

Todd. (S. S.)

R E P O R T

OF TWO CASES OF

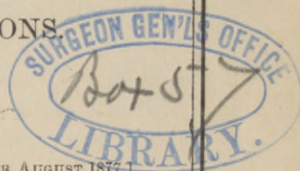
OVARIOTOMY.

✓
By S. S. TODD, M. D., Kansas City, Mo.

PROFESSOR OF OBSTETRICS, AND DISEASES OF
WOMEN, IN THE KANSAS CITY COLLEGE
OF PHYSICIANS AND SURGEONS.

[REPRINT FROM THE ST. LOUIS MED. AND SURG. JOURNAL, FOR AUGUST 1877.]

W. P. KREMER, PRINTER, 816 N. 8th St., St. Louis, Mo.



R E P O R T
OF TWO CASES OF
O V A R I O T O M Y .

By S. S. TODD, M. D., Kansas City, Mo.

Professor of Obstetrics, and Diseases of Women, in the Kansas City College of
Physicians and Surgeons.

Mrs. M. E. B., of Carroll County Mo., was brought to me by her husband for treatment, March 17th 1876.

The patient was 30 years of age, had been married thirteen years, and had never been pregnant. The history of the case further shows that Mrs. B. had always lived a quiet country life; that she had suffered from dysmenorrhœa from the first appearance of the catamenia, at the age of fifteen, to the present time; but with this exception, and an occasional attack of ague with which the locality of her home abounded, she had always enjoyed a pretty fair state of health till about one year and a half ago.

Five years ago she noticed for the first time an abdominal fullness, which she ascribed to pregnancy. She did not remember that this enlargement was greater on one side than the other. Gradually the abdominal cavity became distended, through a period of five years, oc-

causing however, little pain or inconvenience of any sort, except that caused during the past eighteen months by mechanical pressure, and impaired function of the viscera involved. Meantime the menses had continued to recur with regularity, as to time, quality and quantity, save in a few instances where the interval has been prolonged to five or six weeks. A menstrual period had just passed at the time of making her visit. Nothing in her history gave evidence of an hereditary tendency to the formation of adventitious growths of any kind. She had never had any anasarca. No exploratory examination had ever been made, nor had she been subjected to any surgical treatment, and but little medication of any sort directed to the relief of her present condition.

Mrs. B. was of slender form in health, with a weight of about one hundred pounds; had light hair and a fair complexion, but was now sallow, with a dry skin, and much emaciated. An inspection of the abdomen showed enormous and uniform distension, and a girth at the umbilicus of 38 inches; dullness everywhere except deep in the lumbar regions; parietes thin, and veins of the abdominal walls moderately enlarged, with a fluctuation remarkably distinct at all points save in the left hypochondriac and lumbar regions. No aortic impulse was perceptible; crepitus was not to be heard, and the gliding movement of the tumor upon the walls of the abdomen, felt when the tumor is free, was scarcely, if at all discernible.

Vaginal examination revealed the uterus high, almost beyond reach of the finger, deflected to the left, but mobile, with os and cervix normal. The sound confirmed the supposition in regard to the deflection of the uterine axis, and showed a depth of cavity of three inches. No sense of fluctuation could be had from the vagina. The functions of the urinary organs had never been but slightly disturbed, and, with the exception of some little trouble from incontinence, were now in healthy exercise.

The urine though not critically examined appeared to be normal. The tongue was clean, the appetite fair, no thirst; some flatulence, and the bowels regular. Breathing was being much impeded, and there had been considerable coughing, but without expectoration. Sleep had been but little interfered with, pulse 90 regular and soft.

With little doubt as to the result of the procedure a few drachms of the contents of the sac were removed by aspiration, and the fluid found to be viscid, dark colored, and highly albuminous. The disease was pronounced to be a monocystic tumor of the right ovary, with adhesions, a short pedicle probably, and co-existing hypertrophy of the spleen. The patient was rapidly passing into a state of cholæmia and spanæmia that boded no good, but she was cheerful, tractable, hopeful, and all things considered the case appeared to be one favorable for an operation. An immediate operation was therefore at once decided upon. Her menses were expected to return about the 8th proximo.

After a few days of preparatory treatment, and awaiting a favorable change in the weather, the operation was performed on April 3d, Drs. Taylor, Schaufler, Lester and Porter, assisting. Chloroform was administered, and an exploratory incision of an inch and a half having given positive assurance of the presence of an ovarian sac, with firm parietal attachments, the incision was lengthened to seven inches. On now introducing the hand it was found that the entire extent of the tumor in front was adherent by innumerable small bands, and immovably fixed to the front and sides of the abdominal walls. The most of these yielded readily to the fingers and without much bleeding, but some of them were broken up with difficulty and bled freely. Having detached the tumor as far as the fingers could reach, the sac was partly emptied by the removal of about three gallons of dark amber-colored fluid, of the consistency of thin molasses, after which

the trocar was removed and the opening into the sac tied with a stout ligature.

On attempting to drag the now diminished bulk of the tumor through the abdominal wound, it was found to be strongly adherent to the left abdominal wall and behind by a band of three or four inches in width, and of considerable thickness, springing from a point of the sac opposite what was afterwards ascertained to be a mass of small cysts contained in the parent-cyst. This was divided with the scissors and the sac rolled out of its bed. The tumor was quite vascular on its sides, and behind, and the pedicle very broad and short—too short for the clamp. Each half of this ill defined pedicle was tied very tightly with a strong silk ligature, one end cut short and the remaining end of each brought out at the lower angle of the wound. The sac was now cut away and the stump dropped back into its place. Not a drop of the contents of the sac had entered the peritoneal cavity. The other ovary was examined and found to be healthy; so too of the uterus, the *spleen* and other abdominal viscera so far as could be determined.

No bleeding occurred from the pedicle stump, but a good deal of oozing continued from ruptured vessels, requiring the wound to be kept open for half an hour, or more. The only bleeding vessel demanding ligation, however, was one in the wound of abdominal incision. After the lapse of considerable time it being unsafe to continue anesthesia longer, the cavity was made as clean and dry as possible, and, though oozing of blood still continued from many points, the abdominal wound was closed, with thirteen silver wire sutures. It was deemed imperative, however, that drainage should be provided for, and before closing the opening completely a Thomas' drainage tube was inserted deeply into the recto-uterine *cul-de-sac* and brought out beside the ligatures in the lower part of the wound. Long strips of adhesive plaster were now applied, a strip of greased muslin covered

the wound longitudinally, and the whole was surmounted with a compress and tightly fitting bandage.

The tumor on examination proved to be polycystic. The quantity of fluid contained in the main cyst was thirty six pints; it also contained within its walls a polycystic mass weighing three pounds, which, with the weight of the sac—two pounds, made the weight of the entire tumor about forty-two pounds. The polycystic mass spoken of was composed of from fifteen to twenty small cysts, varying in size from a pigeon's to a goose's egg, filled with a dense colloid substance of extreme viscosity. Two or three of the largest of these contained within their cavities smaller cysts of the third order. This mass was situated on the upper and left lateral aspect of the tumor, projecting inwards, and was that which, before an opening was made, had been mistaken for an hypertrophy of the spleen.

The patient rallied well in an hour after the conclusion of the operation but suffered much from nausea during the night following and for three or four days thereafter,—due, no doubt, in part to the anæsthetic, but mainly to opium, of which, unfortunately, she had great intolerance, but which had been freely used in conjunction with quinia for the first three days after the operation. The opium having been suspended, and the patient allowed pounded ice, iced champagne, soda-water, etc. at will, the nausea ceased and she was able to take food with relish on the fourth day.

On the morning of the second day three or four ounces of bloody serum escaped through the drainage tube. From this time to the 12th day, at which time the drainage tube was wholly withdrawn, the peritoneal cavity was thoroughly washed out twice a day through this tube with a weak solution of carbolic acid (one grain to the ounce) and common salt, in water at blood heat. From being sero-sanguinolent at the first, the discharge through the tube soon became purulent, and so continued

in constantly diminishing quantity till the ligatures of the pedicle had come away, on the 28th day, by which time the opening left after removal of the drainage tube had nearly closed.

On the fourth day after the operation the catamenia appeared and lasted two days. On the 11th day I removed four of the sutures and on the 12th day the remainder, when the abdominal incision was found to be firmly united throughout. On the 19th day I had evidence of perforation of the rectum; intestinal gases escaped through the opening for drainage, and pus passed per rectum and so continued at intervals for three or four weeks longer. The patient's appetite and strength continued to improve, and on the 51st day she left for her home, her complete recovery seeming to be well assured. Such however was not the result to follow. She never recovered her normal blood condition, but after a time grew more anæmic, the yellow hue of the skin remaining to the last. So the alluring hope of my patient's complete recovery was one day rudely dispelled by a letter from the husband informing me that his wife was dead. Gastric and hepatic disease, induced by long disturbance of function, had accomplished the work, nearly six months after the operation.

The desperate character of this case will be more apparent when I say that after the fifth, there was no succeeding day up to the close of the sixth week when the temperature,—taken in the mouth, fell below 100° or the pulse below 110, or when respiration fell short of 21 inspirations to the the minute. The average temperature from the 5th to the 42d day, taken at 6 P. M., was $102\ 1\text{-}6^{\circ}$ and the average pulse for the same period 122.

This protracted exaltation of temperature, pulse, and respiration was no doubt caused by a circumscribed peritonitis, a slight degree of septicæmia, and exhaustion from long-continued purulent discharge incident to separation of the ligatures of the pedicle. A point worth

noting in this case was the invariable fall of pulse and temperature that instantly followed the intra-peritoneal injection of antiseptic washes,—a fall in the mercury of from one-half to one degree, and of the pulse from five to ten beats per minute, within half an hour, being observed on several occasions. The power of a combination of quinia and salicylic acid to produce similar results was scarcely less marked.

CASE II. On June 30th 1876, I was called to visit the wife of C. K. Warren, of Wheeling, Livingston county, Mo., who was reported by her physicians to be suffering from an ovarian tumor.

Mrs. Bettie Warren was a native of Kentucky, but had spent most of her life in Missouri; she was the wife of a farmer, to whom she had been married twelve years, and was now thirty-two years of age. She had never in her life menstruated nor conceived; the only recognizable efforts at menstruation ever noted being on two occasions, at long intervals, when after the administration of drugs for the purpose of inducing it a very slight sanguineous discharge made its appearance for the moment, and speedily disappeared. No cause could be assigned for the non-establishment of this function, nor did its absence seem to influence in any degree her general condition, which, till within a comparatively recent period, was that of almost uninterrupted health.

A few months after her marriage, or, to be more precise, eleven and a half years previous to the date of my visit, she noticed for the first time a fullness in the hypogastric region, but does not remember that the swelling when first seen inclined more towards one side than the other.

From that time to the date of my examination the swelling constantly and slowly increased, occasioning however but little pain or inconvenience of any sort and in no way interfering much with her comfort till about one year prior to this examination. Since that

time the enlargement has gone on rapidly, and though never at any time suffering from any acute attack, or febrile symptoms that might be referred to the growing tumor, much discomfort has been felt because of her unwieldy bulk and the pressure to which the pelvic, abdominal, and thoracic viscera were being subjected. Further inquiry into the personal history of Mrs. W. showed that she had always been a person of active habit of body, and cheerful disposition of mind; that she had come of a healthy ancestry, leaving no room to suppose that there existed any constitutional vice, or derived tendency to the formation of adventitious growths.

Mrs. W. had been tapped about twenty days before my visit by Dr. McArthur, of Chillicothe, and Dr. Edgerton, of Wheeling, her regular physician, and about one gallon of dark-colored fluid removed, when the flow ceased. The tapping gave considerable relief to the patient, but did not materially diminish the bulk of the tumor, causing rather a depression only in the right umbilico-hypogastric region, while the swelling at other points remained much as before the operation. The tumor, which had been recognized as ovarian, was hitherto believed to be a monocyst, because of its slow growth, the regularity of its contour, and distinctness of fluctuation, but it was now made manifest to the operators that the tumor was a polycyst, and that one cyst only had been emptied by the trocar.

This cyst had nearly re-filled at the time of my visit, but her general health continued good, with abundant capacity for sufficient bodily exercise. A thorough exploration now made, fully confirmed the opinion already expressed that the tumor was a polycyst, springing, apparently, from the right ovary, and that the case was a good one for an operation. The patient though somewhat emaciated was in good physical and mental condition, and the absence of inflammatory symptoms in the history of the case afforded evidence that adhesions, if

any existed, would prove to be no serious obstacle in the way of success. The season of the year alone was unsuitable, it being mid-summer and very warm. For this reason it was deemed advisable to postpone an operation till the weather should be more favorable. In the meantime the patient was counseled to continue her usual habits of life, availing herself of all the bodily exercise of which her surroundings would permit.

In accordance with this I again visited her October 3d, accompanied by my colleague, Dr. Schaufler. Since my former visit three months had elapsed, during which period she had enjoyed a reasonable degree of comfort till towards its close when she had suffered from an occasional attack of ague, for which she had taken quinine and iron. Several days had passed since the last paroxysm however, and I found her quite comfortable and cheerful,—desirous of the operation, and hopeful of the result.

The cyst that had been emptied by the tapping was now quite refilled, while the entire bulk of the mass had considerably increased in volume. Vaginal touch now showed the uterus to be less mobile than before—high in the pelvis, but other wise normal in position and axis. Its cavity on introduction of the sound gave a depth of two and a half inches. The tumor could be touched by the finger from the anterior vaginal *cul de sac.*, but no fluctuation was discernible at this point.

The abdomen was uniformly and symmetrically enlarged, as if by a monocyst, and the abdominal walls which appeared to be thin, were checkered all over with a dark net-work of tortuous and enlarged veins, and could not be made to move upon the face of the tumor. There was no abdominal tenderness. The tumor was soft and elastic, and yielded a distinct aortic impulse on palpation. Percussion gave a dull sound everywhere except in the lumbar regions, and fluctuation was very distinct at all points. The greatest circumference of the body

was at the umbilicus, and gave a measurement of 42 inches; ensiform cartilage to the umbilicus 9 1-2 inches, and from symphysis pubis to the umbilicus 9 inches.

OPERATION.—The following named medical gentlemen were present to assist or as spectators; Dr. E. W. Schauffler, of Kansas City, Drs. Edgerton and Gish, of Wheeling, Dr. A. S. Cloud, of Chillicothe, Dr. Theo. Fiske, of Mooresville, and Drs. Rogers, Thompson and Waters, of Meadville. Ether was first given, but failing to get complete anæsthesia from this, chloroform was resorted to with the most gratifying results. Before commencing the operation all parties aiding were required to cleanse their hands carefully in a solution containing one drachm of common salt and sixteen grains of carbolic acid to the pint of warm water. An exploratory incision of an inch and a half laid bare the glistening sac and allowed of the introduction of the sound and finger, after which the wound was extended to six inches. Six or eight ounces of ascitic fluid escaped when the peritoneal cavity was opened. An examination now showed numerous small bands of parietal attachment covering the entire anterior face and sides of the tumor which were separated with the fingers, one only requiring the use of the scissors.

Before proceeding further about one-half of the fluid contents of the sac was removed, the trocar first entering the cyst drained at the former tapping; and successively through their partitions two other cysts of large size were partially emptied, when the opening made by the trocar was closed with a strong ligature. Making traction after this, it was soon apparent that the omentum, which overlapped the upper anterior aspect of the tumor, was adherent for a considerable breadth of space, preventing further descent of the remaining mass. In breaking up this adhesion the omentum was torn for a distance of two or three inches, but the bleeding was trifling and ceased after a few minutes, exposure to the air. There were no pelvic adhesions, so after detaching the tumor at a few

more remaining points on its lateral walls it was easily dragged through the abdominal opening. In doing this however the ligature that commanded the opening made by the trocar, and which had not been drawn quite close enough, came off, and some ounces of the fluid escaped into the peritoneal cavity. The pedicle, which sprang from the folds of the right broad ligament, and which I had thought would be found short, was of good length, moderate size, and was readily embraced in a Dawson's clamp and fastened in the lower extremity of the wound. The left ovary was examined and found to be healthy. The mass was now cut away and search made for bleeding vessels.

The only vessel tied during the operation was a small one in the line of the abdominal wound, compression or torsion sufficing for the rest, except that a continuous oozing of blood was being kept up from the torn vessels at the points where adhesions had been ruptured. For this cause the wound was kept open for twenty or thirty minutes longer, in an atmosphere of about 70° at the end of which time the bleeding ceased; the peritoneal cavity was thoroughly cleansed with sponges dipped in the solution before mentioned, and afterwards made as dry as possible with the softest sponges wrung from the same.

All risk of further bleeding having been as far as possible removed, the line of incision was closed by twelve silver sutures, the lower two closely and accurately embracing the pedicle, one on either side, hermetically closing the wound from one extremity to the other. A narrow slip of muslin smeared with simple cerate was now laid longitudinally over the line of incision, after which the body was encircled with strips of adhesive plaster and the whole covered with a soft pad and flannel bandage. It was now four o'clock P. M. and the patient had been on the operating table more than an hour. She slept for half an hour after being put to bed, and awoke

as if from natural sleep, but feeling some nausea. Before commencing the anæsthesia the temperature (by the mouth) was found to be 100° and the pulse 108. At 8 P. M., four hours after the operation, the pulse had risen to 132. At 9 P. M. I gave her half a grain of morphia. This the stomach rejected soon after, when the dose was repeated, and retained, and a tolerably comfortable night for the patient followed.

On the morning of the second day the nausea had in a great measure ceased, and she took some breakfast. Capsules containing, each, sulphate of quinine five grains and opium one grain, were given morning and evening, and under the direction of Dr. W. W. Edgerton, to whom the case was now entrusted, were thus continued to the 13th inst. The bowels had been freely moved on the day before the operation with castor oil, followed at night by an opiate, but from that time till the 14th, eleven days after the operation, no movement of the bowels had been permitted. On the eleventh day a free evacuation was had with an enema. From the history of the case after the second day, with two registers daily of the pulse, temperature and respiration, I am indebted to Dr. Edgerton, and it is to his watchfulness and skill that much of the ultimate success of the operation must be attributed.

At 4 o'clock on the morning of the second day the pulse showed 120, temperature 100.50° , respiration 20. At 8 P. M., same day, pulse 118, temperature 102° respiration 14. On the third day, at 8 A. M., the pulse showed 114, temperature 101.50° , respiration 15. Same day at 8 P. M., pulse 114, temperature 102° , respiration 15. After this there was daily almost uniform declension of the pulse and increased frequency of respiration, with a temperature ranging from 99.50° to 100.50° , up to the tenth day. On the tenth day at 8 P. M., the pulse was 100, the thermometer marked 102.50° , and respiration 17. This was the highest

temperature reached at any time during the illness, and from this date a steady declension of pulse and temperature followed.

One half of the abdominal sutures were removed on the fifth day, and the remaining ones on the seventh day. The clamp came away on the twelfth day. On the nineteenth day she left her bed for the first time, and on the twenty-eighth day rode a mile into the country. In a letter from her husband, dated June 7th, 1877, he writes me that her health is better than ever before in her life.

The tumor on examination proved to be composed mainly of three large cysts, as before stated, filled with a highly albuminous, dark, coffee-colored fluid of the consistence of milk, and more than a dozen smaller cysts, some of them no larger than a grape, filled with a thick colloid substance that could hardly be made to flow. The fluid contents of the three principal cysts measured fifty-two pints, and the sac, with the contents of the smaller cysts weighed five pounds. The weight of the entire mass was about fifty-seven pounds.

