

**hysterectomy with special reference to the technics of the vaginal route : a report of eight cases / by Frederick Holme Wiggin.**

**Contributors**

Wiggin, Frederick Holme, 1853-  
Royal College of Surgeons of England

**Publication/Creation**

[New York, N.Y.] : [D. Appleton and Company], [1896]

**Persistent URL**

<https://wellcomecollection.org/works/heqrtv95>

**Provider**

Royal College of Surgeons

**License and attribution**

This material has been provided by This material has been provided by The Royal College of Surgeons of England. The original may be consulted at The Royal College of Surgeons of England. where the originals may be consulted. This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection  
183 Euston Road  
London NW1 2BE UK  
T +44 (0)20 7611 8722  
E [library@wellcomecollection.org](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>





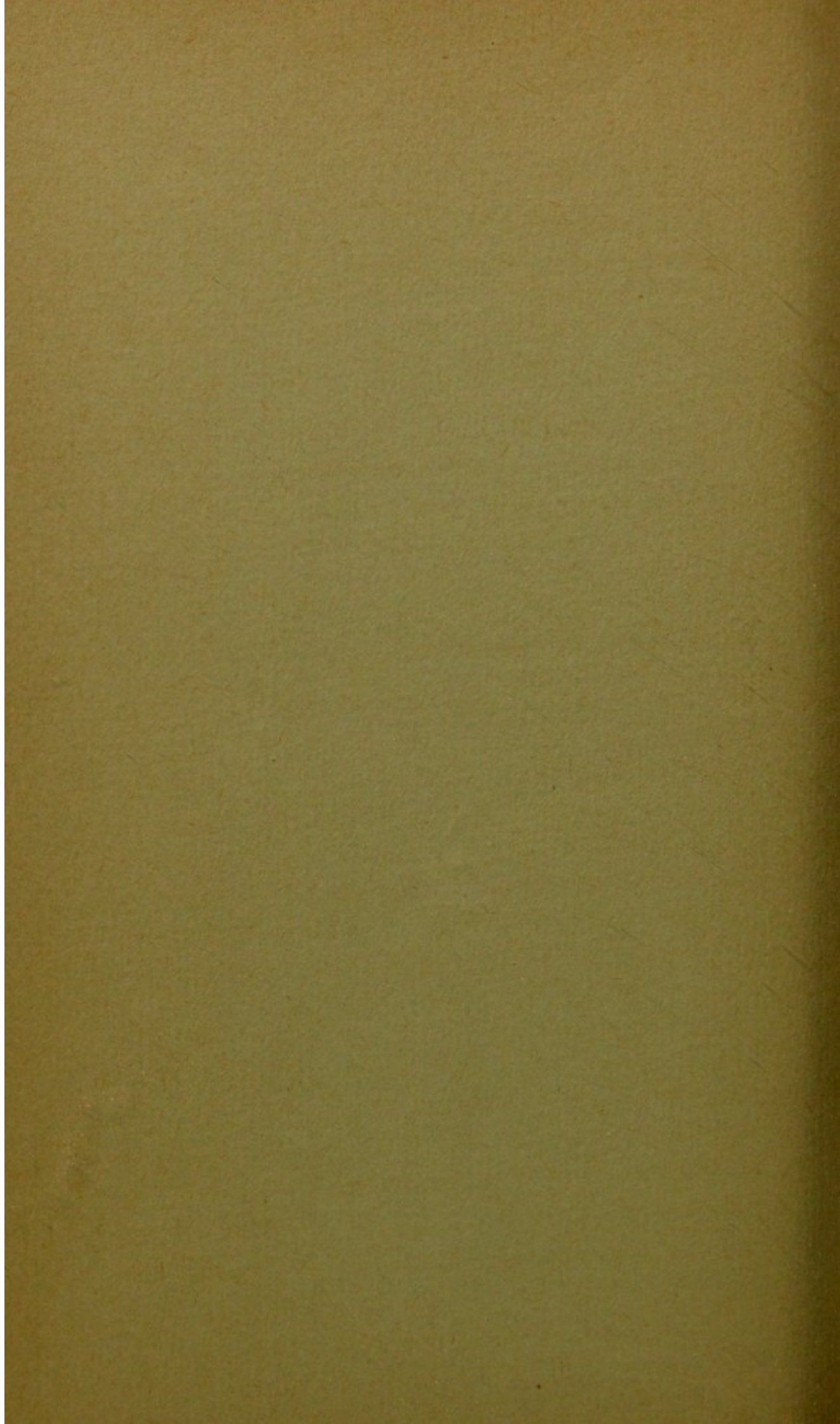


22

**HYSTERECTOMY,**  
WITH SPECIAL REFERENCE TO THE  
TECHNICS OF THE VAGINAL ROUTE.  
A REPORT OF EIGHT CASES.

BY  
**FREDERICK HOLME WIGGIN, M. D.,**  
Visiting Gynecologist to the New York City Hospital,  
Blackwell's Island, and Surgeon to  
St. Elizabeth's Hospital.

REPRINTED FROM THE  
**New York Medical Journal**  
*for August 22, 1896.*





*Reprinted from the New York Medical Journal  
for August 22, 1896.*

---

HYSTERECTOMY,  
WITH SPECIAL REFERENCE TO  
THE TECHNICS OF THE VAGINAL ROUTE.  
A REPORT OF EIGHT CASES.\*

BY FREDERICK HOLME WIGGIN, M. D.,  
VISITING GYNÆCOLOGIST TO THE NEW YORK CITY HOSPITAL,  
BLACKWELL'S ISLAND, AND SURGEON TO ST. ELIZABETH'S HOSPITAL.

So much attention is concentrated at the present time upon everything pertaining to hysterectomy, especially upon the selection of the route by which the uterus shall be attacked—whether vaginally or abdominally—as well as upon the indications for its performance, its technics, and its results, by those interested in the department of surgery known as gynæcology, that the following observations and reports of cases may prove of interest, and serve as an introduction to the further discussion of this important subject.

The chief indications for the performance of hysterectomy may be stated as follows:

1. Uterine neoplasms.
2. Tubular or ovarian disease, when the organs on both sides are affected.

\* Read before the Society of Alumni of Bellevue Hospital, June 3, 1896.



3. Ectopic pregnancy, when the tube opposite to the one in which gestation occurs is diseased.

4. Some cases of puerperal sepsis.

5. Some cases of pelvic suppuration.

6. Metrorrhagia due to endometritis, when the patient is very anæmic and other means have failed to afford relief.

The selection of the method, whether vaginal, abdominal, or a combination of the two, by means of which the diseased uterus shall be removed, will at the present time depend largely upon the size, benignity, or malignity of the tumor, and upon the character of the adhesions which exist in a given case, as well as upon the personal experience and predilection of the individual operator.

Wathen, of Louisville, Ky., in the course of a recent article on Vaginal Hysterectomy, in the *American Journal of Obstetrics and Diseases of Women*, August, 1895, said: "The dangers of immediate and secondary hæmorrhage, 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, Segond, Jacobs, and others, has proved that these dangers are less than in cœliotomy."

The results following upon the performance of hysterectomy by the average operator may be stated at the present time to be represented by a rate of mortality of fifteen per cent., whether the vaginal or abdominal route is followed; while in the hands of more experienced men the death-rate has fallen as low as 2.9 per cent. This latter result has been recorded by Jacobs as following upon four hundred and three uterine extirpations by the vaginal route performed by him.



The patient is best prepared for the operation by the administration of a cathartic on the evening of the third day preceding the time set for its performance, rather than by administering it, as is usually the case, on the previous evening. The longer interval allows the patient to recover from the depressing effect of the medicine. During this time solid food should not be allowed, and each evening the patient should be given a warm bath, and a vaginal douche of boric-acid and bichloride solutions after the bath and douche have been given on the evening prior to the day of operation. The abdominal wall, thighs, and external genitals should be shaved, and, after thorough washing with a bichloride solution, a compress wet with the same is applied, and bound on to the abdominal wall over the site of the proposed or possible incision. It is allowed to remain in place until the patient is placed on the operating table, or until it is desired to incise the abdominal wall. It is well, in all cases, to prepare the patient, as has been described, for both a vaginal and an abdominal operation, for it frequently happens that the operator, beginning his work by one route, is obliged to finish by the other.

The operation should be performed as early in the day as possible. If, however, it must be postponed until the afternoon, the patient may, on awakening, be given a peptonized milk punch. A large enema should be administered at least six hours before the time set for the operation. The patient is anæsthetized, and is placed in the lithotomy position, the thighs being held in place by means of a Clover crutch. After catheterism, the external genitals and vagina are once more scrubbed, and the vagina is douched with a bichloride solution. The exposed portions of the patient's body, not in the



field of operation, are covered by sterilized towels. The perinæum is retracted by means of a Simon retractor, and the cervix is seized by a bullet forceps and drawn downward. A double uterine catheter is passed into the uterine cavity, and it is washed out with a bichloride solution. The cervical canal is next cauterized with the Paquelin cautery, and is closed by sutures passed through the lips of the os. The parts are finally irrigated with bichloride and saline solutions.

The cervix is next drawn forward and upward, and the forceps held by an assistant while an incision is made around the cervix, through the vaginal wall, and then with a pair of blunt scissors, curved on the flat, the tissues are divided posteriorly until Douglas's pouch is reached. This is opened, first by an incision, and then by opening the blades of the scissors widely, divulsing the tissues. A needle, armed with silk, is now passed through the peritonæum and the posterior vaginal wall, in one or two places, and this is tied so as to prevent the slipping away of the peritonæum. The cervix is next drawn downward and forward as far as possible, and the anterior vaginal wall is picked up with another bullet forceps, about a third of an inch below the meatus urinarius, and an incision is made with a scalpel through the anterior vaginal wall, beginning at this point and continuing to the cervix. The flaps are dissected laterally as far as possible, in order that sufficient room for manipulation may be had. Needles armed with heavy silk are passed through either flap, the silk tied, and the ends, which are left long, are held by assistants, thus retracting the tissues. A sound is introduced at this juncture into the bladder, with the curved beak turned outward, which procedure sharply defines its



lower border and the union with the cervix. Below this latter point a curved transverse incision is made with a scalpel, and the bladder is separated from the uterus by blunt dissection with the fingers. This diminishes the chance of injury to the vesical wall, and, as the ureters are pushed up out of the way, there is practically little danger of their being included in the ligature which is passed about the uterine artery of either side. This obviates the necessity of employing Kelly's ureteral bougies. The vesico-uterine fold of peritonæum is next drawn down and incised by scissors. The pelvis is now elevated somewhat, and the bladder and intestines are seen to fall away from the vaginal wall and uterus. The pelvic cavity can now be explored by sight as well as by touch. A needle, armed with heavy silk, is passed as near the fundus of the uterus as possible, and the organ drawn forward. There is usually little difficulty in extracting the fundus and bringing into view the broad ligaments and the annexa. The ligaments are folded over upon themselves. A curved needle, armed with heavy silk, should be passed through this folded broad ligament on either side, and the ends left long, so that in case of hæmorrhage after the tissues are divided and retracted they may again be brought into view. The ovarian artery can be felt, and is best ligated by passing a curved needle, armed with catgut, directly around it, as little tissue being included as possible. The ligature is tied and its ends are cut off short. The round ligament is also tied in a similar manner before division. The ovarian vessels and round ligaments on both sides having been ligated and divided, the fundus is released, and the uterine vessels are secured as closely as possible to the uterus. The remaining tissues are divided, and the uterus and annexa removed.



When reliable catgut, preserved in alcohol, can be procured, it should be preferred for ligature material, as it absorbs moisture and swells rapidly after it has been applied, thus holding the parts more tightly than when it is first tied. The vaginal wound is closed, but not until the vaginal wall on either side has been attached to the stumps of the broad ligaments. After irrigation, the vagina is loosely packed with iodoform gauze. Many operators, especially the French, use clamps to secure the vessels, and while this method has the advantage of being more rapid, the ligation of the vessels is in many ways preferable, especially as it admits of the closure of the wound. The use of the clamp would seem to increase the danger of septic infection of the peritonæum, and of the formation of intestinal adhesions. If clamps are used, they should, after their handles have been securely tied, be left in place for sixty hours, when they should be cautiously removed. The vagina is then to be douched with boric-acid solution at a low pressure, and this treatment is continued daily unless a rise of temperature occurs, in which case it should be followed by a douche of bichloride, 1 to 4,000. It is important that the elevation of the reservoir containing the fluid be not great, for there is some danger that the newly formed adhesions may be ruptured. This danger does not exist when the vessels are ligated and the wound is closed.

Usually the operation is followed by little pain; but, if the patient is restless and complains, there would seem to be no good reason why morphine should not be given.

If the conditions are such that it has been decided to extirpate the diseased uterus by means of an abdominal incision, then, after the patient has been prepared, as



heretofore described, vaginally as well as abdominally, and placed under the influence of the anæsthetic, the compress is removed, and the integument is finally prepared by scrubbing and washing it with alcohol and ether and bichloride solution. The patient's chest, upper abdomen, and limbs are covered with sterilized towels, and the operator begins by opening the abdominal cavity by an incision a little to the left of the linea alba, separating the fibres of the muscle after the division of the fasciæ. After the opening of the peritoneal sac, a needle, armed with heavy silk, is passed through all the layers at several points on either side, and the ends of these sutures are left long after they are tied, so that they may be used to retract the parts as well as to prevent the separation and displacement of the different layers. The patient is next placed in the Trendelenburg position, and the tumor examined. If proved not to be of a malignant character, the procedure employed and described by Kelly in the Bulletin of the Johns Hopkins Hospital for February and March, 1896, would seem to the writer to be all that could be desired.

“The right or left ovarian vessel is ligated near the pelvic brim and a clamp is placed toward the uterus, and, cutting between ligature and clamp, the round ligament of the same side is tied off near the uterus and divided, and the two incisions connected in order to open up the top of the broad ligament. An incision is now made through the vesico-uterine peritonæum from the severed round ligament across to its fellow, freeing the bladder, which is now pushed down with a sponge so as to expose the supravaginal cervix. The body of the uterus is now pulled to the opposite side to expose the uterine artery low down on the side opened up. The



vaginal portion of the cervix is located with the thumb and forefinger, and the uterine artery is seen or felt, and is tied just where it leaves the uterus. The cervix is now cut completely across just above the vaginal vault, severing the body of the uterus from the cervical stump, which is left to close the vault. As the last fibres of the cervix are severed or pulled apart, while the body of the uterus is being drawn up, the other uterine artery comes into view, and is caught with artery forceps about an inch above the cervical stump. Rolling the uterine body still farther out, the right round ligament is clamped and cut off, and lastly, the ovarian vessels on that side are clamped and divided at the pelvic brim. Ligatures are now applied, and the operation is finished by closing the cervical tissues over the cervical canal, and then by drawing the vesical peritonæum and anterior layers of the broad ligament over the entire wound area and attaching it to the posterior peritonæum by a continuous suture."

The chief advantages alleged for this method are, the rapidity with which it can be performed, lessened danger of injuring ureters, and greater facility in shelling out subpelvic peritoneal fibroids and breaking up adhesions. The operation is finished by closing the abdominal wound without drainage.

If it is desired to use the combined method, as in cases of malignant disease of the uterus, the operation is begun by incising the vaginal mucous membrane all around the cervix, opening Douglas's pouch, separating the bladder from the anterior surface of the uterus, and ligating the uterine artery on either side of the uterus. Iodoform gauze is then placed in the vagina. The patient, after the removal of the abdominal compress and



proper preparation of the abdominal integument, is placed in the Trendelenburg posture and the abdomen rapidly opened. The ovarian vessels and round ligaments are tied off and divided, and the diseased parts removed. The wound in the pelvic floor is repaired in the usual manner; the sutures are placed in the abdominal wall, passing through all the layers, and the patient is lowered into the horizontal position. The abdominal cavity is now flushed with hot saline solution, a quantity of which is allowed to remain in the cavity, and the sutures already placed in the abdominal wall are drawn up and tied loosely. The swelling of the tissues which soon follows their division is depended upon to bring the edges of the skin into close contact. Acetanilide powder is dusted over the line of the incision, and over this the usual dressing of gauze is placed, and retained in position by straps of adhesive plaster.

CASE I.—C. F., a single woman, twenty-one years of age, was admitted to the gynæcological ward of the City Hospital on May 13, 1894. She stated that her first menstrual period occurred during her fifteenth year, and that her menstruation had been irregular and painful. In her seventeenth year she had had a miscarriage at six months, one week after which occurrence she had been admitted to a hospital, suffering from peritonitis (?), and had been subjected to a laparotomy, and one ovary removed. Ever since her recovery she had had constant pain in her back, in her left side, and down her left thigh. For several months prior, and at the time of her admission to the City Hospital she had suffered from metrorrhagia. Repeated curettage at intervals failed to afford relief, and as the patient was anæmic, suffering much pain, and becoming exhausted, it was deemed advisable to remove the uterus. After preparation, the patient was placed under ether narcosis, and hysterectomy was performed by the com-



bined vaginal and abdominal method. Adhesions of the viscera contained in the pelvic cavity were met with, and these proved to be very vascular when ruptured. The resulting hæmorrhage was controlled by the use of hydrogen dioxide. The remaining ovary proved to be diseased. With the exception of the occurrence of some stitch-wound infection and suppuration, the convalescence was uneventful.

CASE II.—F. C. A., a single woman, forty-two years of age, was admitted to the gynæcological ward of the City Hospital early in December, 1894. She stated that her first menstrual period had occurred during her fourteenth year, and that it had been followed by regular menstruation of the monthly type. She had had two children, the last one having been born sixteen years ago. Seven weeks prior to her admission, and during her regular period, she began to flow profusely, and after this had continued for two weeks she received treatment, but the flow had continued. Vaginal examination revealed the fact that a vascular growth existed on the cervix, and a portion was removed and sent to Dr. Ira Van Gieson for microscopical examination. He pronounced it to be an epithelioma. On December 8th, after the preparation of the patient had been effected, and under ether narcosis, hysterectomy by the combined method was performed. The convalescence was uneventful, excepting for the occurrence of a superficial abscess in the incision through the abdominal wall.

CASE III.—R. M., a single woman, seventeen years of age, was admitted to the gynæcological ward of the City Hospital on December 17, 1894. She stated that her first menstrual period had occurred during her eleventh year, that it had been painful, and that after the first year menstruation had been regular and of the monthly type. About one year prior to her admission she had first noticed a vaginal discharge which had since continued. It had been accompanied by severe pain in her back and abdomen, especially in the left inguinal region. Her appetite had been poor, and she had been costive.



A vaginal examination revealed the fact that the uterus was anteflexed, enlarged, and tender, as were both tubes, and that there was a purulent uterine discharge. Bilateral pyosalpinx was diagnosed and, on January 17, 1895, after proper preparation, the patient was placed under ether narcosis, and abdominal hysterectomy performed. The patient's convalescence was uneventful. On January 29th it was recorded that the wound had healed, and that the patient was feeling well, and was allowed to sit up in bed. At a later period, the writer's colleague, Dr. Pryor, reported that the right ureter had been injured, and that urine escaped into the vagina.

CASE IV.—A. P., a married woman, thirty years of age, was admitted to the gynæcological ward of the City Hospital on January 18, 1895. At that time she stated that she had had four children, the youngest of whom was six months of age. She also stated that her health had been good until about three months prior to her admission, when she had begun to have chills, followed by fever, to lose flesh and strength, and to suffer from severe pain in her back and lower abdomen. This was accompanied by a foetid vaginal discharge, tinged at times with blood. She had had insomnia, and had been constipated. Examination showed the patient's general condition to be poor, and that her bodily temperature was  $103.6^{\circ}$  F.; that her pulse-rate was 108, and that her respirations were 28. Vaginal examination revealed the facts that a cauliflower growth existed, which involved the cervix and a limited portion of the posterior vaginal wall, and that the uterus and tubes were enlarged and tender. On January 19th, after the usual preparations, and under ether narcosis, vaginal hysterectomy was performed (Mackenrodt's incision). After removal, the tubes and ovaries were found to contain pus, and microscopical examination proved the cervical growth to be an epithelioma. The convalescence was uneventful.

CASE V.—A. W., an unmarried woman, twenty years



of age, was admitted to the gynæcological ward of the City Hospital on January 14, 1895. She stated that her first menstrual period had occurred during her fourteenth year, and that menstruation had been painful, but regular, and of the monthly type. She had had no children, but had had one miscarriage. For several months she had had a free vaginal discharge. Recently she had had pain in her left inguinal region, and the vaginal discharge had become more profuse. She had also suffered from pain in her head and back, and her appetite had become poor. Vaginal examination revealed the fact that both tubes and ovaries (especially those on the left side) were enlarged and tender, and also that there was a purulent discharge from the uterus. On January 22d, after the usual preparations, and under ether narcosis, vaginal hysterectomy was performed (Mackenrodt's incision). Convalescence was uneventful.

CASE VI.—At the meeting of this Society of Alumni of Bellevue Hospital, held on May 1, 1895, the writer reported the case of Mrs. E., who had been suffering from uterine myoma, and a tumor located posterior to the uterus. It was supposed to be an ovarian carcinoma, but proved to be composed of phleboliths. Vaginal hysterectomy was performed, the anterior vaginal wall being incised longitudinally. The convalescence was both rapid and uneventful.

CASE VII.—M. F.A., a married woman, thirty-eight years of age, was admitted, on January 21, 1896, to the gynæcological service at the City Hospital. She stated that her first menstrual period had occurred during her tenth year, that it had been painless, regular, and of the monthly type. She had had twelve children and two miscarriages, the last a year and a half ago. Since that time her menstruation had been irregular and profuse. Five months prior to her admission the character of her menstrual discharge had changed, becoming foetid, and later it had also become light colored and watery. She had previously undergone two uterine operations the nature of which she was unable to state. She had been



costive. Of late she had been losing flesh, strength, and appetite, had had night sweats, and had suffered from pain and soreness in her right inguinal region. On January 22d a thoracic examination yielded a negative result, but vaginal examination revealed the facts that the uterus was slightly enlarged, and that the cervix was indurated. Under chloroform narcosis the cervix was dilated, and some uterine tissue removed by means of the sharp curette for microscopical examination. This was made by Professor E. K. Dunham, of the Carnegie Laboratory, who reported on January 23d the results of his examination, as follows: "Although the bits of tissue you see, as the result of curetting the uterus, are very small, microscopical study of them leads me to think your suspicions of carcinoma are well founded. I find strands of epithelium, apparently derived from the glands of the uterus, which are certainly atypical, and which even without the clinical evidence would lead me to believe that there was a beginning carcinoma."

On January 27th, the patient, after having been prepared in the usual manner and placed under ether narcosis, was subjected to vaginal hysterectomy. The anterior vaginal wall was incised, as in Mackenrodt's operation for retrodisplacement, and the technic already described followed, excepting that the ligatures were applied to the ends of the vessels instead of being passed around them with a needle, as has been the writer's usual custom. The ligatures placed on the right uterine and left ovarian arteries having been pulled on by the mistake of an assistant, they slipped off, and free hæmorrhage resulted. As the patient was already suffering from shock clamps were applied and left in place. The longitudinal incision in the anterior vaginal wall was alone closed by suture. Iodoform gauze was packed loosely into the vagina. A catheter was introduced into the bladder and retained by a catgut suture, and the dressings applied. The patient was stimulated by enemata of coffee and saline solution. Strychnine and morphine were also given hypodermically. She passed a



comfortable night and was allowed to drink water freely. On January 29th the dressings, clamps, and catheter were removed, and the external genitals and vagina douched with a 1-to-4,000 bichloride solution, followed by a douche of saline solution, and external dressings only were applied. The patient was at this time placed on light diet, and her further convalescence was uneventful, her highest bodily temperature having been 100.8° F.

CASE VIII.—M. B., a married woman, forty-nine years of age, but who had not lived with her husband for twenty-five years, stated, when first seen by me on April 4, 1896, that her first menstrual period had occurred during her fifteenth year, and that menstruation had been regular, and of the monthly type, but accompanied by pain at first. She had married during her nineteenth year, and had had three children. She had had two miscarriages. Her last menstrual period had occurred during November, 1895. Two years ago the patient became aware that she had an abdominal tumor, and she suffered from bearing-down pains, accompanied by menorrhagia. The tumor gradually increased in size until November, 1895, when it began to enlarge rapidly. Abdominal palpation revealed a tumor somewhat movable, and reaching to a point a little above the umbilicus. On vaginal examination, while the tumor could not be reached, it seemed to be attached to the uterus. The patient's family physician having assured me of the fact that he had made an examination of the urine and had found it normal, a laparotomy was decided upon, and on April 12th it was performed at the patient's residence. On opening the abdominal cavity the tumor presented at once, and proved to be a large fibroid attached by a pedicle to the fundus. It was covered in front by omentum, which adhered to it, but otherwise it was free from adhesions. As the body of the uterus contained several small tumors of a like nature, it was decided to remove the uterus and annexa, as well as the tumor. This was accomplished without much difficulty. The pelvic cavity having been freely flushed with saline solution, the



vaginal wound was closed. Some more saline solution was poured into the abdominal cavity and allowed to remain there. The wound in this wall was now closed. The operation, from the time of the administration of the anæsthetic to the closure of the abdominal wall, occupied about an hour. The patient regained consciousness promptly, and suffered but little from nausea and shock. On the following morning, when I left, her condition seemed favorable, excepting the fact that but little urine had been secreted. On the 14th her bowels moved freely after the administration of a saline cathartic, and the urinary flow seemed about to be re-established; but, in spite of all efforts, she died on the 18th.

Of the eight patients whose cases have been reported, and upon whom hysterectomy was performed, seven recovered and one died. In two instances (Cases I and II) the uterus was attacked by the combined method; in two others, by the abdominal route (Cases III and VIII); and the remaining four by the vaginal (Cases IV, V, VI, and VII).

The first case is of interest mainly on account of the condition for which the uterus was extirpated—i. e., hæmorrhagic endometritis. Sivitalski reports (*Centralblatt für Gynäkologie*, 1895, No. 33) a similar case, occurring in a woman, twenty-nine years of age, upon whom he performed hysterectomy after the failure of curettage to relieve the patient. A careful examination of the specimen threw no light upon the cause of the hæmorrhage, as the only pathological change noted was a minor degree of interstitial endometritis. The annexa in this case were normal. The patient recovered. The writer calls attention to the rare occurrence of metrorrhagia without any discoverable local or general cause, and regards it as a clear indication for total extirpation



(*American Journal of the Medical Sciences*, January, 1896).

The special point of interest in the third case is the reported injury to the ureter, which did not make itself manifest till more than two weeks had elapsed after the performance of the operation. In Case VII, the operation was complicated by the slipping of the ligatures, necessitating the use of clamps to arrest the resulting hæmorrhage. In Case VIII, the neglect to make a careful examination of the patient's urine, and consequent failure to discover the existence of renal disease, led to the fatal result. Cases IV, V, VI, and VII are of interest on account of the vaginal technic employed, which has been heretofore described, and to which Vineberg has also called attention.

It is the writer's belief, founded both upon his own experience and his observation of the work of other surgeons, that while in many instances the vaginal route will prove entirely satisfactory, yet in those cases where the tumor is of large size, or firm adhesions exist, the abdominal operation and the method advocated by Kelly, of Baltimore, will prove more satisfactory; while in still another class of cases, especially those of a malignant character, the combination of the lower and upper routes, offers decided advantages over either of the other methods, and will afford the most favorable results for both the patient and operator.

55 WEST THIRTY-SIXTH STREET.







