STRONG (C. P.)

TOTAL EXTIRPATION OF THE UTERUS

Improved Method of Treating the Stump.

BY

CHARLES P. STRONG, M. D.,

PHYSICIAN TO OUT-PATIENTS, MASSACHUSETTS GENERAL HOSPITAL; ASSISTANT SURGEON, FREE HOSPITAL FOR WOMEN; ASSISTANT IN GYNÆCOLOGY, HARVARD MEDICAL SCHOOL.

presented by the author

Reprinted from the Boston Medical and Surgical Journal of December 1, 1892.

BOSTON:
DAMRELL & UPHAM, PUBLISHERS,
No. 283 WASHINGTON STREET.
1892.

S. J. PARKHILL & CO., PRINTERS
BOSTON

TOTAL EXTIRPATION OF THE UTERUS: IMPROVED METHOD OF TREATING THE STUMP.[1]

BY CHARLES P. STRONG, M.D.

It is not my intention to discuss the relative value of different operations for removal of the uterus by high amputation as against total extirpation, but rather to point out the merits which may attend the use of a Trendelenburg posture, and removal of the uterus in that position by means of abdominal incision instead of the more commonly used vaginal extirpation.

The extension of the disease into the broad ligaments, the presence of adhesions, the binding of the uterus backward, and of the ovaries and tubes together in one mass, render extremely difficult the possibility of a thorough and complete eradication of the disease, or a removal of the whole organ by simple vaginal incision.

The operation also leaves, as commonly practised, a free opening from the vagina into the abdominal cavity, which is closed, perhaps by stuffing the vagina with iodoform gauze, or some such method.

The operation which I wish to present to your notice is one which I believe occupies the position of combining the advantages to be gained by the ordinary vaginal form, that is, the complete removal of the organ; it also enables the complete closure of the wound between the vagina and the abdominal cavity by its natural covering, that is, the peritoneum, and leaves less risk of infection, less chance for septic absorption of any kind than any other operation.

[1] Read before the Surgical Section of the Suffolk District Medical Society, November 2, 1892.

It is not in any one of its particulars essentially new; but the combination of them all is, I think, recognized to be of advantage by few, if any operators.

I think Freund's operation, which was that of total extirpation of the uterus through the abdominal cavity, was rendered so difficult by the position of the patient, such as would be assumed in the case of an ordinary laparotomy, that it has fallen practically into disuse. By the Trendelenburg posture, however, this is obviated. The field of view is so extended and broadened that the operative technique becomes a comparatively easy matter.

Since the first of May I have performed this operation seven times. In only one of these cases do I think the removal of the organ would have been possible by the ordinary vaginal method of operating. My mortality has been two out of the seven. Both of these were desperate cases and were unpromising from the start, but the election was made by the patient to have the operation performed rather than to suffer death from the cancer. I should never have undertaken the cases had I been obliged to rely upon the vaginal method alone.

The entire success of the operation, I think, depends upon securing the arteries of the broad ligament before removing the uterus, dissecting off from the anterior and posterior walls of the uterus a good layer of the peritoneal investment, so that the closure of the vaginal-abdominal wound may be made complete; with this is also stripped back the bladder and rectum. With this done there is no danger of hæmorrhage, there is no danger of infection; and malignant outcroppings into the broad ligament and along adhesions between the uterus and the intestines are easily felt, seen and secured.

The cases reported in detail will afford a certain

similarity; so that, after describing the various steps of the operation, I shall merely give in the individual cases the particular point that made me elect this operation in preference to the more common one. In none of these, I may say, would the operation of high amputation have afforded any prospect of removal of the disease. The sutures employed have been uniformly silk, the single exception is the continuous suture which unites the peritoneal surfaces at the completion of the operation, which is of catgut carefully prepared; and I have never seen septic absorption from it. One death of the two came in a patient in whom the investing peritoneum was so thick, and also evidently the seat of malignant disease, that I did not dare to leave any behind, and so removed it entirely and adopted the usual method of vaginal drainage by iodoform gauze. Although there was no evidence of sepsis in this case, yet I feel the patient's chances would have been much better could I have closed the wound in my usual manner.

I thoroughly disinfect the vagina by soap and corrosive sublimate, then scrape away all the disease possible, and at the same time employ the Pacquelin cautery and pack with iodoform gauze. This method secures as much asepsis as is possible in a vaginal operation. Opening the abdomen, the fundus of the uterus is seen snugly reposing against the back of the pelvis away from the bladder. With double hooks I draw the fundus as closely as possible to the abdominal wound, pass a ligature of silk with aneurism needles to include the ovarian artery and as much as possible of the broad ligament, pass the second suture including the remainder of the broad ligament and the uterine artery. I similarly secure the vessels of the opposite side, and control any bleeding from the uterus by compression-forceps. Then dissect away all the

peritoneal investment possible, posteriorly and anteriorly; then cut across below the junction of the cervix into the vagina; and rapidly remove the uterus.

If the disease extends down the vaginal walls I endeavor to get below this disease before opening the vagina. I have removed down to within less than an inch of the vaginal orifice through the abdominal cavity.

Believing that the tendency of the disease is greater to return if the tubes and ovaries are left behind, it has been my rule to remove these.

The operation is accompanied by very little hæmorrhage, because the uterine ends of the vessels, as severed, are held by compression-forceps. A single large flat piece of gauze laid across the intestines at the upper end of the abdominal wound is sufficient to protect the general abdominal cavity from any fluid or from blood, which forms a pool in the retro uterine pouch exactly as with the patient in her ordinary position. The toilet of the peritoneum by this means, therefore, becomes very simple. A continuous suture of catgut closes in the peritoneum, placing peritoneal surface against peritoneal surface, thus securing a very speedy obliteration of any possibility of infection extending from the vagina into the abdominal cavity.

In my first operations I drained through the vagina with long ligatures, as suggested by Dr. Krug in his operation for removal of fibroids. Without going into details of separate cases, I will briefly indicate what advantage I gain by this method of operating over the more common one.

In the first case, the disease invaded the right broad ligament to such an extent that after removal of the uterus, I extirpated the ligament out to its junction with the pelvic wall. I also removed all the vaginal wall, anteriorly, and posteriorly to within about one inch of the vulva.

In the second case, there were adhesions connecting the uterus with the intestines, with the bladder, and with the ovaries and tubes, which adhesions also were in part the site of malignant disease. These bands I was able to sever entirely from the intestinal end, thus preventing a possible return through disease there. Also, in this case, both the vagina and the broad ligaments had to a certain extent become affected, and these were also removed.

In the third case, along the top of the broad ligament there ran a single piece of small intestine, which lay exactly parallel with the top of the ligament, and which was collapsed, and could not have failed to have been included either in suture or in compression forceps, which might have been introduced from below upwards.

The death of the patient from the ordinary vaginal operation would have been certain, from the compression and sloughing of this portion of the small gut.

The third case was one, also, of very marked adhesion, everything being bound together, which would have rendered it very difficult, though not impossible. In cases one and three, fibroids were complications also present, and to add to the dangers of an attempt at removal through the vagina.

Case four was a very marked case of adhesions. The woman was so enormously fat that I doubt it having been possible to have reached from the vagina up to the top of the broad ligaments, certainly not to have differentiated them from the adherent and matted mass of intestine surrounding. The vagina was also implicated nearly to the vulva. This case was the one previously mentioned, in which I was unable to secure enough peritoneum to close the abdominal wound. The patient died.

Case five was again a case of universal adhesions and fibroids as well as malignant disease.

In case six, everything was adherent, and there was also a cyst of the broad ligament.

In case seven there was senile atrophy of the vagina, with too large a uterus to be easily brought down. As to the result of the operation from a statistician's point of view, two deaths out of seven cases seem a large per cent. That means, however, that six of these were cases in which, I think, few operators would have dared to hope for a successful result from a vaginal operation, and none from high amputation.

One of these deaths was a woman with fatty heart, fatty degeneration of various organs, enormous amount of fat in the abdomen, and with drainage vaginal-abdominal. Her operation was during that hot, prostrating weather in July; and after doing very nicely for three days, she suddenly collapsed one night, and died, but not from hæmorrhage. The other death was from shock following the operation. The operation was tedious; and the dissection out of the intestines was extremely difficult in every way. There was also the complication of a cyst in the broad ligament to add to the danger. The woman died, according to the result of the autopsy, of general peritonitis, — a condition which existed at the time of the operation, but with no septic peritonitis.

In all these cases, before and after operation, microscopical examinations of portions of the uterus were made by Dr. Whitney or by Dr. Gannett. There could be no question, in any of them, as to the malignant nature of the disease. In only one of them has there been any secondary deposit. This was a case of malignant medullary cancer, in which the broad ligaments and the uterine peritoneal investment were all affected by the disease. In this case there has been return, not locally, but at the meatus urinarius, a spot entirely distinct and separate. I doubt if the dis-

ease had not become systemic, as stomachic troubles which have ensued would point to the same conclusion.

My other cases are entirely free as yet, although, of course, the time is very short. Still, it is very satisfactory to realize that we have in this operation a chance of giving some assistance to those desperate cases where a woman is bleeding, is rendered uncomfortable and disgusting from the presence of a sloughing mass, and which would not be undertaken to be cured by any other means. The Trendelenburg posture is one which gives the greatest advantage in manipulations in the pelvis for the removal of growths of all kinds, with the possible exception of large ovarian tumors, in which it is unnecessary.

In those cases where we have to deal with adhesions, in which we deal with fibroids, in which we deal with tumors involving the layers of the broad ligament, or of tumors or growths which are liable to bleed, it is invaluable; and the more one works with it, the more familiar he becomes with its possibilities, the more reluctant he will be to abandon it for the old method with the shorter incision, and the greater dangers from loss of blood, tearing of the intestines, or manipulation of the intestines. I know no disadvantages except the one of a longer abdominal opening. The patient certainly looks extremely livid, but circulation is unimpaired. I have never seen an after result which I felt to be unfavorable, due in any way to a prolonged operation in this posture; and one of mine, that was the first one, lasted nearly three hours.

As Dr. Krug of New York has well said in explaining this position, you not only can feel and have all the advantage of your tactile ability, but more than all you have in addition to that, the opportunity of seeing, which is in many of these cases of extreme value.