

Wathen (W.H.)

al

From the Transactions of the American Gynecological Society.

Phila., 1897, $\frac{XXII}{253-261}$

VAGINAL HYSTERECTOMY

FOR

UTERINE MYOMATA AND DISEASES OF THE ADNEXA.¹

BY

WILLIAM H. WATHEN, M.D., LL.D.,

Professor of Abdominal Surgery and Gynecology in the Kentucky School of Medicine ;
Fellow of the American Gynecological Society and of the Southern Surgical and
Gynecological Society ; Gynecologist to the Kentucky School of Medicine
Hospital and to the Louisville City Hospital, etc.,
Louisville, Ky.

LIBRARY
SURGEON GENERAL'S OFFICE
DEC.-20-1897
607

(With nine illustrations.)

To Péan is mainly due the credit of demonstrating the indications for and the success of vaginal hysterectomy in the treatment of tumors of the uterus and the uterine adnexa, and other diseased conditions in the pelvic cavity ; and as his experience is greater than the experience of any one else, the following extract from a letter received from him may be of interest :

"Since 1882 I have shown, as you will see, that the vaginal method is preferable to the abdominal for all small tumors of the uterus and adnexa ; that vaginal hysterectomy is preferable in operating for cystic or solid tumors of the uterus and its adnexa, the size of which does not exceed the fetal head and does not extend above the umbilicus ; that by this new method we may remove without danger (two to four per cent) the uterus for fibroma, sarcoma, cysts, or cancer, with the greatest facility, if one employs my method of using preventive clamping forceps and morcellation of the tumors and diseased organs. By this

¹ Read before the American Gynecological Society at the meeting in Baltimore, May 28th, 1895.

presented by the author

new method an experienced surgeon may avoid lesions of the adjacent organs, even if there are grave complications, general adhesions, pelvic suppuration, etc."

From a more recent letter from Péan, Paris, May 3d, 1895, giving the statistics of his vaginal hysterectomies and the conditions for which the operations were performed, I quote the following: "The operations were performed approximately in 10 per cent of cases for myomata, in 20 per cent of cases for simple inflammation of the uterine adnexa, in 30 per cent of cases for simple pelvic suppuration, in 40 per cent of cases for complicated pelvic suppuration and intraligamentous cysts and myomata. The mortality in all these operations is about 3 per cent."

The following is an extract from a letter from Richelot, Paris, May 7th, 1895:

"In my book¹ were reported 230 observations concerning facts that interest you. Of this number there are 43 uterine myomata with one death; 61 pelvic suppurations with five deaths; 126 non-suppurative diseases (hematosalpinx, parenchymatous salpingo-ovaritis, hydrosalpinx, etc.) with five deaths, which gives a mortality of 4.78 per cent.

"Since the end of the year 1893, at which time the statistics in my book cease, I have made in the space of one and a half years 154 operations for diseases not cancerous. Here are the results: 22 uterine myomata with one death, 78 non-suppurative diseases with one death, 54 pelvic suppurations with three deaths, which gives a mortality of 3.68 per cent.

"In uniting the two series I find 384 cases with 16 deaths, which gives a general mortality of 4.16 per cent.

"It is to be remarked that the results of the second series are superior to those of the first, though the proportion of pelvic suppurations is much greater.

"It is also to be remarked that the six deaths of the second series occurred in the first five months, and that I have had since the month of June, 1894, nearly a year ago, an uninterrupted series of 112 recoveries, of which I count 36 suppurations nearly all complex, and 19 fibroids nearly all large and extracted by laborious morcellation.

¹ "L'Hystérectomie vaginale contre le Cancer de l'Utérus et les Affections non-cancéreuses," Paris, O. Doin, éditeur.

"These results confirm the opinion that I have already expressed in my book on vaginal hysterectomy. I prefer this operation to laparotomy in :

"1. Uterine myomata when the tumor can be taken away per vaginam by morcellation ; that is to say, for all tumors that do not ascend above the umbilicus and are of sufficient consistence to give firm hold to the instruments per vaginam.

"2. Diseases of the adnexa when the lesion is certainly bilateral ; when the age of the woman permits the surgeon to think exclusively of the assurance of the operative result and the perfection of the therapeutic result. I reserve laparotomy for cases where a woman is young, if the bilateral lesions are not shown."

The following are the conclusions in a letter from Pozzi, Paris, May 11th, 1895, based upon his experience in vaginal hysterectomy for the last five years :

"I only prefer vaginal hysterectomy for pelvic inflammations when laparotomy would be too dangerous or insufficient to insure a complete recovery. So I perform vaginal hysterectomy every time I find bilateral lesions of the appendages with firm adhesions to the uterus. I also perform vaginal hysterectomy when I meet with double pyosalpinx adherent to the fixed uterus or with periuterine inflammation. As for my myomata, some of them were very large and extended up to the umbilicus, and in some cases there were periuterine inflammation and adhesions.

"My rule is to perform vaginal hysterectomy in myomata when they do not go beyond the umbilicus."

Probably no one has had better opportunities than Jacobs to compare the results by vaginal hysterectomy and celiotomy in the treatment of pelvic suppuration and bilateral diseases of the uterine adnexa. In a paper published in the May number of the AMERICAN JOURNAL OF OBSTETRICS AND DISEASES OF WOMEN, he gives the following indications for vaginal hysterectomy :

"Hysterectomy and ablation of the adnexa by the vagina is indicated in cases of cancer of the uterus, uterine tumors, diseased conditions of the uterine appendages, periuterine suppurations, suppuration about the appendages, and for periuterine tumors."

To these indications I would add some cases of extrauterine pregnancy, post-puerperal septicemia where the infection is confined to the uterus or pelvic structures, and small ovarian tumors. Jacobs' mortality in four hundred and three vaginal hysterectomies for the above-named conditions is 2.9 per cent.

It will not be contended that vaginal hysterectomy should be an operation of election in all cases of pus pockets in the broad ligaments, tubes, ovaries, or cavities formed by adhesions (encysted peritonitis), for there may be complications involving structures so high above the pelvis that they cannot be reached per vaginam, and without the removal of which the patient cannot be cured—namely, extensive omental or intestinal adhesions and appendicitis. These complications, however, are so infrequent that practically all cases are operable per vaginam.

As hysterectomy should not, with few exceptions, be performed if the ovary and tube upon one side are healthy, it may be urged that where we cannot positively diagnose bilateral diseases of the adnexa the diseased structures should not be approached through the vagina.

This objection is not valid, because an opening into Douglas' pouch is devoid of danger, and the diseased side may be removed through such opening without disturbing the uterus, and if it cannot a celiotomy may be immediately performed, and if necessary the vaginal opening left to give more perfect drainage. In cases of celiotomy where a pus sac cannot be enucleated without rupture a previous opening into the vagina would lessen the mortality, because the pus by gravitation would go in that direction, and by irrigation from above might be immediately forced into and out of the vagina without soiling the peritoneum or necessitating the use of abdominal drainage by the glass tube or gauze.

The dangers of immediate and secondary hemorrhage, wounding the bladder, ureters, or intestines, and the difficulty of maintaining asepsis are arguments used against vaginal hysterectomy; but these objections are not well founded, and the experience of Péan, Richelot, Ségond, Jacobs, etc., has proved that these dangers are less than in celiotomy.

Where it is the correct thing to attempt to separate the adhe-

sions of the intestines or omentum, this may be done about as well through the vagina as through the abdomen; but where adhesions are firm and extensive, shutting off pus cavities from the abdomen, it is often the wise thing to disturb the intestines as little as possible, for they are so arranged that they may cause no subsequent trouble, allowing the gas and feces to pass uninterruptedly. But if celiotomy is performed these adhesions must be separated, the peritoneal cavity thereby soiled, probably causing local if not general sepsis, and if the intestines have escaped serious injury they are left in a condition that predisposes to secondary irregular adhesions more dangerous than the primary adhesions. All experienced celiotomists know that in secondary operations in such cases the adhesions are often almost universal and may cause death from obstruction. While the dangers of wounding the rectum, bladder, or ureters in vaginal hysterectomy are not greater than in celiotomy, if these structures are injured the mortality in the former is not twenty-five per cent of the mortality in the latter, because the perfect drainage prevents peritoneal infection. The bladder or rectum may often be immediately sutured, and if the ureter is injured and cannot be repaired it may be subsequently implanted into the bladder.

If the wounds of the rectum and bladder cannot be repaired the openings generally close within a few weeks. The indications for vaginal hysterectomy, and the superiority of this method over the abdominal method in the treatment of cancer, of small myomata confined to the uterus or extending into the broad ligaments, or in small bilateral intraligamentous cysts, are so manifest and have been demonstrated so positively by the work of Péan and his followers that a further discussion would be a waste of time.

Nor is it necessary to argue with celiotomists who contend that the removal of the uterus after the tubes and ovaries have become badly diseased and are functionless is a useless mutilation.

When the tubes and ovaries are removed the uterus can serve no useful purpose, and may remain, or finally become an offending member of the body. In many cases where the tubes and ovaries are removed the woman is not cured and may not be

benefited, but when finally the uterus is removed all symptoms disappear.

As tubal or pelvic suppuration is frequently caused by continuation of an infection in the endometrium, the uterus may remain a diseased organ that cannot be cured by curetting or other intrauterine treatment.

In other cases where the uterus shows no positive signs of disease the removal of the adnexa does not relieve pain, because the nerves of the uterus or the surrounding ganglia are diseased. If the uterus is not removed, even if not diseased, it may become reinfected by fresh exposure, or become displaced and adherent to adjacent structures, or carcinoma may develop. As about twenty per cent of all cases of salpingitis are tubercular, with probable tubercular involvement of the uterus, the latter organ in such cases should be removed with the tubes and ovaries.

Pus tubes may have formed such extensive and firm adhesions that their removal entails such injury to the uterus that a mutilated organ is left. In most of Péan's cases where the uterus was removed and the appendages drained and left the patients remained permanently cured. Péan was at first alone in his advocacy of vaginal hysterectomy for the above-named conditions, but finally his own countrymen who had opposed him vigorously became the most earnest advocates of the new method.

The following are some of the reasons why vaginal hysterectomy should be preferred to celiotomy :

1. There is less shock and more rapid and complete convalescence, the patients usually sitting up within a week and walking a few days later.

2. In pelvic suppuration there is less danger of septic infection from soiling the peritoneum.

3. Absence of suture or mural abscesses, and of sinuses following the use of drainage or an infected ligature.

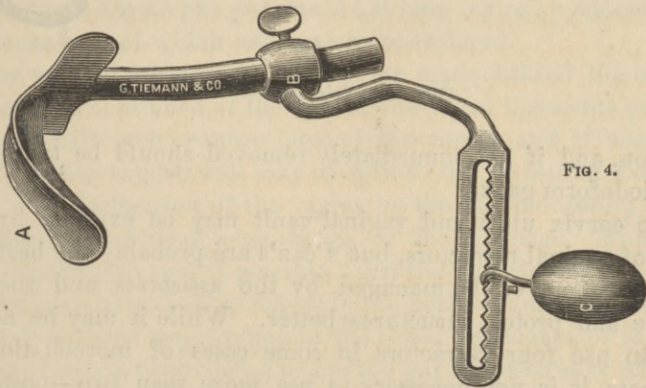
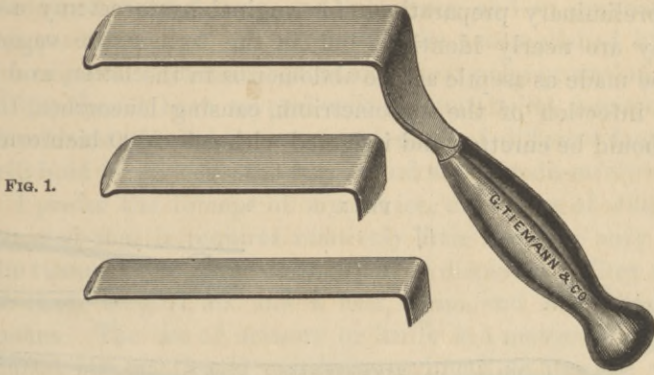
4. Fewer adhesions following operation:

5. Immunity from ventral hernia.

6. A lower mortality, fewer post-operative complications, and a more complete restoration to health in a relatively greater number of cases.

The above are facts, as shown by statistics of the most successful operators in celiotomy and vaginal hysterectomy; and in

vaginal hysterectomy many of the cases were inoperable by any other method.



FIGS. 1, 2, 3, 4.—Retractors.

It will thus be seen that theoretical objections to vaginal

hysterectomy, unsupported by facts and reasons, are worthless when tested by intelligent experience.

The preliminary preparations for vaginal hysterectomy and celiotomy are nearly identical, but in the former the vagina should be made as aseptic as the abdomen is in the latter, and if there is infection of the endometrium, causing leucorrhœa, the uterus should be curetted and irrigated with a 1:2000 bichloride

FIG. 5.

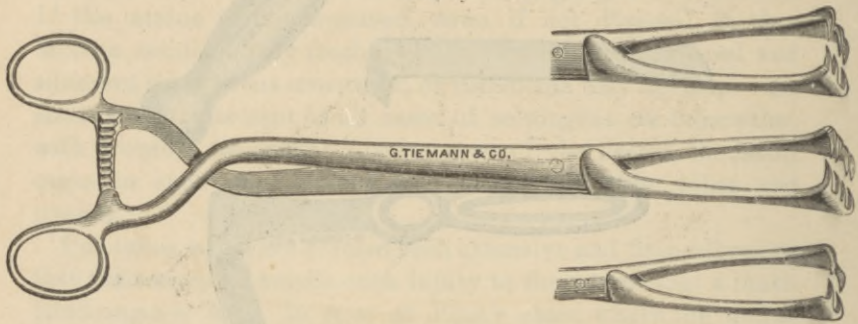


FIG. 6.

FIGS. 5, 6.—Volsella forceps

solution, and if not immediately removed should be tamponed with iodoform gauze.

The cervix uteri and vaginal vault may be exposed by any form of vaginal retractors, but Péan's are probably the best, for they are more easily managed by the assistants and thereby expose and protect structures better. While it may be necessary to use four retractors in some cases of morcellation of myomata, it is not necessary to use more than two—posterior and anterior—in operating for other conditions, and the anterior one may often be dispensed with.

The success of the operation depends upon our ability to control primary and secondary hemorrhage, to avoid injury to the bladder, ureters, rectum, and intestines, and to prevent soiling the peritoneum, all of which may be accomplished by proper attention to the details before and during the operation.

We should have several volsella and bullet forceps, and an assortment of reliable clamping forceps of different lengths that will hold firmly upon the tissues and will remain safely clamped.

I prefer the forceps of my device, the blades of which are so grooved that it requires relatively little force to bury them in the tissues, and they will not slip or be displaced. They are made of three lengths, six and a half, seven, and seven and a half inches. The use of scissors or knife is a matter of individual choice, but we should enucleate as much as possible with the



FIG. 7.—Clamping forceps.

fingers and carefully push the bladder and ureters away from the uterus.

The removal of the uterus for bilateral diseases of the adnexa where there are no pus pockets is a simple vaginal hysterectomy, the technique of which need not be considered.

The vaginal incision should first be made behind the cervix, and may be continued at the base of the broad ligaments on each side one-half inch or more beyond the cervix, and if necessary the posterior vaginal wall may be split to the bottom of Douglas' pouch. The incision of the vagina by the thermocautery is not necessary to control hemorrhage or for drainage. Enucleate with the fingers, and, if possible, open the pus cavities and drain and irrigate them before exposing the peritoneum. This can be done in cysts or suppuration in the broad ligaments, or in other forms of pelvic suppuration where the pus has been shut off from the peritoneal cavity by plastic exudation and adhesions. In these cases the pus may be discharged and the cavities irrigated

and disinfected without hemorrhage or the necessity of using a ligature or clamp. The hysterectomy may then be completed without danger of infecting the peritoneum. If there is induration without suppuration the dissection into the folds of the broad ligaments will do no harm, and the resulting drainage may prevent suppuration if the infection is confined to the connective tissue. If the pus pockets cannot be reached and treated in this way the peritoneum may be opened and the tubes and ovaries explored with the finger, at the same time introducing a reflux irrigation tube above the diseased structures and allow-



FIG. 8.—Reflux irrigation tube.

ing hot water to flow steadily, so that in the event of accidental or intentional rupture the pus will be forced into the vagina.

If the intestines and the omentum protrude into the vaginal wound or come in contact with the ovaries or tubes filled with pus, they should be replaced and protected by gauze or a sponge before the pus cavities are opened. In such cases if there are intestinal or omental adhesions to the tubes or ovaries, these may be separated before evacuating the pus or enucleating the tubes or ovaries, or they may be separated after the uterus has been removed.

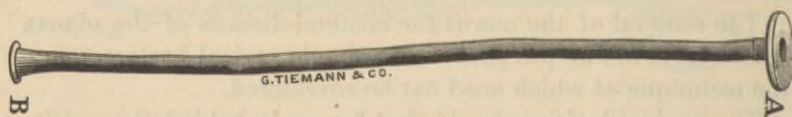


FIG. 9.—Self-retaining catheter.

If, after Douglas' sac has been opened, the uterus can be removed without rupturing the suppurating tubes or ovaries, it should be done, for if these organs are situated high up they can be enucleated or drained more easily and successfully afterward. In cases where it is impossible to enucleate and remove the entire tubes and ovaries they should be drained, irrigated, disinfected, and tamponed, and no immediate or subsequent trouble will usually follow; with few exceptions these patients make uninterrupted recoveries and are permanently cured.

In nearly all cases of hysterectomy, except for myomata, the

uterus may be removed in its entirety; but if this cannot be done we may resort to bilateral section and amputation of the cervix, hemisection of the anterior uterine wall, or antero-posterior section of the uterus. Hemorrhage may be controlled progressively from below upward, but if the uterus has been inverted anteriorly or posteriorly the clamps may be applied from above downward. Pus pockets that are drained and cannot be enucleated should be carefully tamponed before the strips of gauze are introduced to cover the jaws of the forceps. The ends of the strips of gauze should lie between the handles of the forceps and extend nearly to the vulva.

In vaginal hysterectomy for myomata by morcellation adopt any method that best meets the indications, or combine two or more methods—namely, Péan's, Richelot's, Ségond's, Doyen's, Müller's, or Quénu's.

The field of operation should be thoroughly exposed, so that we may see the tissues we cut. Morcellation should not be attempted until the uterine arteries have been ligated or clamped. As morcellation is continued and the broad ligaments are divided, an assistant should make firm and continuous traction with strong volsella forceps, which is an efficient means of controlling hemorrhage. In hysterectomy for broad-ligament myomata we should usually morcellate the tumors before we remove the uterus, but when myomata are developed in the walls of the uterus we may morcellate the tumor and the uterus simultaneously as may be indicated.

In conclusion I will briefly refer to but five illustrative cases upon which I recently operated for bilateral diseases of the uterine adnexa and uterine myomata.

CASE I.—A feeble woman with bilateral intraligamentous cysts, the smaller of which had suppurated. The larger, filled with a clear liquid, reached to within one inch of the umbilicus; the suppurating cyst was the size of an orange. Both were drained and irrigated through the posterior vaginal incision before the peritoneum was opened. The uterus was then removed. She had no untoward symptom, was sitting up in six days, and walking a few days later.

CASE II.—A confirmed invalid, with high fever and rapid pulse caused by a pus tube and an ovarian abscess on the left side and a pelvic abscess on the right side. These abscesses were high up and could not be successfully treated until the uterus

was removed. The tube and the ovary on the left side were enucleated, and the pelvic abscess on the right side torn open and irrigated. The patient sat up in seven days and walked a few days later.

CASE III.—Temperature 103°, pulse 130, badly septic, with abdomen distended and pelvic abscesses upon each side extending nearly to the umbilicus. The cavities were opened through the posterior vaginal incision and each drained of more than a pint of offensive pus without opening the peritoneal cavity. The uterus was then removed, but the exudations were so firm that it could not be enucleated and had to be cut out with scissors. She was very feeble and intensely nervous; her pulse varied from 125 to 150 until the clamps were removed thirty-six hours after operation. Twenty-four hours later the pulse was 85, temperature normal, and remained so. She sat up in seven days and walked in ten days.

CASE IV.—No children, but has had six induced abortions, the last two months ago, resulting in septic infection. The vaginal wall was incised, the broad ligaments opened, and a tubo-ovarian abscess on each side drained before exposing the peritoneal cavity. The uterus and the remnants of tubes and ovaries were cleanly removed. She had no untoward symptom, sat up within six days, and left the hospital in two weeks.

CASE V.—No children; has suffered for several years from pressure of uterine myomata which extended to the umbilicus. The uterus and tumor were removed by morcellation. There was no shock, and the woman recovered without an untoward symptom, sitting up in seven days and able to return home in two weeks.

In none of these cases was the operation followed by nausea, vomiting, or distention, and the patients relished food on the second or third day.

628 FOURTH AVENUE.