened from its attachment, so that it was at length easily displaced by the injection.

Now it is evident to my mind, in connection with the growth of the previous case, that there existed but a single tumor. I am also satisfied that in the Newark case the supposed subperitoneal fibroid

was imbedded in the uterine tissue nearly to the mucous membrane of its cavity. Fortunately by the uterine contractions which were excited the tissues crowded up upon the tumor so as to force it in the direction of the canal, and, although leaving so thin a septum of uterine tissue beneath the peritoneum, the cavity was soon closed up by the rapid decrease in the size of the uterus.

The practical bearing is obvious that in addition to the risk from blood-poisoning the practice is not a safe one to remove, as is frequently done, a projecting mass within the cavity without any knowledge as to its depth within the uterine tissue. When we can make traction it matters little how thin the outer wall of the uterus may be, provided we are able to excite the muscular tissue to contraction, since the space will be closed up as rapidly as the mass is withdrawn. This will surely be the case where we have a single tumor, especially if it be situated near the fundus, or even in the lateral wall, if its size be not so large as to have replaced the greater portion of the true uterine tissue. There is certainly a limit to the procedure, but it is safer and is appreciable to every case where a prudent operator would feel justifiable in attempting enucleation by any method. I deprecate the practice of separating the tumor from its capsule before withdrawing it, where muscular action is not excited, or to so limited an extent that a large cavity is left from which the patient is exposed to the danger of blood-poisoning, if she does not sink from the loss of blood beforehand.

It is even more hazardous to cut into the mass or excite inflammation within its structure, by the use of the cauterly or other agents, with the view of bringing about disintegration; for no man possesses the means of limiting, to the tumor, the inflammatory process which he will establish by this mode of treatment. Where the sloughing has stopped short of breaking down with the tumor, the outer uterine wall covering it, the progress has been stayed in every instance by a special interposition of Providence. Were we as familiar with the death record as we are with the result where the treatment has been survived, no conscientious man would ever attempt to destroy a uterine tumor by disintegration.

A few words in relation to the after-treatment. When the tumor has been removed, and all shreds or loose portions within reach, it is important to wash out the cavity thoroughly. It is best to use very hot water; for not only is it a prompt exciter of uterine action, but by prolonging the injection we thoroughly empty the capillaries within reach of its direct influence. After the injection

we possess no better means of increasing the contraction, and of maintaining this condition, than by the free application of Churchill's strong tincture of iodine. Should there be any oozing of blood after the hot-water injection, the application of iodine is certain to arrest it, without there exists some impediment to the proper contraction of the uterus. It is an agent I have employed for this purpose more than ten years, and it is also a most valuable antiseptic. I am confident that we possess no better means as a prophylactic, when used as I have employed it.

Under no consideration would I introduce the persulphate of iron into a cavity to arrest hemorrhage. It possesses in itself no styptic properties, and only coagulates a mass of blood, which then acts mechanically. The blood is so destroyed in character by contact with the persulphate that it undergoes decomposition within a few hours. From this source the patient frequently becomes blood-poisoned before any septic element has been generated elsewhere. It acts as a local irritant, and it is impossible to get rid of it until removed by suppuration. After injecting the iodine I sometimes pack in a little cotton saturated with glycerine. If more than this is needed, it is better to use damp cotton, which has been saturated with a strong solution of alum, and tampon the vagina with the same material. On the second day I carefully remove the cotton; and if there is no bleeding after washing out the cavity, I dispense with all dressings. It is necessary to devote the utmost care to cleanliness by frequent injections of warm water. To these injections may be added a little brewer's yeast as a stimulant and disinfectant, or carbolic acid, if there is any tissue undergoing decomposition. Finally I keep the patient in bed until the cavity has filled up, if a tumor has been enucleated, or until all discharge ceases from the uterine canal, if a polypus has been removed.

My experience in this mode of operating would recommend it on the score of safety. I have not lost a single patient, after the removal of growths from the uterus, in over eight years, during which time I have regularly employed the method. The only case during this period in which I deviated from my practice, by cutting into the growth and leaving it to break down, died. The details of the case I have already presented. I must state, however, that I have never enucleated so large a fibrous tumor before as the case I have presented, for I have not been favorably impressed with the results following the usual methods of operating which have passed under my own observation in the practice of others; but I have safely

removed a number of small fibroids, where death has frequently occurred under other circumstances. I have also operated many times by traction in pedunculating tumors which have begun to project into the canal. Formerly, when I have operated under like circumstances, I have lost patients from blood-poisoning in the breaking down of the portion left imbedded in the uterine wall. It has been my practice, when the growth was larger than a pigeon's egg, to confine my efforts entirely to controlling the hemorrhage, and aiding the action of the uterus in forcing the tumor from its bed toward the canal. When it had projected sufficiently I then removed it by traction. I have always been very conservative in my views regarding any surgical interference with large fibrous tumors involving a greater portion of the uterine wall. While I am likely still to hold these views to a great extent, my recent experience may justify me in extending the field to a larger number of cases than formerly.

