

Greene (J. B.)

With Compliments
of Writer.

REPORT OF TWO CASES OF UTERINE FIBROID AND ONE
OF STRICTURE OF THE RECTUM.

TREATED BY ELECTROLYSIS AND SURGICALLY.

ALSO,

PRESENTATION OF SPECIMEN OF DERMOID CYST.

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MISHAWAKA, IND.



Read before the Chicago Medical Society.



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Anything that I may offer will not, I am sure, add to the knowledge already possessed in regard to the causes, symptoms or effects of fibroid tumors of the uterus. As I have been experimenting somewhat during the past few years with electrolysis, and during the past year quite extensively with the Apostoli method, I thought that the details of two cases of fibroid of the uterus and one of stricture of the rectum, treated by electrolysis, and surgically might be of interest.

Before describing the cases I will say that the evidence for and against electrolysis as a resolvent is about equal. Of course we do not know the kind of battery used by those reporting failures. A report stating "I applied — cells" is worthless. The current for electrolysis *must* be the galvanic. The amount used cannot be gauged by number of cells, but by a millimeter, and the method of application must be one scientifically applied.

Many cases treated by careful, honest and (outside of electricity) scientific men, have been pro-

nounced not benefited or injured by their electrolytic (?) treatment. Many of those cases are treated after electrical failure by other surgeons, and the electricity applied, both as regards quality, quantity, force and time, scientifically, and a happy recovery followed. Do not believe that a four, five or six cell galvanic battery can give you a current of sufficient electro-motor force, of sufficient quantity, or intensity to produce chemical (electrolytic) changes in tissue of the resistance of fibroids, or strictures. Above all do not believe that the Faradic current will do the same that a galvanic current will do.

Perhaps there is such a thing as luck, if so, I must be one of the lucky ones, for in the treatment of many cases of fibroids, strictures, goiters, hypertrophies, etc., I can now call to mind a complete failure in but a single case, and that was a case of urethral stricture treated (?) on the top of the Rocky Mountains, with an improvised galvanic battery of uncertain power, with no meter, and using an improvised electrode.

Case—April 11th, 1890, Dr. I. H. Darr, of Morley, Macosta county, Mich., sent Mrs. B. to me, aged 46 years, multiparous. At that time she was suffering with interstitial fibroids of the uterus, in fact the whole uterus seemed an enormous fibroid mass. The anterior wall was easily outlined as a tumorous mass extending above the umbilicus, to the right was a pediculated tumor as large as a cocoanut freely movable, hard and apparently fibrous. I could not tell from where the pedicle grew, but believed from the fundus. Examination per rectum revealed a mass in the posterior uterine wall that almost completely filled the pelvis. Defecation was difficult because of the pressure of the mass upon the rectum. Micturition could not be accomplished excepting when patient was in the knee chest position. The catheter showed an urethra fully four inches long, and an instrument with a curve as great as in the male catheter had to be employed to enter the bladder—a soft catheter was useless, as pressure by the “mass” completely obliterated the channel.

For two years she had been the subject of repeated and profuse hæmorrhages. Flooding was the first symptom she noticed of her trouble. For more than a year she had suffered from dyspeptic symptoms, at times vomiting severely. She also had frequent, but as regards periodicity irregular, attacks of what had been diagnosed as chills, followed by profuse sweating and no fever. I was satisfied that the chills were rigors, caused by a formation of pus. Still I determined to try electrolysis before resorting to surgical measures.

The first application April 14, 1890, was of forty-two milliamperes. Negative pole attached to a carbon vaginal electrode; positive to the clay abdominal electrode. I used a vaginal electrode because the os could not be reached either digitally or per speculum. The only effect I could discover from this treatment was an apparent increase in strength. Four days after, April 18, I applied the electrolysis in the same manner, using seventy-five milliamperes. There was again a tonic effect; the feeling as of a heavy weight in the pelvis disappeared.

April 27. Patient called my attention to the fact that the pediculated tumor had nearly disappeared; that the band of her skirts were fully three inches too large for her; that she could micturate by getting on her knees and leaning only slightly forward; and that defecation was comparatively easy. Examination showed the os in nearly normal position. That night she was attacked with profuse flooding. I then introduced into the uterine cavity one of Massey's prepared steel bulbs, attached to the positive pole of the battery; negative to clay electrode over the abdomen, and applied 100 milliamperes for ten minutes. The flooding ceased within six hours, but was followed by a rigor. While I was somewhat worried by the rigor on account of its severity and following so closely on the cessation of the flooding, I did not believe it the result of the treatment, but was stronger in my belief that pus was hidden somewhere.

The next day, April 28, the patient showed the usual improvement that had followed each treatment,

and during the following week her condition was one to inspire the greatest hope. At the end of the week the decrease in the size of the growth was remarkable, the lateral walls of the uterus that could be felt through the abdomen was no longer smooth, but nodulated, the pediculated tumor had entirely disappeared, the urethra was nearly normal in length and position, micturation was accomplished with no difficulty, excepting that a little longer time was required. The knee and forward position had been abandoned. The rectum could be examined with very little pain, its canal was smaller than normal, but defecation was not painful or difficult.

I felt that the time had now come to be aggressive, and May 5 I applied negative interuterine, positive on abdomen, 375 milliamperes. The patient complained of no particular or severe pain, but remained in bed for six hours after the treatment. During the ensuing week she showed continued improvement in everything excepting that the rigors continued, as they had done all through the weeks she had been under my care, they came no oftener, and apparently with no increased severity, and I began to hope that the pus was in the Fallopian tube and would soon discharge itself per os. Sunday, May 11, the patient took a long ride in the country. Upon her return she expressed herself as feeling somewhat fatigued but otherwise no worse. May 13 I prepared to give another treatment, but suddenly—without the least warning the patient was seized with a rigor, the most severe she had ever had. I immediately decided to anæsthetize her, and if possible, find and evacuate the pus. Accordingly, with the assistance of Drs. Van Pelt and Thorp, with Dr. Butterworth in charge of the anæsthetic, I began my exploration. With a large aspirating needle I punctured the anterior tumor through the anterior uterine walls, but got no pus. I then aspirated the posterior tumor through the cul-de-sac of Douglas, and with my Allen's pump evacuated the tumor of about a pint of foetid pus. I then decided to forego further surgi-

cal measures until I was confident that they were required.

The patient rallied well from the anæsthetic. For three weeks she appeared to improve. The discharge of pus through the openings was free but not profuse. (I had enlarged the openings made by the needle, and introduced rubber drainage tubes.) Twice per day I washed out the cavities with dilute peroxide hydrogen. The tumors had all apparently disappeared excepting the one in the anterior uterine wall; that was about the size—judging by examination through the abdominal walls, of the pediculated tumor mentioned in the beginning—hard and smooth. The patient had a good appetite, bowels moved regularly and normally, urine passed freely. No rigors, no nausea, no sweating. I decided to soon again apply the current. How little we know of the hidden workings of Nature. How soon my castle was razed. Suddenly the fire again broke out. The rigors returned with greater force and frequency, and my patient began to fail with great rapidity. I almost gave up hope. After two days from the return of the rigors, she was attacked in the night by the most severe chill I had ever, in nearly a quarter of a century of practice, seen. I at once decided that as soon as the daylight came, to make an exploratory incision, and to then meet the indications presented, feeling certain, however, that hysterectomy was the only thing to be done.

At 8 o'clock the next morning, June 8, the patient was anæsthetized by Dr. Camelon, and with the assistance of Drs. Turner, Miller and Thorp, I began the operation. I made a long incision through the skin in the median line of the abdomen, going directly to the linea alba. I caught the few bleeding points with the hæmostatic forceps, and rapidly passed down to the peritoneum. Beneath it I could see the tumor, but, strange to say, there was no peritoneal adhesion. I then with my scissors laid open the peritoneum, catching it at intervals on either side with T-forceps. The tumor did not "come up" into the wound as is usual in such cases, but lay as if held

down. Examination showed it to be a true suppurating fibroid, almost ready to burst.

I plunged in my aspirating needle, but could with my pump attached get not more than an ounce of pus. I then passed my hand back of the tumor, raised it as high as I could, had my assistants press the parietes as close around it as possible, then removing my hand I packed a soft towel around the tumor close to the abdomen, and laid the cyst open. It contained fully a quart of pus and caseous matter;—because of the latter I had been unable to aspirate. After emptying the tumor I again introduced my hand into the peritoneal cavity, and in attempting to raise the fundus, I ruptured a posterior tumor, one that I had not been able to discover by any previous examination. The amount of pus discharged into the abdominal cavity it is impossible to estimate; but the quantity was great, and the odor most offensive. By this time the patient was very weak; sweat as cold and clammy as the death sweat broke out; the pulse began to fail, and my patient was on the brink of the river Death. Dr. Thorp, by my direction, immediately began the hypodermic injection of whisky, and I continued my exploration, knowing that what was done must be done quickly, and feeling that every minute of time lost in waiting for an improvement in her condition was criminal. I traced the posterior tumor to the stomach and liver, broke its adhesions to those organs and the intestines. The adhesion to the liver was of a surface at least three inches in diameter. The liver surface was rough, granular and friable. I immediately, with my dull spoon curette, removed all of the friable liver tissue. I then decided to hysterectomize, but as I traced the tumor lower I found the adhesions denser, and finally found an adhesion to the abdominal aorta; I feared to break that adhesion. I then passed my hand into the right then the left pelvis. The ovaries were granular, and degenerated to such an extent that I picked them off as easily as I could pick an over-ripe pear from its stem, and without a drop of hemorrhage. I cut off as much of the

tumor tissue as possible and then passed a drainage into the rectum and another into the vagina through the cul-de-sac.

I then freely and thoroughly irrigated the abdominal cavity. What was I to do with the anterior tumor? To amputate it would leave a surface to suppurate; to return it to the cavity was not to be thought of. I finally drew it as far through the wound as I could; then with my forceps I drew the peritoneum well up and around it; then with interrupted silk sutures, I stitched it to the peritoneum and muscles. After fastening the tumor in the wound, I stitched the peritoneum together with interrupted silk sutures, and followed in like manner with the muscles, passing each muscle suture through the loop of the peritoneal suture immediately below it, following with sutures in the skin, introduced in like manner. I had fitted a large curved glass drainage tube well into the peritoneal cavity, passing it down and near to the spot of adhesion on the liver. With a large curved trocar and canula I went through the tumor (at the bottom of the cyst) into the uterine cavity. I withdrew my trocar, passed a rubber drainage tube into the canula and then withdrew the canula, thus one end of the tube emptied into the vagina through the os; the other end was open on the abdominal surface. Iodoform was then freely applied, carbolated cotton and gauze placed over the wound, the bandage applied and the patient returned to bed.

She rallied from the anæsthetic, and although she was weak and her condition one not to warrant hope, she persisted that she would not die. Within twelve hours she began vomiting. The matter vomited was different in character from any before ejected; it was mucus, in which were great quantities of the so-called coffee-ground substance. For four days the emesis continued, the vomited matter growing blacker and increasing in amount. The patient grew weaker and for the first time gave up her hopes of recovery. Everything I had given had been of no benefit. I finally gave infusion of peach-bark, as cold as ice could

make it, and gradually the nausea disappeared and the vomiting ceased.

The wound looked healthy—drainage was free through all of the drainage tubes. On the fifth day she had a slight rigor. Since the operation I had, every 8 hours, introduced the catheter, and the urethra was quite irritable, as the chill followed the use of the catheter, I considered it rather of reflex origin than septic. Examination showed slight pus formation in the sutures of the skin. I therefore cut the skin with my tenetome from each suture through, not cutting the loop of the suture. Usually the skin between the sutures is adherent, and by cutting through from entrance to entrance of suture, you have a loop to the sutures in the muscles and peritoneum, and in proper time you can, by slight traction, remove the deep sutures. In this case the skin had not adhered, but immediately gaped. I then discovered that the muscles also were as separate as at the time of the introduction of the sutures. The peritoneum was adherent and covered by healthy granulations. I decided to apply adhesive straps across the wound and allow the wound to fill from the bottom by granulation, keeping it well powdered with iodoform. From this time on improvement was rapid and steady; by the 14th day every suture was removed; by the 18th day every drainage was withdrawn; the wound rapidly healed by granulation, leaving *no* hernia; by the middle of the fourth week the patient was able to sit up; before the end of the 5th week she walked about the house and rode a short distance in the carriage, during the sixth week she rode to and from South Bend, did some shopping, and during the week did quite an amount of sewing. Six weeks and two days after the operation she returned to her home *well*, though not yet fully restored in strength.

This case had many points of interest, not the least of which was the effect the electricity had. I do not believe that a surgical operation such as hysterectomy or oophorectomy could, before its use, have been

done successfully, the mass was so large, and the adhesions so great that death must most certainly have followed either method. However, that is mere speculation. I might believe that the electrolysis caused the suppuration were it not for the fact that I have used the same ampereage in a previous case and suppuration did not follow, and since operating upon Mrs. B. I have operated upon a lady of Mishawaka, whose condition as regards suppuration was almost identical—unfortunately the lady died 18 hours after operation. This patient had never been treated by electricity. The rapid and really remarkable decrease in the size of the growths, the fact that the rigors before applying the electricity were of the same character as after, cause me to believe that the electricity really saved her life.

Another point of interest is the apparent harmless condition of the confined pus (in her case), the amount flooding the peritoneal cavity after the rupture of the tumor was great, and caused grave doubts, rather than careless hopes, as to the outcome. The curetting of the liver I think was wise, and although an operation not necessarily fatal, it is one we should well consider before performing.

The second case was one of submucous fibroid, the lady aged 26, married, multiparous, had suffered four years with excessive floodings—so profuse that she was anæmic and was a great part of the time confined to her bed. May 5, 1890, she came under my treatment, she was bleeding profusely. The os was dilated nearly large enough to admit my index finger. I thoroughly washed out the uterus and vagina with hot antiseptic solution. Mer Bi chl 1 to 1000, and introduced into the uterus the positive electrode, Massey's bulb—large clay negative electrode over the abdomen, and gradually turned on the current to 75 milli., applying it for ten minutes. Attempting to remove the electrode I found it "glued" and I had to reverse the current, using 20 milli. five minutes, when I easily removed it. Flooding ceased within two hours. Four days after, May 9, examination showed

the os somewhat more dilated. I then applied negative interuterine, 45 milli. ten minutes. Slight expulsive pains began within a few hours after the treatment, and continued two days, no flooding. After an interval of one week, May 17, I again applied electricity, negative intrauterine, 75 milli. After five minutes contractile pains began, and were so severe that I had to desist. The os rapidly dilated, the pains increased in intensity and severity, with no flooding. About six hours after the treatment she expelled a pear-shaped fibroid tumor, weighing ten ounces. The patient made a rapid recovery, and is now in nearly perfect health. Menstruation has twice shown itself normally—both as to time, quantity and character of the discharge.

This case could have been treated purely surgically without great risk. The os might have been dilated forcibly or by tents, a snare thrown around the tumor and it removed either with the cautery or ecraseur. But considering the fact of her debilitated condition, the danger (although slight) of destroying a part of the uterine wall with the loop, the danger of subsequent endometritis, from the forcible dilatation and removal, was not electricity a far better remedy?

F. L. G., aged 39. Residence, Oklahoma; occupation, government officer. For many years he has been a plainsman and mountaineer, subject to all the irregularities of life and exposures of men in that far and sparsely settled country. About two years ago he was attacked with diarrhœa, which was quickly controlled with morphine. Frequent attacks of diarrhœa and pain followed; constipation and colic were also frequent. Pain was at all times relieved by morphine; the constipation by cathartics. Enemas were frequently used, but did little toward emptying the bowel. The use of morphine *pr. orum* was finally succeeded by morphine hypodermically, until the patient became a victim of the fiend. From ten to twenty hypodermics of from one-fourth to one-half grain each, were used during the twenty-four hours. During the month of December, 1889, he came East

and put himself under the treatment of a much-advertised, if not a celebrated rectal specialist, who diagnosed his case as one of hæmorrhoids, and treated a few pile tumors with hypodermics of carbolic acid. Getting no better he went to Washington, D. C., and there consulted several medical gentlemen eminent in the profession. Strange as it may seem, each diagnosed the case to suit the humor he was in, though not one of them making more than an ocular examination of the anus; and none of them diagnosing stricture. While in Washington he failed in strength rapidly, and lost flesh until he was a mere skin-covered skeleton, his weight being but 85 pounds. Considering his case one past help he went to Fremont, Ohio, to die in his childhood's home. Upon arrival there he was suffering intensely with distension of the intestines by fæcal matter and gas. Dr. Stamm introduced an aspirator needle and allowed the gas to escape, thus giving him great relief. April 29 I was telegraphed for and reached his bedside at 8 A. M., April 30. I found him so weak and suffering so greatly that I declined to examine him except under an anæsthetic. Dr. Louis Gessner at once began its administration. After he was thoroughly anæsthetized he was placed on the table and an examination made, revealing a complete closure of the rectum. The whole pelvic cavity was filled with a mass of exudate which to the touch appeared to be scirrhus in its character. It was impossible to find a canal. The operation of colotomy was decided upon, and with the assistance of Drs. Stamm, Pontius and Brinkerhoof, with Dr. Gessner in charge of the anæsthetic, the operation was done. I made an incision through the skin beginning at the left superior anterior spinous process, cutting downward and inward about four inches. The fibers of the different muscles of the abdomen were then separated with the finger, down to the peritoneum. That was cut through with the scissors, and each side of its cut surface caught by T-forceps. The colon was then sought for and with no great difficulty found. One

side of it was brought through the wound and the peritoneum and muscles were stitched with silk sutures around and to it. After the sutures had been placed, the junction of the bowel with the muscles, was surrounded with a "rope" of absorbent cotton, well saturated with iodoform collodion. After the collodion was set and the parts well sealed, an incision was made transversely of the gut. Great quantities of gas escaped, and then irrigation was done, which emptied the bowel of an enormous quantity of faecal matter. Large rubber drainage tubes were inserted, the wound dressed and the patient returned to bed. He soon rallied from the ether, and I left him in charge of Drs. Brinkerhoof and Stamm. I frequently heard from him, but the information was not satisfactory. June 6 he came to my house. He had gained somewhat in flesh and strength; he had given up the hypodermics, and was using McMunn's Elixir of Opii as a substitute. The artificial anus was doing him good service. I at once took the opii from him and forbade the use of it, or any of its preparations; gave him a thorough Faradic bath and put him to bed. He had filled himself pretty full of the elixir while on the cars, and being very tired had a good night's rest. The next day he was restive and listless. I watched him closely that he should have no opium. At 7 o'clock he took a Faradic bath and went to bed. Within two hours he was delirious—his nervous system was calling for the opiate. I then thoroughly saturated his hair with warm water and gave him through the brain, a treatment of galvanism, 5 milliamperes for ten minutes. He soon thereafter went to sleep, and slept about an hour, when he awoke refreshed. He remained awake for a short time and again began to show symptoms of delirium. I at once repeated the galvanism. After the second treatment he slept nearly four hours; awakening he was rested, and the delirium not returning I applied no more that night.

For five nights the same play was enacted, sometimes two, occasionally three treatments would be

necessary. On the sixth night I gave him a galvanization immediately after his Faradic bath, and he slept for seven hours. From that time he had no more battles with the habit. I, however, continued the treatment; sometimes, if he was very tired, I would give him a treatment during the day; he said it rested him. After I had broken the habit, I decided to see what electrolysis would do for the stricture. I accordingly had my assistant, Dr. Camelon, place him under an anæsthetic, and applied negative in rectum, positive over the abdomen, using on the negative a No. 13 F. urethral bulb, using 5 milli. for 20 minutes, when the bulb passed through the stricture. In two days thereafter he was passing small amounts of fæces through the rectum. Fourteen days after the treatment I again applied the current, poles, as before, using a No. 30 F. urethral bulb, 7 milli. for ten minutes. He suffered much pain during the treatment, but lost no blood. Two days after, I irrigated the rectum through the artificial anus and washed out per anus quite an amount of fæcal matter. Three days thereafter he began to pass fæces of good size and consistency through the anus. The discharge through the artificial anus ceased, and fearing that the abdominal wound would close, I introduced steel sounds to prevent so undesirable a result. After a week of no discharge through the wound, I again irrigated. After the colon and rectum were thoroughly cleansed, I passed a soft-rubber catheter into the wound, my finger into the rectum and found the stricture not over an inch in extent. At this time he was feeling so well, and his business requiring his attention, he started for his home in Oklahoma, July 20th; at that time he weighed 131½ pounds. I did not want him to go, his treatment was not finished; and although no desire for the narcotic had been shown, I was not confident that pain or fatigue might not tempt him to again use it.

I accompanied him as far as Chicago, and had Charles Truax & Co. fit him with an aluminum tube.

The tube was made of aluminum because it is light, ductile and non-corrosive.

As before said, the treatment was not finished, still the effect produced by the few electrolytic treatments, and the galvanizing of the brain convinces me that but a short time would be necessary to completely cure the stricture, and to remove all desire for opii.

How did galvanism antidote the morphia habit? I theorized much and my conclusions are these. Opii and its narcotic principles, morphia, etc., cause sleep and relief of pain by producing an anæmia of the brain. After the effect passes away a hypæmia supervenes. Frequent doses of the drug causes frequent contractions of the vessels, the following hyperæmia is increased after each dose spends its power. The vascular tonicity is destroyed and the normal caliber of the vessel is lost, the loss of normal caliber permits, without the opiate influence, an increased flow of blood through the brain, which increase causes intense nervous suffering. The galvanic current restores tone to those vessels. The first action is to produce anæmia, by contraction of the cerebral vessels.¹ The reaction is not so great as after opiates, still hyperæmia follows just as it does after the primary effect of the drug has passed. That hyperæmia is not, however, so great, because of the tone given to the vessels by the current. After each application the dilatation following the anæmia is less than before. Such being the case will not those vessels become normal in tonicity, and cannot the terrible effects of the drug be overcome? If so, we have a cure for the habit, and the days of curing (?) it with morphia are numbered.

DERMOID CYST.

Dr. J. B. Greene said: This specimen is a dermoid cyst that I removed in 1883. It was filled with a substance that was sebaceous in character, and weighed, when removed, 58 lbs. By everting and turning it

¹ The post-mortem of Kemmler, executed by electricity since this paper was written, showed the brain to be anæmic.

out we find great tufts of hair all through it, part of the ilium or scapula, I can't tell which—it resembles both very closely. Here is a very close resemblance to the fœtal head showing, the inferior maxillary and tongue, and on one side is a resemblance to the penis and scrotum. There are a great many teeth scattered through, some incisors and some molars.

The lady from whom this was removed was 32 years of age, unmarried, and I believe a virgin. Her mother told me that at 5 years of age she began to complain of pain in her right side, and that a growth was noticed which continued until this was removed.

We can theorize as to what this is, but we don't know. My opinion is that it is a one-sided development, that is that the ovum when ripe is not discharged—I believe that the female can ovulate in infancy—that the graafian vessicle did not rupture, and the ovum continued on to a one-sided unimpregnated development, just as we will sometimes see a blasted ear of corn on a single stock where no other stocks have been near impregnate it with pollen.

Dr. Hoadley: I should like to hear Dr. Greene explain the presence of dermoid cysts in other parts of the body where there are no graaffian vesicles to rupture.

Dr. Greene: I have seen a number of dermoids and never saw one removed from any other part of the body except the testicles or ovaries or broad ligaments in which there was more than spiculæ of bone. There are bones here that are well formed, and teeth that are well formed, but as I said before, it is mere speculation; I don't know, I don't believe any one knows and I don't believe any one ever will know. The lady made a rapid and in every way, a satisfactory recovery.

