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EXTIRPATION OF THE UTERUS BY ABDOMINAL SECTION.1

BY JAMES R. CHADWICK, M. D.

On May 28, 1875, I was called to Mrs. C., a patient of Dr. Kingsbury, of Holbrook, with a view to the removal of an abdominal tumor. She was fifty-four years of age, had had a child and a miscarriage in early life. She was in good health until a tumor appeared in the left side of the abdomen, and uterine hæmorrhage set in, about six years ago. The flow of blood persisted uninterruptedly for three years; during the last three years it recurred profusely at intervals. The growth of the tumor had been slow but continuous. Menstruation had ceased eighteen months before. The patient was fairly nourished, but was gradually losing flesh and strength. She had been confined to the house for nine months, owing to constant pain in the abdomen, apparently caused by the pressure of the tumor. Latterly she had been subject to frequent attacks of headache, vomiting, and convulsions, the latter apparently of hysterical nature.

Examination. The girth at the umbilicus was thirty-four inches; half-way between this point and the pubes it was thirty-seven inches. The lateral symmetry of the abdomen was perfect. A firm, perfectly round tumor was felt, rising two inches above the navel and resting upon the brim of the pelvis. Bimanually the mass was recognized as being unmistakably the body of the uterus, enlarged by a fibroid growth. Three inches obliquely above and to the left of the navel was a body as large as a small potato, projecting from the surface of the uterus. It was either an enlarged ovary or a second fibroid. The abdominal walls were very lax, and freely movable over the tumor. The cervix was immediately behind the pubes but could be readily displaced to the hollow of the sacrum by inserting the left hand above the fundus and tilting it forward. The uterine sound could not be introduced more than an inch. All other organs and functions of the body were normal; the heart's action, however, was quite irregular, intermitting every fifth beat; the pulse was of fair strength.

In my opinion there was no possibility of removing the tumor per vaginam, owing to its size, and I was timid about undertaking the abdominal operation, with its great risk, on account of the weak action of the heart. I consequently declined interfering, in spite of earnest solicitations, until all other means for the relief of the patient's sufferings had been tried.

It is needless to specify the various remedies resorted to without avail during the summer; let it suffice to say that at the end of three

¹ Read before the Suffolk District Medical Society, October 30, 1875.

months the condition was unchanged, except that under the administration of quinine the intermittence of the heart had become much less frequent. Actuated by the following considerations, I finally consented to operate, provided Dr. Knight failed to discover evidence of organic lesion of the heart: the woman's sufferings in one way or another had been so great during the past year that she had not been out of the house, had had no enjoyment of life, and had been of no service to her friends; there seemed to be no chance of relief by other measures; the patient and her friends fully realized the danger of the operation, and yet claimed it persistently. The prognosis I gave was that the chances of recovery or death were equal; this was a little more favorable than is shown by the sixty odd operations that have up to this time been placed on record, but many of these were done in very desperate cases, without suitable instruments, whereas the local condition in my patient was the very best that could be hoped for; she was, moreover, calm, hopeful, and came of good and healthy stock.

Dr. Knight reported as follows: "I found on examination occasional intermittence of the heart. It was difficult to determine its size on account of fat and the large size of the mammary gland. The sounds were of fair strength, the pulmonic second sound, however, being more distinct than the aortic. There was a systolic souffle heard over the ensiform cartilage, not propagated far away. There is no proof of serious organic disease."

I operated in Boston on Saturday, September 18, at ten A. M., with the assistance of Drs. Lyman, Ellis, Nichols, J. Homans, Sinclair, and Boardman. With the patient under the influence of ether, I made an incision eight inches long in the median line of the abdomen, lifted the enlarged uterus out of the abdominal cavity, and found entire freedom from adhesions as expected. I next affixed a Wells' clamp to the cervix and broad ligaments, but fearing that the latter might not be properly held by the clamp, I passed a double whip-cord through the cervix and tied it on either side so as to include the broad ligaments. The body of the uterus, containing the fibroid, was then cut away. In spite of my precautions the left broad ligament slipped from out both clamp and noose; the large vessels ramifying in it sank into the pelvis and bled considerably before they could all be secured. The woman's pulse at this time became imperceptible, but soon rallied under the influence of repeated subcutaneous injections of brandy. I sponged out the peritoneal cavity until it was entirely free from blood, brought the clamp into position without much tension upon the pedicle, closed the wound with silk sutures, applied the common support of cotton-wool secured by adhesive plaster, and put the woman to bed in a rather prostrate condition. The operation lasted a little over an hour.

The patient rallied from the state of depression in the course of two

hours; she had some pain during the afternoon, requiring morphine; there was a little gentle vomiting. Pulse 125, temperature (vaginal) 100°. Beef-tea and brandy enemata were administered.

Sunday, September 19, A. M. Pulse 140, temperature 1005°.; slight vomiting arrested by ice-pill in a teaspoonful of brandy; quinine. Four P. M., pulse 165, temperature 101.2°. No pain; sweating, retching.

From this time the pulse gradually fell until it reached the normal on the fourth day; while it was elevated there was no intermittence, but as it sank, the old irregularity again manifested itself, and became so marked on the sixth day that I was repeatedly unable to count fifty beats in the minute. The temperature fluctuated between 101.6° and 102.2° until the sixth day, when it began to sink.

The clamp fell off on the sixth day, as did most of the sloughing end of the pedicle. The wound was cleansed and disinfected with salicylic acid most thoroughly every four hours. There was at no time any abdominal tenderness, distention, or even flatulence. The bowels responded to enemata on the fourth day. The urine was drawn with a catheter every one or two hours. All the abdominal sutures except the one next to the pedicle were removed on the seventh day.

On the seventh day the pulse was normal; the temperature had fallen to 101°; the tongue was clean; the appetite was good; the skin felt naturally; the slough had all come away from the pedicle, which was suppurating nicely, and drawing together; the bowels were acting freely; there was no peritonitis or flatulence. I felt that my patient had escaped all the natural dangers attendant upon the operation.

At eleven o'clock Mrs. C. had a slight chilly sensation running down her spine; the temperature and pulse, however, had not risen. In the afternoon she complained of sore throat, which grew worse toward night, but did not arouse my suspicions, as the pulse was only 80 and the temperature had actually fallen half a degree since morning. By midnight it became evident that tetanus had set in. The respiration became so difficult that, dreading lest the abdominal wound should be torn open by the straining, I supported the abdominal walls by fresh broad strips of adhesive plaster, but in spite of this precaution my fears were soon realized. After a severe paroxysm, I found a large mass of intestines protruding from the wound; it was with the greatest difficulty that I finally succeeded in replacing them within the abdominal cavity and sewing up the wound again.

Toward morning the breathing was so labored that at my request Dr. Lyman performed tracheotomy with much temporary relief. The patient lingered, with but slight benefit from enemats of chloral, and died near the end of the eighth day.

An Autopsy, made by Drs. Fitz and Cutler and myself, demonstrated he internal organs were perfectly healthy. There was no trace

of lymph in the peritoneal cavity except in the vicinity of that part of the wound which had been forced open twenty-four hours before death. There was not a drop of serum or a trace of blood or lymph in Douglass's pouch. I have here the pedicle, made up, as you see, of the cervix uteri and right broad ligament; the cut layers of the left ligament are here plainly visible, bounding this long denuded surface of cellular tissue, which was taken up from the floor of the pelvis. You will notice that the peritoneum up to the very edges of this surface, as well as entirely around the cut surface of the pedicle, is free from all signs of inflammation. The pedicle had evidently been firmly united in its whole circumference to the muscular layer of the abdominal walls.

Nothing could more fully corroborate the perfect success of the operation per se, as indicated by the clinical history, than the condition found at the autopsy.

The specimen, removed at the operation, weighed about four pounds, was oval in shape, measured twenty-two or twenty-three inches in its greatest circumference, and had projecting from its surface two or three potatoid tumors, one of which had been recognized during life; they were ordinary fibroids of dense structure. The left ovary was the seat of a small fibroid. The uterine cavity passed up posteriorly to the principal mass for the distance of seven inches, as had been discovered at one time in the course of the summer, when the os had been dilated with sponge-tents and the sound passed up to the fundus. An incision into the large tumor in the anterior wall of the uterus showed that it was of a coarse trabeculated structure, with interstitial spaces lined with a delicate membrane. The whole mass was inclosed within a capsule, which was readily enucleable from the encompassing uterine walls. Only a comparatively thin wall of uterine tissue interposed between the tumor and the cavity of the uterus.

In conclusion, I feel justified in claiming that the result in this case, although fatal, should not depreciate the operation in the eyes of the profession, but should encourage them to adopt the opinion of Péan, who, after operating in twenty cases with fifteen recoveries, asserts that the danger is no greater than in ovariotomy. The cause of death here was one that is common to all surgical operations, great or small, and can in no way be regarded as a danger peculiar to the extirpation of the uterus.