

**A year's work in operative gynecology : from April 10th, 1894, to April 10th, 1895 / by William H. Humiston.**

**Contributors**

Humiston, William H.  
Doran, Alban H. G. 1849-1927  
Royal College of Surgeons of England

**Publication/Creation**

Cleveland : [publisher not identified], 1895.

**Persistent URL**

<https://wellcomecollection.org/works/eb743xg5>

**Provider**

Royal College of Surgeons

**License and attribution**

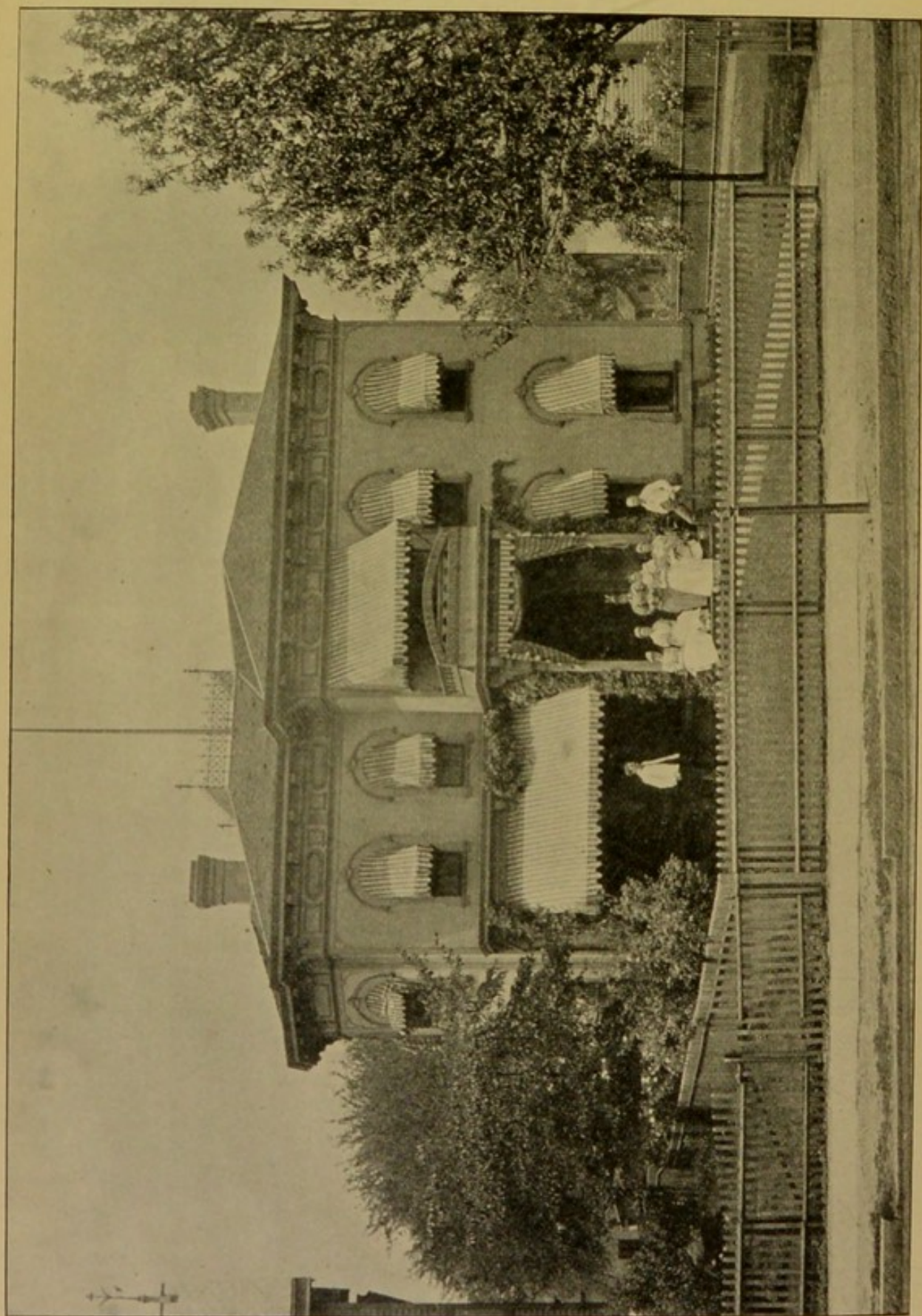
This material has been provided by This material has been provided by The Royal College of Surgeons of England. The original may be consulted at The Royal College of Surgeons of England. where the originals may be consulted. This work has been identified as being free of known restrictions under copyright 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>

(17)



DR. W.M. H. HUMISTON'S PRIVATE HOSPITAL FOR WOMEN

17

A YEAR'S WORK  
IN  
OPERATIVE GYNECOLOGY

From April 10th, 1894, to April 10th, 1895,

BY

WILLIAM H. HUMISTON, M. D.

CLINICAL LECTURER ON GYNECOLOGY IN THE MEDICAL DEPARTMENT OF THE  
WESTERN RESERVE UNIVERSITY, CLEVELAND, OHIO; CONSULTING GYNECOLO-  
GIST TO THE CITY HOSPITAL; FELLOW BRITISH GYNECOLOGICAL SOCIETY,  
LONDON, ETC., ETC.

---

CLEVELAND: AUGUST, 1895



# CELIOTOMY

## PREPARATION OF PATIENT

As a rule, too little attention is given by writers to the general discussion of the details employed by them in their methods of preparing cases for operation.

Sometimes too little thought is given by the surgeon to the general physical condition of patients, leading to unlooked-for serious results. A case should be under close and constant observation for a week—at least not less than three days prior to day of operation. A certain routine should be observed in all possible cases. Upon entering "The Home" each case is given a careful general physical examination—particular attention being devoted to the heart and lungs, and the liver and kidneys. For the former, strychnin and digitalis are used almost exclusively. All cases are given one of the salts of strychnin, varying the dosage from  $\frac{1}{30}$  to  $\frac{1}{20}$  of the sulfate three times daily. The number and character of the stools are noted. For functional inactivity of the liver an early course of calomel is prescribed—small divided doses at short intervals are administered. For simple constipation licorice powder is used, assisted, if necessary, by rectal injections. A diet suitable for each patient is selected, and strict adherence to the list is observed.

On the evening of the third day prior to the morning of operation, two grains of calomel are taken, followed in the morning by a Seidlitz powder. From this time the diet is restricted to the plainest and most easily digested foods; nothing but liquids are taken during the last twenty-four hours and the patient is kept quiet in her room.

The urine passed in each twenty-four hours is collected, and both chemical and microscopic examinations are made. It is not too much to say that seven (7) in every ten (10) cases upon entering "The Home" pass a diminished quantity of urine with a high specific gravity. The urine of all the most aggravated cases within at least three days has been made to ap-

proach the normal by the routine practice of drinking a large glass of *hot* water with a half drachm of a mixture of equal parts of common salt and bicarbonate of sodium one hour before each meal. Probably only by a trial can the reader arrive at a just appreciation of the happy results that may be derived from so simple a measure.

A tub bath is given each day and, upon retiring, the extremities and back are thoroughly rubbed to assist in maintaining both a normal reaction of the skin and a vigorous circulation.

The repeated and thorough evacuation of the bowels, practiced by all abdominal surgeons, depletes the body of large quantities of fluid and has given rise to the most distressing symptom succeeding operations—namely that of thirst. This has been largely overcome of late by the following expedient with most happy results: Seventy-two hours preceding the operation the patient drinks from six to eight large glasses of hot water in each twenty-four hours, and an extra pint three hours before the hour of operation.

After a close study of the last eighteen cases the following uniform results have been noted:

(a) No patient has complained of great thirst. A few who asked for water were resigned when their request was not granted.

(b) Instead of the usual small, wiry pulse, a large, full one has been noted in almost every case.

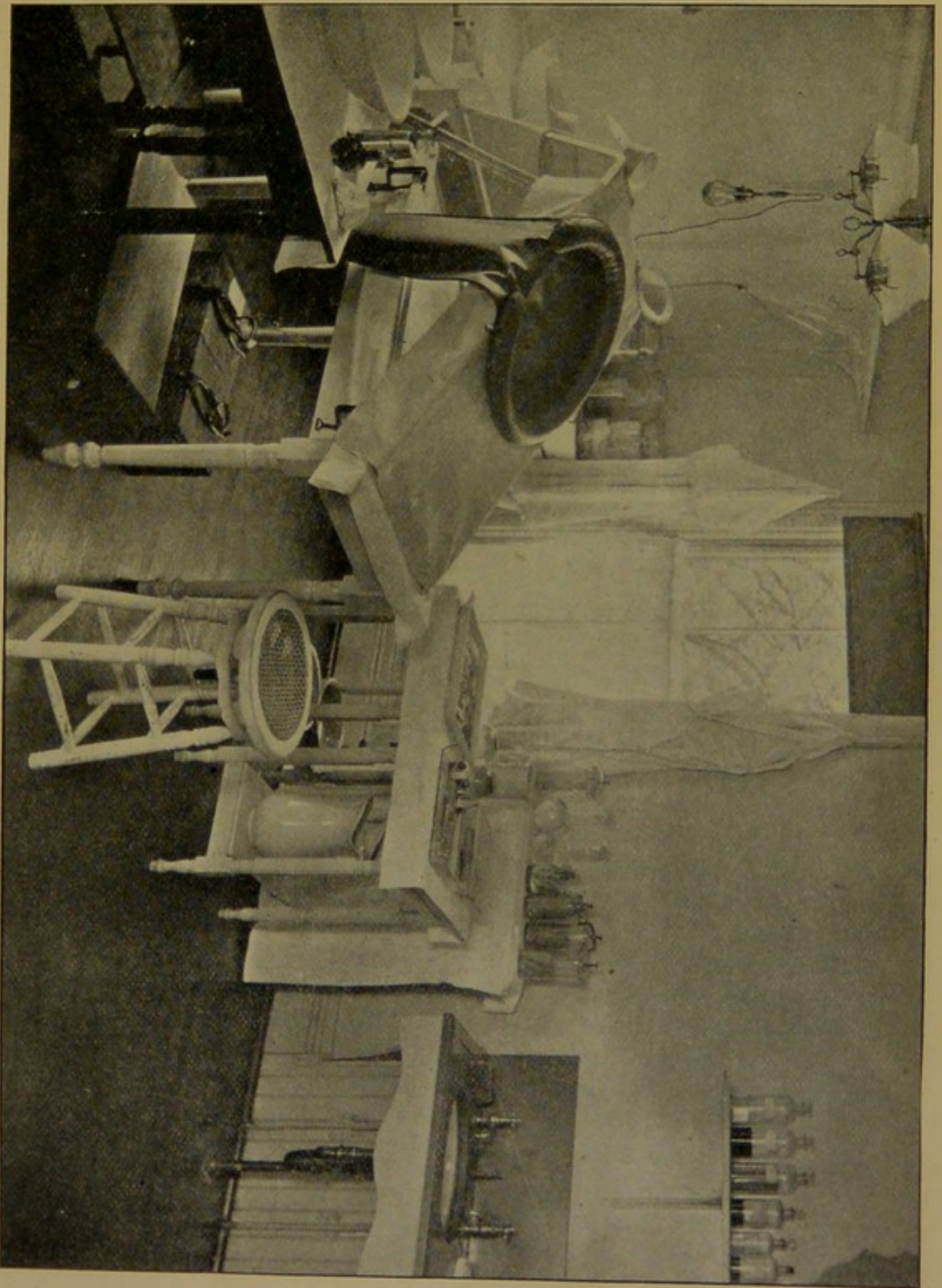
(c) In over 80 *per cent.* of the cases the amount of urine passed in the first twenty-four hours after the operation has exceeded 32 ounces.

In four cases over 50 ounces were passed with a specific gravity of 1.020, 1.023, 1.024 and 1.025, respectively.

The ordinary vaginal douches of soda, and bichlorid of mercury (1 to 4000) are used.

In order to reduce the period of anesthesia the belly is shaved before the morning bath; afterwards it is sponged with alcohol or ether, followed by a 1 to 1000 solution of bichlorid, and a wet compress of 1 to 500 is then applied.

An early morning hour has many advantages for the operator over any other part of the day in choosing a time for operation, chiefly because of the intervening hours before night in which to watch the condition of the patient. Nine o'clock is the fixed hour at "The Home."



OPERATING ROOM IN DR. W. H. HUMISTON'S PRIVATE HOSPITAL.

## TECHNIQUE

All of the dressing materials are made at "The Home" and in small quantities.

Absorbent cotton is treated with a solution of 1 to 1000 of bichlorid of mercury for 12 hours and dried in a slow oven.

Non-absorbent cotton, which has been made sterile by dry heat, is used for padding because of its elasticity.

Bichlorid gauze and iodoformized gauze are prepared in the ordinary way. The former is cut into small squares of five inches; the latter into strips one yard long and three inches wide. Each strip is then tightly rolled and packed in air-tight jars. This makes a most convenient form for handling while packing cavities. Strips of four-ply thickness are prepared for packing the pelvic cavity, as will be described later. These are four inches in width.

All suture and ligature materials have been silk and silkworm-gut. No silk sufficiently light and strong could be obtained in this country, so it is imported from England. The *pedicle-silk* is very fine and cannot be broken with more than ordinary force.

The silk is cut into lengths of eighteen inches, and five strands are wound on a glass spool. Two spools are placed in a test tube. Twelve strands of silkworm-gut are placed in long tubes and stoppered with non-absorbent cotton. These tubes are then put in a sterilizer and steamed for one hour on the first day and for one half hour on two successive days. Each tube is then labeled with the date of sterilization and also the size of the silk noted. These sutures or ligatures will keep sterile indefinitely under ordinary conditions.

Two sizes of gauze sponges are used in abdominal work—the larger size (8x8) and the smaller size (4x5). These are prepared just previous to each operation and are made sterile by boiling for ten minutes in a one *per cent.* solution of carbonate of sodium, followed by rinsing either in a sterile normal physiologic salt solution or plain water.

The glass drainage tubes are kept in a salt solution in sealed jars after careful boiling in a one *per cent.* soda solution for ten minutes.

Sterile physiologic salt solution is kept in stoppered flasks in readiness either for flushing the abdominal cavity or for transfusion. Half the number of flasks are set in a sand-bath over a Bunsen burner to keep the solution at the boiling point. The temperature of the solution for flushing is 110°, for transfusion, 120°.

Small tubes are filled with a mixture of iodoform 1 part, and boric acid 5 parts. This is used as a dusting powder over wounds.

The instrument trays, after thorough cleansing with soap and brush, are filled with a solution of bichlorid (1 to 500), allowed to stand for twelve hours, and rinsed with a sterile salt solution just previous to arranging the instruments. The instruments are thoroughly scrubbed and then boiled for ten minutes in soda water *after* each operation. They are sterilized by moist heat for one-half hour *prior* to each operation. This applies to all but the knives and needles. These are boiled for two minutes in a one *per cent.* soda solution, care being taken to carefully wrap the points and edges in gauze to prevent dulling.

A very small number of instruments are required in ordinary pelvic operations, and it is usual to find the more expert operators use the smaller number of instruments and the least complicated. A dozen hemostats, two large clamps for compressing the broad ligament in case of accident, a knife, one straight, and one curved scissors, a needle-holder, a pedicle-needle, one perineum-needle, with six assorted small, curved and straight, round needles, are all that are usually used. It is well, of course, to be prepared with a greater variety, but it is not absolutely necessary.

Great ease and expediency has been acquired by the use of the Trendelenburg incline. The great objection raised against the Trendelenburg posture is that bleeding occurs from unobserved points when the patient's position is changed from the inclined to the horizontal. In the opinion of careful operators this adverse criticism is largely theoretical. If there be any doubt in a case, while the abdominal sutures are being placed, the patient can be lowered and an inspection can be made before the wound is closed.

All bleeding points in the incision in the median line of the belly wall are caught immediately and tied with fine silk, if necessary, before the peritoneal cavity is opened.

The peritoneum is picked up with forceps and a short incision with the knife is made, of sufficient length to admit two fingers. The scissors complete the opening. The cut edges of the peritoneum are clamped with forceps, which procedure saves some little time while placing the abdominal sutures. As soon as the intestinal and omental adhesions are freed, a large, flat gauze sponge is carefully spread over all—preventing too frequent handling and exposure, and possibly much injury to the intestines, and also catching any oozing blood from the incision.

It is far better to cut dense adhesions with the scissors than to risk tearing open a bowel by the force sometimes necessary in breaking them up with the fingers.

The broad ligament is transfixed with two fine silk ligatures crossing each other at their middle. Then the pedicle is tied in two sections. One ligature is then taken about the whole pedicle and tied over the knot of the first ligature, the ends of which have been separated; and finally another

knot is made by the first ligature over<sup>4</sup> the knot which has taken the pedicle *en masse*. This procedure brings three knots on one side of the pedicle, but this has yet given no trouble, probably because of the extremely small size of silk used.

Four needles of different sizes and shapes are threaded with *carriers*. These are made by putting the ends of a small silk thread 18 inches long through the eye of the needle in opposite directions, and making *behind* the head of the needle a surgeon's knot. This is advantageous, in that it requires but a few needles and saves time. With these carriers threaded, the bases of bleeding points in the bottom of the pelvis can be caught up and ligated *en masse* in a very short time.

After the removal of the appendages of a side where adhesions have been universal and many oozing points are left, the four-ply strip of iodoformized gauze is packed tightly into the cavity and allowed to remain until all of the abdominal sutures are placed. If it is necessary to flush the cavity, these are removed and placed back again, as before. Silkworm-gut is now used for suturing the incision in the belly wall. Great care and sufficient time is devoted to securing the peritoneum and the fascia encasing the *recti* muscles together with the other structures in each suture. No particular thought is given to the size of the incision—it is always relative to the work required.

Only one hernia has resulted in all the cases operated upon, and in that the Mikulicz tampon was used.

When there is any doubt about using drainage the question is always answered in the affirmative. The glass tube is used and usually removed within the first twenty-four hours. When the pelvic condition suggests a Mikulicz tampon, and the general condition of the patient will admit, a hysterectomy is preferred, so that the Mikulicz has a much less wide field than was first proposed.

The incision is dusted over with the mixture of iodoform and boric acid powder—bichlorid gauze is laid over and about the wound, and finally a layer of bichlorid cotton and another of baked non-absorbent cotton is added. These are held in place and the abdomen supported by strips of adhesive plaster. A flannel binder is applied over all. Chloroform is used if there are no contraindications.

## AFTER-TREATMENT

A great deal may be written about the care of a patient after operation, but the required judgment can only be obtained by the experience gained from the study and close observation of many cases. It is of the utmost importance to have a trained nurse—a nurse who carries about with her not only a diploma from some school of nursing, but also the weight of experience in this particular line of work, and more especially sound judgment and thorough reliability.

Nothing is given by mouth during the first twenty-four hours, and if nausea persists, the time is extended to include the first forty-eight hours. Since the use of hot water before operations, nutritive enemas are given much earlier than formerly, the rectum not being required for an irrigating channel. After the first twelve hours they are given every six hours. If gas accumulates in the bowel in great quantities, a large rectal tube is carefully inserted, or the large rectal tube of a fountain syringe is allowed to remain for a short time. This latter is often very efficacious. Again, a quart of water with a dessert or tablespoonful of turpentine gives satisfaction. On the evening of the third day licorice powder is administered, followed in the morning by a Seidlitz powder.

Sometime during the second twenty-four hours a small quantity of hot weak tea is given, and later some broth. On the fourth day a sandwich of scraped raw beef is allowed, and the patient gradually attains by the ninth day an ordinary diet. Persistent nausea and vomiting is often stopped by allowing the patient to drink a half glass of hot water containing a half teaspoonful of sodium bicarbonate.

When the glass drainage tube is used, the fluid is drawn every half-hour, then every hour, and finally every two hours, if no more than two drachms collect in this time. The change from the half hour to the hour is usually left to the discretion of the nurse. After each drawing of the secretion the tube is gently turned to prevent clogging. It is in these cases that the experience and reliability of the nurse should always be assured.

Stitches are removed, as a rule, on the seventh day. The silkworm-gut will remain for a much longer time without inducing irritation, but the patients usually feel better when the tension on the parts is relieved.

Patients are kept *on their backs* for the first twenty-four hours. If a case is turned once they require constant moving and turning; but if kept absolutely quiet at first they usually remain so through the first few days. Patients are kept in bed from two to three weeks, and are allowed to resume their walking a few days later.

Every shadow of a change for worse is promptly noted and reported, so that abortive measures may be at once instituted. This eternal vigilance will alone save at times a life, and in every case will shorten the time of convalescence.

TABULATED RECORD OF ABDOMINAL OPERATIONS

| Number. | Name.                   | Date.           | Age. | Social condition. | Number of children. | Referred by                     | Pathological conditions necessitating operation.                                                                                                                              | Operation.                                                                                                                                                                                                                                             | Drainage.        | Results and remarks.                                                     |
|---------|-------------------------|-----------------|------|-------------------|---------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------------------------------------------------------------|
| 1       | Mrs. E. City.           | April 11, 1894. | 21   | M.                | 1                   | Dr. G. B. Farnsworth, Brooklyn. | Ruptured tubal pregnancy. Shock. Hemorrhage.                                                                                                                                  | At patient's home. Chloroform. Celiotomy. Removal of ruptured right tube and ovary. Time, 1 hour.                                                                                                                                                      | Gauze.           | Recovery complete. See detailed report of case.                          |
| 2       | Mrs. H. McP. City.      | May 23, 1894.   | 32   | M.                | 1 Mis.              | Dr. E. M. Davidson, City.       | Uterus tender, enlarged, drawn to left side and fixed. Fluctuating tumor, size of orange, on right side. Ill 10 years.                                                        | At my private hospital. Ether. Celiotomy. Omental adhesions. Right ovarian cyst, fist size; firm adhesions to broad lig. and cul-de-sac; ruptured, dark bloody fluid, removed. Left hematosalpinx, degenerated ovary, adherent. Removed. Time, 50 min. | Gauze and glass. | Recovery complete but slow. See additional report under head of Case II. |
| 3       | Mrs. W. St. Paul, Minn. | June 5, 1894.   | 40   | M.                | 0                   | —                               | Uterus first stage prolapse. Retroflexed, adherent. Chronic endometritis. Right ovary prolapsed, enlarged, adherent. Left ovary enlarged, slightly movable. Invalid 20 years. | At my private hospital. Ether. Curettage, celiotomy. Removal both tubes and ovaries. Universal dense adhesions. Uterus released and stitched forward to abdominal wall. Time, 45 minutes.                                                              | Glass.           | Recovery interrupted.                                                    |
| 4       | Mrs. B. Collingwood, O. | June 1, 1894.   | 46   | M.                | 1 Mis.              | Dr. D. P. Allen, City.          | Uterus fixed. Cirrhotic ovaries.                                                                                                                                              | At my private hospital. Ether. Celiotomy. Removal of sclero-cystic ovaries. Ventro-fixation of uterus.                                                                                                                                                 | None.            | Recovery.                                                                |

| Number. | Name.             | Date.          | Age. | Social condition. | Number of children. | Referred by                     | Pathological conditions necessitating operation.                                                                                                                              | Operation.                                                                                                                                                                                          | Drainage.       | Results and remarks.                                    |
|---------|-------------------|----------------|------|-------------------|---------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------------------------------------------------|
| 5       | Mrs. S. New York. | June 28, 1894. | 26   | M.                | 0                   | Dr. Herman Bauer, City.         | General peritonitis following pelvic inflammation (gonorrheal). Temp. 104°; pulse, 120. Chills, sweating.                                                                     | At my private hospital. Ether; celiotomy; removal of suppurating tubes and ovaries; adhesions univ., and plastic inflam. Lymph covering intestines and epiploon.                                    | Gauze.          | Recovery prolonged but complete.                        |
| 6       | Mrs. H. Parna, O. | July 7, 1894.  | 26   | M.                | 3<br>1 Mis.         | Dr. G. B. Farnsworth, Brooklyn. | Endometritis. Right tube and ovary massed together, adherent, size of hen's egg. Left appendage in same general condition, but smaller.                                       | At my private hospital. Ether; celiotomy. Old firm adhesions of omentum and intestines carefully separated, and both tubes and ovaries separated and removed. Abdominal end of both tubes occluded. | Flushing glass. | Recovery rapid and complete.                            |
| 7       | Miss C. City.     | July 18, 1894. | 23   | S.                | 1 Mis.              | Dr. O. T. Thomas, City.         | Gonorrheal and septic infection of pelvic structures, following abortion. Pelvic peritonitis. Temp. 101½°.                                                                    | At my hospital. Chloroform and ether. Curettage, celiotomy, omental and intestinal adhesions; double pyosalpinx and ovarian suppuration; removal.                                                   | Flushing glass. | Recovery interrupted.                                   |
| 8       | Mrs. C. City.     | July 24, 1894. | 55   | M.                | 4                   | Dr. John P. Sawyer, City.       | Enlarged uterus, slight bloody disch. constantly. Menopause 10 years ago. Malignant adenoma of corpus uteri diag. from scrapings sent to Dr. Welch, Johns-Hopkins Hos., Balt. | At my hospital. Ether. Vaginal hysterectomy, ligature silk. Perineum was divided to <i>sphincter ani</i> to obtain room to operate handily.                                                         | Gauze.          | Recovery complete. No return of growth after operation. |

TABULATED RECORD OF ABDOMINAL OPERATIONS—Continued

| Number. | Name.                     | Date.              | Age. | Social condition. | Number of children. | Referred by                  | Pathological conditions necessitating operation.                                     | Operation.                                                                                                                                                                                                                             | Drainage.       | Results and remarks.                                                 |
|---------|---------------------------|--------------------|------|-------------------|---------------------|------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------------------------------------------|
| 9       | Mrs. S.<br>City.          | Sept. 4,<br>1894.  | 26   | M.                | 0                   | Dr. E. M. Davidson,<br>City. | Specific pelvic peritonitis, recurrent. Large double pyosalpinx. Sepsis.             | At my hospital. Ether. Curettage. Celiotomy. Both tubes as large as <i>Wieners</i> sausages, encircling the ovaries. Dense adhesion of small intestine to left tube separated and both tubes removed entire. Ventrofixation of uterus. | Flushing glass. | Died septic Sept. 5th, 1894. See detailed report.                    |
| 10      | Mrs. T.<br>Wellington, O. | Sept. 22,<br>1894. | 33   | M.                | 0                   | —                            | Gonorrheal salpingitis and ovaritis. Uterus retroflexed and adherent.                | At my hospital. Ether. Curettage. Celiotomy—left pyosalpinx and ovarian cyst densely adherent removed. Right pyosalpinx and degenerated ovary removed. Ventrofixation of uterus.                                                       | Mikulicz        | Recovery complicated by an attack of pneumonia. See detailed report. |
| 11      | Mrs. G.<br>City.          | Sept. 22,<br>1894. | 23   | M.                | 0                   | —                            | Pyosalpinx and cystic ovaries. Uterus ante-flexed and fixed. General pelvic matting. | At City Hospital. Ether. Celiotomy. Universal adhesions; separat'n of and salpingo-oophorectomy.                                                                                                                                       | None.           | Recovery rapid and complete.                                         |

| Number. | Name.              | Date.             | Age. | Social condition. | Number of children. | Referred by        | Pathological conditions necessitating operation.                                                                                          | Operation.                                                                                                                                                                                                                              | Drainage. | Results and remarks.                                                                                                  |
|---------|--------------------|-------------------|------|-------------------|---------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------|
| 12      | Miss N.<br>City.   | Oct. 20,<br>1894. | 19   | S.                | 0                   | —                  | Uterus chronically inflamed. Retroversion. Enlarged prolapsed ovaries.                                                                    | At City Hospital. Ether. Celiotomy. Salpingo-oophorectomy. Cystic degeneration of ovaries.                                                                                                                                              | None.     | Recovery and full relief of all symptoms.                                                                             |
| 13      | Mrs. McN.<br>City. | Nov. 10,<br>1894. | 32   | M.                | 0                   | —                  | Uterus large, sensitive. Metritis. Left ovarian cyst size of orange. Right intra-ligamentary cyst. Patient deaf for several years.        | At City Hospital. Ether. Celiotomy. Left ovarian cyst removed; adherent to descending colon, which was opened. Right broad ligament opened and cyst contents and sac removed. Cavity packed with gauze and stitched to abdominal wound. | Gauze.    | Recovery complete. Hearing restored during first 24 hours following operation. 6 months after operation hearing good. |
| 14      | Mrs. G.<br>City.   | Nov. 20,<br>1894. | 39   | M.                | 6<br>1<br>Misc.     | Dr. I. W.<br>Bard. | Carcinoma of cervix and body of uterus. Diagnosis confirmed by microscopical examinations of scrapings submitted to Dr. W. T. Howard, Jr. | At Charity Hospital. Curettage Oct. 24, 1894. Vaginal hysterectomy, Nov. 5, 1894. Clamp operation.                                                                                                                                      | Gauze.    | Recovery; left hospital looking well Dec. 10, 1894. See notes.                                                        |

TABULATED RECORD OF ABDOMINAL OPERATIONS—Continued

| Number. | Name.            | Date.             | Age. | Social condition. | Number of children. | Referred by                  | Pathological conditions necessitating operation.                                                                                                          | Operation.                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Drainage. | Results and remarks.                                    |
|---------|------------------|-------------------|------|-------------------|---------------------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------------------------------------------|
| 15      | Mrs. D.<br>City. | Dec. 27,<br>1894. | 28   | M.                | 0                   | Dr. H. T.<br>Clapp,<br>City. | Choked pelvis, <i>i. e.</i> ,<br>vagina encroached upon<br>by inflammatory prod-<br>ucts. Uterus fixed and<br>exudate reaching two<br>inches above pubis. | At my hospital. Ether.<br>Celiotomy. Separation<br>of omental and intestinal<br>adhesions, necessitating<br>removal of a large portion<br>of omentum. Left tube<br>and ovary encased in in-<br>flammatory exudate, re-<br>moved <i>en masse</i> . Right<br>ovarian cyst size of hen's<br>egg removed. Right tube<br>could not be distinguish-<br>ed and condition of pa-<br>tient would not permit<br>continuing operation.<br>Patient put to bed in<br>shock. | Gauze.    | Recovery slow<br>but complete.<br>See notes of<br>case. |
| 16      | Mrs. H.<br>City. | Dec. 21,<br>1894. | 23   | Wid.              | 1<br>1<br>Misc.     | —                            | Uterus retroverted and<br>fixed. Induration in both<br>vaginal vaults.<br>(Gonorrheal history.)                                                           | At City Hospital. Ether.<br>Celiotomy. Large am't<br>of reddish-brown fluid<br>found free in abdominal<br>cavity. Both tubes and<br>ovaries were firmly adhe-<br>rent; ovaries cystic; re-<br>moved. Pelvic organs<br>and intestines covered<br>with miliary bodies.<br>Ventro-fixation of uterus.<br>(Pyo-salpinx.)                                                                                                                                           | None.     | Recovery. See<br>notes.                                 |

| Number. | Name.                | Date.             | Age. | Social condition. | Number of children. | Referred by        | Pathological conditions necessitating operation.                                               | Operation.                                                                                                                                                                                                                               | Drainage.             | Results and remarks.                                                                                                                     |
|---------|----------------------|-------------------|------|-------------------|---------------------|--------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| 17      | Mrs. W.<br>City.     | Dec. 22,<br>1894. | 28   | M.                | 1                   | — — —              | Uterus prolapsed, re-<br>troverted, adherent.<br>Tubes and ovaries en-<br>larged and adherent. | City Hospital. Ether.<br>Curettag. Celiotomy.<br>Universal vascular adhe-<br>sions. Both ovaries cys-<br>tic, double pyosalpinx<br>removal, free oozing from<br>separation of adhesions.                                                 | Flushing<br>Mikulicz. | Died septic the<br>4th day. See<br>notes.                                                                                                |
| 18      | Mrs. D.<br>Akron, O. | Jan'y 7,<br>1895. | 23   | M.                | 0                   | — — —              | Uterus fixed. Choked<br>pelvis.                                                                | At my hospital. Ether.<br>Curettag. Celiotomy.<br>Universal vascular adhe-<br>sions. Large hemorrhagic<br>cyst of right ovary re-<br>moved. Left tubo-ovar-<br>ian abscess removed. In-<br>flammatory masses with-<br>in broad ligament. | Mikulicz.             | Died the 4th<br>day. Exhaus-<br>tion from vom-<br>iting, which be-<br>gan during op-<br>eration and con-<br>tinued without<br>cessation. |
| 19      | Mrs. S.<br>City.     | Jan'y 5,<br>1895. | 52   | M.                | 4                   | Dr. I. W.<br>Bard. | Sloughing sub-mucous<br>fibroid of uterus. Gen-<br>eral septicemia.                            | At my hospital. Chlo-<br>roform. Abdominal hys-<br>terectomy; <i>serre-naud</i> ;<br>extra-peritoneal.                                                                                                                                   | None.                 | Died. Patient<br>was septic sev-<br>eral days before<br>operat'n. Death<br>30 hours after<br>operation.                                  |

TABULATED RECORD OF ABDOMINAL OPERATIONS—Continued

| Number. | Name.                       | Date.             | Age. | Social condition. | Number of children. | Referred by | Pathological conditions necessitating operation.                                                                                                   | Operation.                                                                                                                                                                                                                                                     | Drainage.          | Results and remarks.                                                   |
|---------|-----------------------------|-------------------|------|-------------------|---------------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------------------------------------------------------|
| 20      | Mrs. L. Brooklyn            | Jan. 4, 1895.     | 39   | M.                | 4                   | —           | Uterus enlarged. Mov-<br>able. Enlarged tortuous<br>tubes adherent. Right<br>tube and ovary movable<br>and could be felt in right<br>iliac region. | At my hospital. Chloro-<br>form. Celiotomy. Right<br>tube and ovary massed<br>together and suspended<br>by omental adhesions.<br>Left tube firmly embed-<br>ded to pelvic wall and<br>descending colon, which<br>was torn in separating<br>adhesions. Removal. | Glass.             | Recovery rap-<br>id and uninterru-<br>pted.<br>(See notes and<br>cut.) |
| 21      | Miss H. Lorain,<br>Ohio.    | Feb. 11,<br>1895. | 36   | S.                | 0                   | —           | Uterus prolapsed, fixed,<br>Metritis. Tender masses<br>in both vaginal vaults.                                                                     | At my hospital. Chloro-<br>form. Celiotomy. Uni-<br>versal dense adhesions all<br>separated, both tubes and<br>ovaries inflamed and re-<br>moved. Ventro-fixation<br>of uterus.                                                                                | Flushing<br>Glass. | Recovery.                                                              |
| 22      | Miss H. Youngs-<br>town, O. | Feb. 18,<br>1895. | 38   | S.                | 0                   | —           | Areolar hyperplasia of<br>uterus. Retroversion.<br>Left ovary prolapsed, en-<br>larged, tender.                                                    | At my hospital. Chloro-<br>form. Celiotomy. Sclero-<br>cystic ovaries, tubes nor-<br>mal, removal. Ventro-<br>fixation of uterus.                                                                                                                              | None.              | Recovery.                                                              |

| Number. | Name.                                | Date.              | Age. | Social condition. | Number of children. | Referred by                               | Pathological conditions necessitating operation.                                                              | Operation.                                                                                                                                                                       | Drainage.       | Results and remarks.                                   |
|---------|--------------------------------------|--------------------|------|-------------------|---------------------|-------------------------------------------|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------------------------------------------|
| 23      | Mrs. C. Bloom-<br>ingville,<br>Ohio. | March 4,<br>1895.  | 43   | M.                | 2                   | Dr. M. J. Love,<br>Blooming-<br>ville, O. | Retroflexed, fibroid uterus. Left ovary enlarged, prolapsed, cystic. Uterine cavity, $4\frac{3}{4}$ in.       | At my hospital. Ether. Curettage. Celiotomy. Large cyst of left ovary prolapsed, adherent and ruptured in removal. Right ovary sclero-cystic, removed. Vento-fixation of uterus. | Flushing Glass. | Recovery rapid.                                        |
| 24      | Mrs. B. Brighton<br>Ohio.            | March 20,<br>1895. | 39   | M.                | 0<br>1 Mis          | —                                         | Uterus tender, enlarged, not freely movable. Right tube and ovary tender, prolapsed and adherent. Gonorrheal. | At my hospital. Chloroform. Curettage. Celiotomy. Both ovaries sclero-cystic. Double pyosalpinx. Removal. Adhesions universal but recent.                                        | Glass.          | Recovery. Went home well the 22d day.                  |
| 25      | Mrs. B. Warren,<br>Ohio.             | April 6,<br>1895.  | 44   | M.                | 4                   | Dr. T. M. Sabin,<br>Warren, O.            | Fibroid uterus, size of cocoanut.                                                                             | At my hospital. Chloroform. Curettage. Removal of tubes and ovaries.                                                                                                             | None.           | Recovery. Tumor reduced one-half in size in six weeks. |

TABULATED RECORD OF ABDOMINAL OPERATIONS—Concluded

| Number. | Name.                          | Date.              | Age. | Social condition. | Number of children. | Referred by                               | Pathological conditions necessitating operation.                                                                                                                                                 | Operation.                                                                                                                                                                                                               | Drainage.          | Results and remarks.         |
|---------|--------------------------------|--------------------|------|-------------------|---------------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------------|
| 26      | Mrs. G.<br>City.               | April 1,<br>1895.  | 29   | M.                | 5<br>1<br>Misc.     | —                                         | Uterus prolapsed, retroflexed, tender, immovable. Resistance in right vaginal vault. Left vault posterior to cervix an ovoid mass, size of goose egg, tender on pressure, elastic, firmly fixed. | At my hospital. Chloroform. Curettage. Uterine cavity 4 in. in depth. Celiotomy. Both tubes normal. Right ovary 2½ times normal size. Cystic. Large multilocular cyst of left ovary, removed. Ventro-fixation of uterus. | None.              | Recovery. See cut and notes. |
| 27      | Mrs. L.<br>Newton<br>Falls, O. | April 10,<br>1895. | 24   | M.                | 0<br>1<br>Misc.     | Dr. S. D.<br>Good,<br>Newton<br>Falls, O. | Choked pelvis. Masses in vaults and <i>cul-de-sac</i> excessively tender.                                                                                                                        | At my hospital. Chloroform. Celiotomy. Universal dense adhesions of all the pelvic organs. Ovaries sclero-cystic, pyosalpinx double. Removal. Ventro-fixation of uterus.                                                 | Flushing<br>Glass. | Recovery.                    |

## DETAILED REPORTS OF A FEW CASES

### CASE I

#### EXTRAUTERINE PREGNANCY, RUPTURE, OPERATION AND RECOVERY— SOME UNUSUAL FEATURES

Extrauterine pregnancy is now looked for and recognized by the general practitioner, but I do not believe that it occurs more frequently than formerly. The history, symptoms and results have been so repeatedly and thoroughly discussed that the profession is now well acquainted with this condition.

The case which I desire to report has some unusually interesting symptoms, which, coupled with the extreme loss of blood, the hurried operation in most unfavorable surroundings and under adverse conditions, and the lack of a sufficient number of assistants, form an instructive clinical report.

On April 11, '94, I was called by my friend, Dr. George B. Farnsworth, of Brooklyn, to see a patient who was critically ill.

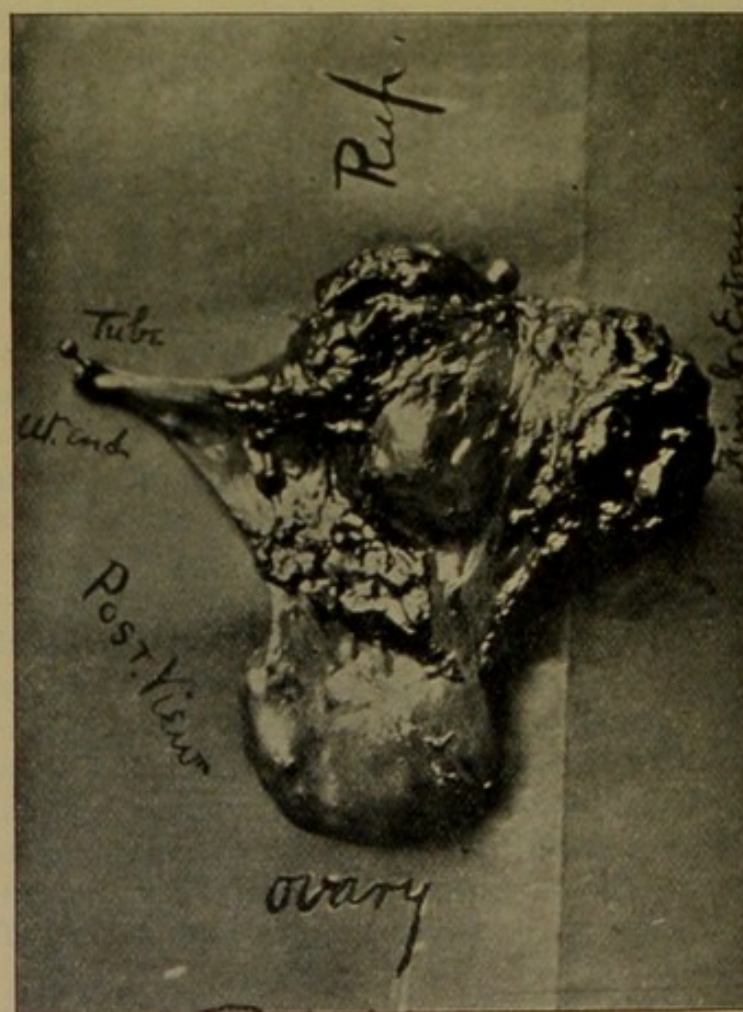
Mrs. E—, aged 21, American. Menstruation began at 14 years; regular, without pain, normal quantity and lasting four days. She was married at the age of eighteen years; has one child 15 months old, healthy and nursing at the breast. Personal history is negative.

PRESENT ILLNESS:—In December, 1893, when her baby was 11 months old, patient's menstrual periods returned and were normal in all respects, recurring regularly in January, February and March. On March 18th, when menstruation should occur, the flow appeared with no unusual symptoms; but instead of ceasing on the fourth day, as usual, a fair amount of bleeding continued daily, without pain or noticeable change in character, until she arose early on the morning of the 26th. While dressing she felt a sudden, cutting pain in the right iliac region, attended with nausea and faintness. The pain increased steadily until noon, when Dr. Farnsworth was summoned. The flow was more profuse and clotted after the onset of pain. The patient was kept absolutely quiet in bed and in a day or two felt better—the bleeding, however, continuing in spite of the usual remedies. She remained in bed until April 10th, when she attempted to sit up while the bed clothing was being changed. She became faint and extremely weak, and there was a return of the sickening pain with feeling of distension of the abdomen and free bleeding from the uterus.

The doctor was again sent for and resorted to stimulation, and ordered the foot of the bed raised to control bleeding and overcome the tendency to faintness. On examination, Dr. Farnsworth found the vagina filled with

clotted blood, the uterus very tender and not freely movable. He at once suspected a possible tubal pregnancy, although the menstrual history was not in accord with such a conclusion. In a few hours the patient was made more comfortable, but before leaving the doctor asked for counsel.

On the following morning (April 11) I was called in consultation to see the patient. I found her in bed with the head lowered and the extremities elevated; the face was blanched, all of the mucous membranes pale, shallow respiration, rapid and feeble pulse, temperature 101, abdomen distended and very sensitive to slight pressure. The vagina was filled with blood, cervix softened and to left side, uterus partially fixed and a large boggy mass in the right vaginal vault and *cul-de-sac*. Bimanual palpation elicited so much pain that it was not made. It was unmistakably a case of ruptured ectopic pregnancy, the primary rupture occurring March 26th, and the secondary on the evening of the 10th of April with unchecked hemorrhage. It was self-evident that prompt and active measures must at once be instituted,



RUPTURED TUBE FROM DR. HUMISTON'S CASE OF  
TUBAL PREGNANCY

as our patient was sinking rapidly and in shock arising from the continuous hemorrhage. Removal to more favorable surroundings was precluded by her extreme condition, and preparations were immediately begun for operation.

Water was being heated in a wash-boiler while I was securing my instruments and assistants. Dr. P. Max Foshay administered the chloroform, Dr. Farnsworth stood opposite me and Miss Ritchie (my nurse) looked after the sponges and instruments. I hurriedly cut through the abdominal wall, and as the peritoneal cavity was opened, the intra-abdominal pressure being so great, the blood was forced out to a height of eighteen or more inches, as though a large vessel had been cut. Within the cavity very firm blood-clots were met which were broken up before I came upon the uterus. I secured the broad ligament on the right side between the uterus and the mass with large pressure-forceps, keeping close to the former. This procedure checked for the most part any further bleeding and by that much increased the chances for a favorable result. Clearing away the clots, transfixing the right broad ligament and removing the tube and its contents, together with the ovary, occupied but a short time. A half hour was spent, however, in washing out the peritoneal cavity and freeing it of all blood, and sixteen gallons of boiled water were used at a high temperature. Before this was finished the patient ceased to breathe, the radials were pulseless and it seemed that life was extinct. I requested Dr. Farnsworth to assist Dr. Foshay in keeping up artificial respiration while I hurriedly completed the toilet of the peritoneum and closed the incision, tamponading and draining after the method of Mikulicz.

After perhaps ten minutes of artificial respiration and the administration of several doses of strychnin hypodermically, the patient respired. She was placed in bed on an incline with the head a foot lower than the pelvis and surrounded with artificial heat. This inclination of the body was maintained for one week (a horizontal position being gradually assumed), in order to keep sufficient blood in the brain to avoid syncope. The outlook was most unpromising, and an unfavorable prognosis was given to the family. After an hour reaction came on and her strength slowly improved.

The accompanying cut will clearly show the enlarged tube and ovary and the point of rupture. The fetus was not found, as it was probably surrounded with clotted blood and was washed away unnoticed. The duration of gestation was probably eight weeks.

To the anxiety and the commotion ensuing from the general condition of the patient and my hurried completion of the operation without assistants, I attribute the leaving of a sponge in the abdominal cavity. It was not missed until the following morning when the sponges were being cleaned, a nurse reported that a flat one was missing. Recalling the steps in the operation, instantly, the picture of the sponge within the cavity, and no remembrance of its having been removed, made me certain that it was

still in the cavity and that our last chance for saving the life of this desperate case was gone.

I summoned Dr. Farnsworth to meet me at the patient's bedside, and told him I should reopen and secure the sponge. The patient had passed a fairly comfortable night, but was extremely weak. A small quantity of chloroform was given, the patient placed upon a table and four of the sutures cut. The sponge was readily found, but was removed with the greatest difficulty; the sutures were replaced.

The patient made a complete but slow recovery and is now (one year after operation) in good health and able to do all her household work. She menstruates regularly every three weeks without any pain, the flow being normal in quantity and lasting four days.

We may learn from this case:

(a) That tubal pregnancy may occur without missing a menstrual period.

(b) That seemingly it is never too late to operate.

(c) That if you wait for reaction from shock in all such cases you will lose valuable time.

(d) That shock is due to hemorrhage in the great majority of cases, as in this one, and the more quickly the bleeding is controlled the better.

(e) That a sponge may be left in the abdominal cavity twenty hours and yet not give rise to septicemia or other complications.

(f) That the operator should *always* have a *trained* assistant who should be held accountable for instruments, sponges, etc.

In conversation with a number of abdominal surgeons, I find many have experienced the same unspeakable misery and anxiety resulting from leaving a sponge within the abdominal cavity. So far as I can learn the results are varying. If *all* such cases were reported and compiled I believe a most interesting and instructive addition to medical literature would result.

I am indebted to Drs. Farnsworth and Nevison for their after-care of the case during my absence from the city.

## CASE II

There are some interesting features in this case that I shall briefly allude to. The case was a prolonged one of severe constant suffering during a period of ten years of undoubted gonorrheal origin, beginning a few days after marriage. The local symptoms increased until pelvic peritonitis occurred, uniting with firm adhesions all the pelvic viscera. She gave a history of repeated attacks of local inflammation. The operation was a difficult one, requiring fifty minutes to complete it. The left tube and ovary were so firmly adherent to the posterior surface of the broad ligament, as to necessitate its removal. A cyst of the right ovary the size of an orange, was separated

from many dense adhesions and together with an enlarged tube removed. Free oozing of blood from the raw surfaces necessitated flushing with hot water, and packing with iodoform-gauze. Patient was put to bed in good condition, and did well for thirty-six hours. At this time the pulse became rapid and the patient was restless, indicating a beginning sepsis. At the end of forty-eight hours in spite of strychnin and digitalis hypodermatically, the patient was growing rapidly weaker, pulse 140, temp. 102°. I decided to remove the gauze drain, take out a few of the abdominal sutures, flush out the cavity and insert a glass tube with additional fresh gauze surrounding it; this was done without anesthesia. A large quantity of dark colored bloody fluid was removed. The patient was returned to bed in a very precarious condition; the heart was extremely weak, and the face had the peculiar septic expression. This condition continued for twenty hours, when a favorable change was noticed. She gained steadily in strength and within three days was pursuing a normal convalescence. In this case gauze failed to drain. I am partial to the glass drainage tube, after a thorough trial of both.

#### CASE IX

##### PYOSALPINX WITH DENSE ADHESIONS

This case died septic within thirty-three hours after operation. I was called to see patient at her home in consultation with my friend, Dr. Davidson. She had been confined to her bed several weeks, suffering from severe pain in whole lower abdomen, which was distended, and very painful to slight pressure. Alternating chills, fever and sweating had been present for some time and these symptoms persisted with diarrhea, in spite of medication and careful nursing. The patient was very much reduced in weight and strength, with a very weak heart, pulse 130, temp. 102½°. The patient had been married three years, and pregnancy had not occurred, specific infection occurring soon after marriage.

On examination the vaginal outlet was found relaxed, the vagina reddened, there was a free amount of muco-purulent secretion, the cervix was swollen and eroded, the uterus retroflexed and firmly adherent, and there were large tender boggy masses in both vaginal vaults, making a condition that I designate as a 'choked pelvis.'

On Sept. 4th, under ether, curettage and celiotomy were performed. Omental and intestinal adhesions were found and separated. Both tubes as large as *Wiener* sausages formed in a ring encircling each ovary. To the left tube a knuckle of small intestine was firmly united, and after careful separation, the tube and ovary *en masse* was freed from adhesions and removed, leaving a large raw, oozing surface. The right tube and ovary were in like manner removed, the uterus released, brought forward and anchored

with a silk suture. Thorough flushing with sterilized water was done and a glass drainage tube inserted. The operation lasted one hour and the patient left the table in good condition, having a slower pulse than an hour previous to operation. She continued in good condition for ten hours after operation, when her pulse became more rapid and continued to grow weaker in spite of repeated hypodermics of special heart stimulants and tonics. Death occurred at the thirty-third hour. No autopsy.

Both tubes were filled with pus and were removed without rupture. This case should have been operated upon before the last recurring attack of pelvic inflammation, which was prolonged and severe, and greatly exhausted her vitality.

## CASE X

### BRONCHO-PNEUMONIA FOLLOWING ETHER NARCOSIS

This case was very much emaciated, extremely nervous and hyperesthetic, and walked with difficulty, the body being inclined forward. She complained of exquisite pain on the slightest pressure over the tip of the coccyx, but nothing could be made out on examination.

She had been examined at the age of 12 after a severe fall, and the doctor in attendance said he found the uterus retroverted. She had never been strong or well since the fall. Menstruation began one year later with severe cramp and had ever since been painful.

One year after marriage she had a severe attack of gonorrhea. She had never been pregnant. Family history is good.

On examination the uterus was found retroflexed and immovable. The tubes of either side could be mapped out and were much enlarged; the left ovary was also many times larger than normal. At the operation the diagnosis was confirmed. Universal and dense adhesions massed all the pelvic structures together. A double pyosalpinx was found; the left ovary contained a cyst of the size of a goose-egg and the right ovary was small and sclerotic.

A double salpingo-oophorectomy and hysteropexy were performed. The operation was somewhat difficult owing to the density of the adhesions and the free bleeding. A Mikulicz tampon was used.

The patient left the table in very good condition. Twenty-four hours after the operation the temperature rapidly and suddenly rose to  $102^{\circ}$ , the pulse 120 and respirations 30 and very labored. Over the right side of the chest loud sonorous notes could be heard, and bubbling in the trachea could be heard in any part of the room. Hot poultices were applied to the chest and ammonium chlorid was ordered with digitalis. On the evening of the fourth day the temperature was  $103\frac{3}{8}^{\circ}$ , pulse 152 and occasionally too weak and rapid to be counted, and the highest number of respirations per minute

noted were 46. The condition of the patient was such that no hopes of her living were entertained and no record of the amount of stimulation with whisky, digitalis and strychnin was kept. However, in the early morning hours of the 5th day the pulse became slower and more forceful, and at 7 A. M. the temperature had dropped to 100° after a copious expectoration of thick muco-purulent masses. This had not the character of an ordinary pneumonia and never showed but the slightest trace of a rusty color.

No bacteriologic examination was made for *pneumococci*, but later repeated examinations for tubercle bacilli were negative. No further interruption to recovery occurred though convalescence was very slow. After leaving "The Home" she gained weight and color very rapidly.

#### CASE XIV

##### CARCINOMA OF CERVIX AND BODY OF THE UTERUS

On April 10, 1895, I was telephoned that this patient had died. She had been seen a short time before death by my friend, Dr. Boesger. I requested him if possible to make an autopsy, as it was impossible for me to meet him. Dr. O. T. Thomas was present and made the following report:

"April 11th an unsatisfactory *post-mortem* was made, *only* the abdominal cavity being opened. The pelvis was well filled with cancerous masses, the posterior wall of the bladder and the cecum together with the lower part of the greater omentum was involved. There was no occlusion of the bowel anywhere. The mesenteric glands generally were not enlarged, the liver and spleen were said to be normal, the right kidney was enlarged. Altogether the amount of cancerous tissue in the pelvis and abdomen was scarcely sufficient without serious invasion of *other* organs to cause death."

#### CASE XV

##### *Patient of Dr. H. T. Clapp*

This was an aggravated case of pelvic inflammation and matting into one immovable mass of all the pelvic structures. Patient was extremely anemic, greatly reduced in flesh and hectic. On examination the vaginal outlet was found to be normal, the vagina reddened and containing a free amount of muco-purulent secretion. The vagina was short, being encroached upon by inflammatory products. The cervix alone could be distinguished and was crowded well forward, immovable and painful to pressure. This mass extended above pubis two inches, and only slight pressure could be tolerated. As the patient was daily growing weaker and suffering intensely, it was decided to operate as soon as she could have the usual preparation. On December 27, 1894, I opened the abdominal cavity and found extensive adhesions between the omentum and the pelvic walls—fingers of omentum dipping down into the inflammatory mass. A large portion of the omentum was

ligated and removed. The pelvic cavity was entirely choked with a hard, resisting mass, in which the tubes and ovaries could scarcely be distinguished. A cyst of the right ovary as large as a hen's egg was ruptured in removal. The cystic fluid was of a light brown color. The right tube could not be distinguished. The left tube, greatly enlarged after breaking up dense adhesions, was removed together with a large inflammatory mass containing the left ovary. The bleeding was very free, and owing to the weak condition of the patient, a further attempt to remove *more* was abandoned. The pelvis was carefully walled off from the general abdominal cavity by strips of iodoform-gauze, and the patient quickly put to bed in *shock*. Pulse 160. This was at 11 A. M. During the next twenty-four hours the patient was given strychnin hypodermically, to the amount of one-fourth grain in six divided doses. At the close of the first twenty-four hours her pulse was 120; temperature, 98.2°; and she had vomited six times. The patient steadily lost ground for one week, owing to continued vomiting, which caused a decided and continued depression of the circulation, evidenced by a pulse of 120-30 during the time. It was impossible to medicate or nourish her through the stomach, and nutrient enemas were given at regular intervals. The patient continued in a desperate condition and the fourth day a reversed peristalsis occurred, and the enemas of beef peptonoids and Bovinine were freely vomited, and seemingly unchanged in appearance. All efforts to nourish patient were temporarily suspended, and her vital organs were kept active by special stimulants and tonics hypodermically administered. The strips of iodoform-gauze packing were changed every second day and the drainage was satisfactory. The fifth day a slight improvement was noticed, which continued daily until the stomach retained food on the seventh day. The favorable changes continued, and patient had gained considerable strength up to January 19th, when, on dressing the case and just as the rubber drainage tube had been placed in position, a tremendous hemorrhage occurred from wound. Bright arterial blood welled up like a fountain, and it was only a question of a very few minutes until a fatal result would ensue. I removed the tube and pressed my thumb into the wound and kept up pressure until my assistant, Dr. Thomas, could prepare a conical compress and get me some iodoform-gauze which was thoroughly packed into the sinus and the compress was held firmly in place by strips of adhesive plaster. This was successful in controlling the hemorrhage, and was not removed for two days. We estimated the loss of blood at six ounces. Prior to this unfortunate loss of strength the pulse was 110, but immediately after the hemorrhage it was 160. It required two weeks of careful nursing and feeding to regain this loss.

To sum up in brief, this patient has made a complete and satisfactory recovery and is doing all the work devolving upon a housewife. Had she in her desperate condition been refused the relief that surgery alone could give, death would soon have claimed her. Had I been influenced by a de-

sire to select cases favorable for operation, in order to attain a low death rate, this case would not have been saved.

#### CASE XVI

This patient was thin and anemic. Two operations for trachelorrhaphy had been performed without any signs of union having taken place at either time. Her mother had died of phthisis. One year ago she had gonorrhea followed by rheumatism affecting all of the smaller joints. Both tubes were enlarged and contained pus; the ovaries were cystic. Adhesions bound all the pelvic organs to each other and to the walls. The uterus was in retroversion.

A double salpingo-oophorectomy and hysteropexy were performed. No flushing or drainage was used. Covering all the pelvic and abdominal organs were found small miliary bodies, and when the cavity was opened a large amount of brown fluid was found free.

Macroscopically it had all the appearances of an acute miliary tuberculosis of the peritoneum. The specimens were given to the pathologist of the hospital for examination but no report could be obtained.

The stitches were removed on the seventh day and the wound had healed throughout its whole length. On the thirteenth day after the operation the lower angle became reddened and finally broke down and a thick yellowish discharge poured out. A fistula has remained up to the present writing. A few days ago a pedicle-ligature was discharged and since then no pus has exuded and the tract is rapidly closing.

The patient has steadily gained in color and weight during the past four months.

#### CASE XVII

##### DOUBLE PYOSALPINX, FIRM VASCULAR ADHESIONS, CYSTIC OVARIES— DEATH FROM SEPSIS THE FOURTH DAY

This was a difficult operation owing to the dense firm adhesions encountered and the persistent oozing of blood from the separation of the same. Symptoms of sepsis were late in appearing, being first noticed near the close of the third day. The Mikulicz tampon was immediately removed, a part of the abdominal wound reopened and the abdominal cavity thoroughly flushed with sterilized water. A glass tube surrounded with iodoform-gauze was substituted for the Mikulicz tampon, but the relief was only temporary and death occurred the following day. The Mikulicz tampon I like for a definite purpose, *i. e.*, the control of free oozing from raw surfaces. Its ability to drain perfectly is limited to a few hours only, and cannot after this time be compared in efficiency to the glass tube. From experience since gained I believe this case would have had a better prospect for recovery had

I packed the oozing surfaces firmly with strips of iodoform-gauze during the time required to place the abdominal sutures and complete the toilet of the peritoneum, then removed the gauze and put in the glass drainage tube. In fact, I have demonstrated this method of procedure to my entire satisfaction in several recent cases.

#### CASE XVIII

##### **TUBO-OVARIAN ABSCESS AND HEMORRHAGIC CYST OF OVARY—DEATH**

This patient was in a very low condition when admitted to "The Home." She had been an invalid for several years. Could do no housework excepting at very rare intervals.

On examination, there were immovable masses in either vaginal vault, and the uterus also was immovable. On opening the abdomen there were found universal omental and intestinal adhesions which were extremely vascular. On the right side was a large intra-ligamentous ovarian hemorrhagic cyst. On the left side was a small tubo-ovarian abscess. The right broad ligament was much thickened and required to be ligated in four sections.

A double salpingo-oophorectomy was performed. A Mikulicz tampon was used to check the oozing. Thirteen fluid ounces of ether were used during narcosis. The time of operation was forty-eight minutes.

Incessant vomiting began twenty-four hours after the operation, and the pulse became very weak and rated at 132. The temperature at this time was 101°. The highest temperature was 101 $\frac{1}{3}$ °.

The vomiting was terrific, and by reversed peristalsis the enemas were passed out of the mouth.

The pulse gradually grew more rapid and very weak. Seven hours before death ensued three pints of normal physiologic salt solution were injected into the radial artery. Only a temporary slowing of the pulse resulted, and the patient died on the morning of the fourth day. No autopsy was held.

#### CASE XX

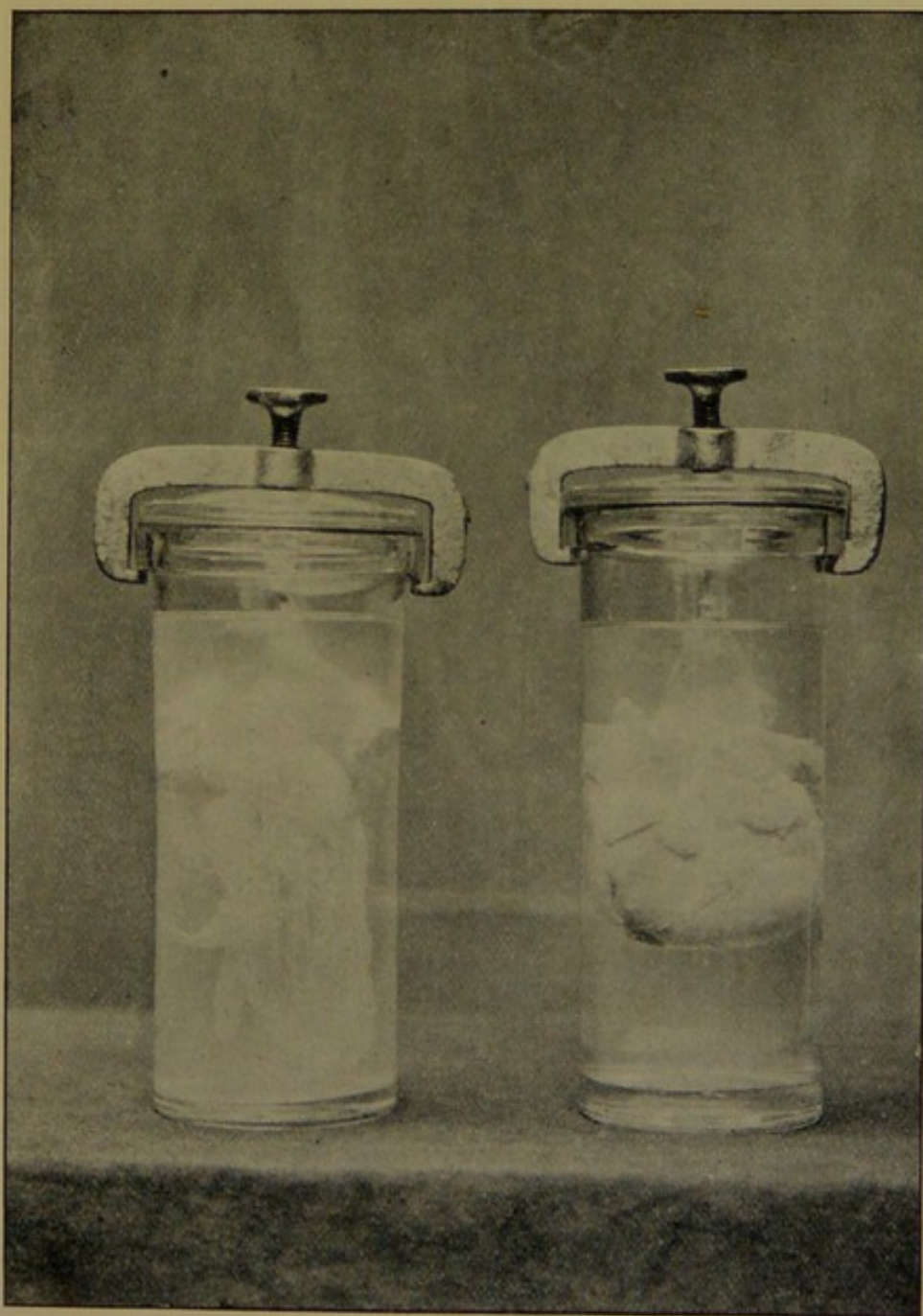
##### **LARGE DOUBLE PYOSALPINX—SPECIFIC HISTORY—RECOVERY**

(SEE CUT)

This case was a remarkable one for the reason that there was so much suppuration and enlargement of the tubes without corresponding suffering or illness.

She came to me Jan. 9th, 1895, complaining of steadily growing weaker and menorrhagia—no backache, no headaches—during last two weeks has had pain in both groins, and says she can feel a lump in right lower abdomen that she can push around. She is not in good general condition but has a pale and sallow appearance. She is about and doing household duties, but feels that she cannot exert herself as it induces pain on both sides of lower

abdomen. On examination, I found partial rupture of the perineum, the vagina relaxed and roomy, the cervix was swollen, indurated, and canal full of purulent secretion; the uterus was in normal position, enlarged, tender and movable to a less degree than normal. Patient was very much reduced, her weight now being but 95 pounds. Her abdominal walls were very thin, rendering bi-manual examination easy. An irregular mass, movable, the size of a small orange, could be readily palpated in right iliac region. It



LARGE DOUBLE PYOSALPINX FROM CASE No. 20.

moved with the uterus. In the left vaginal vault a good sized, immovable mass could be felt that gave the sensation of fluctuation. Diseased appendages were readily diagnosed, with probable suppuration, and operation advised. This was accepted, and on January 14, 1895, celiotomy was performed in my hospital.

Chloroform anesthesia was employed. A very thin belly wall was found. Upon opening the cavity in the median line, a large right tube and ovary was exposed, partly covered by omentum and adherent to it. It gave a general appearance of floating upon the intestines. This was carefully and easily ligated and removed. The tube was filled with pus. An ovarian cyst, size of walnut, was ruptured in removal. The left tube was low in the pelvis, along the left lateral wall—firmly adherent to the rectum and to the intestines above. In enucleating the mass, a large tear was made through the peritoneal covering of the descending colon. The peritoneal surfaces were carefully brought together over the bowel with a fine silk continuous suture. The further separation of the mass was soon accomplished, and the tube and ovary ligated and removed. The uterus was found forward, freely movable, but much softened and enlarged. Between the adhesion of the bowel and left tube there was a blood clot, softened, and it would have required but a short time for rupture to have occurred at this point. No flushing, but a glass drainage tube was inserted and left in place for 25 hours.

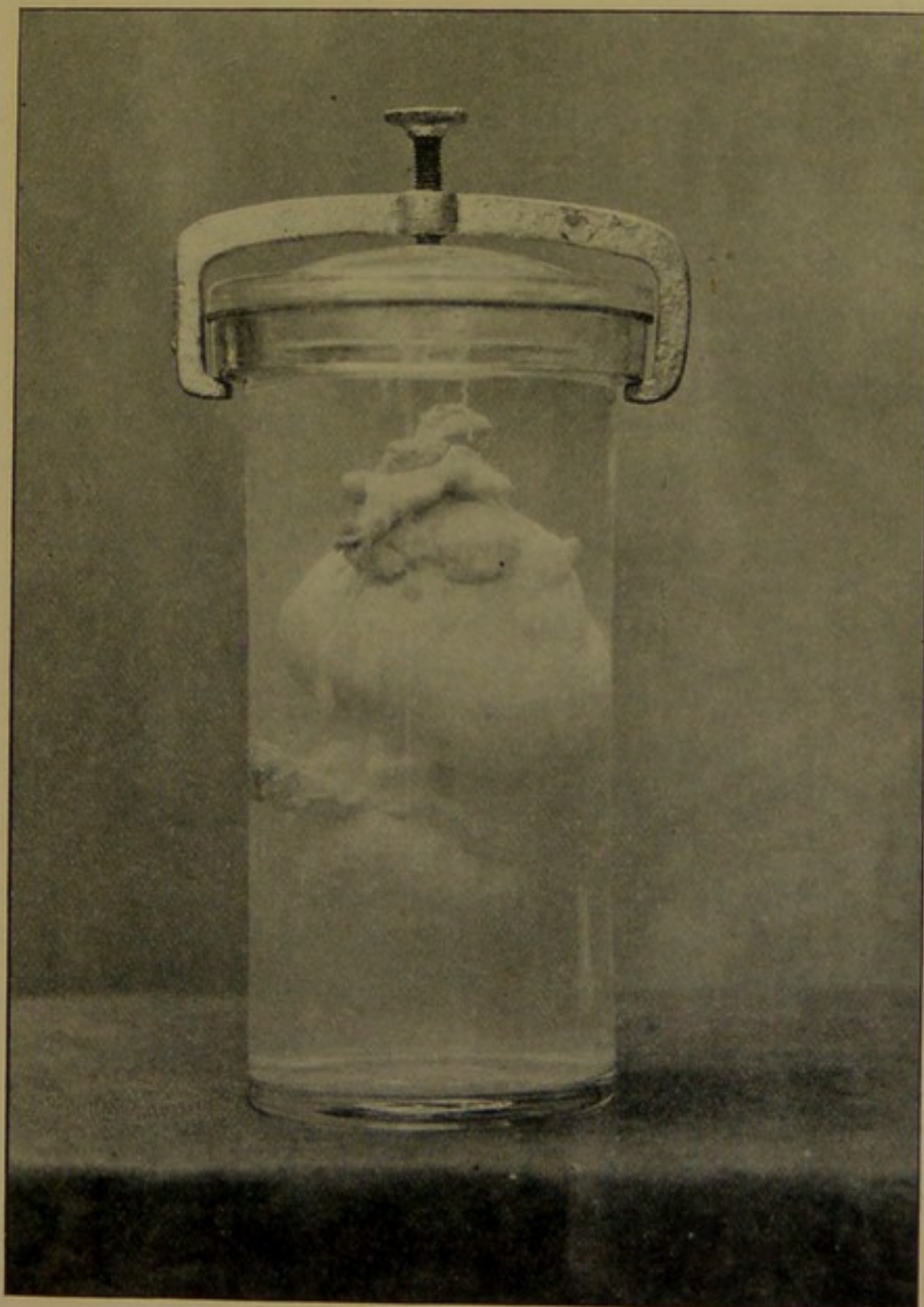
A rapid, uninterrupted recovery took place. Patient was out of bed the twentieth day, walked about on the twenty-fifth, and went home on the twenty-seventh day following operation. A recent report is most favorable in every respect. A gain in weight, strength and color continues.

#### CASE XXVI

This case I desire to briefly report to demonstrate how readily one can be deceived as to adhesions existing in the pelvis. This patient was anemic, thin in flesh, and scarcely able to walk, complains of frontal and coronal headache, backache, severe pains in both groins but most severe in left; pains in left leg and knee. She has had frequent urination with *ardor urinæ*. She flows now from five to six days, somewhat painful, and has sick headaches during this time. She is unable to be on her feet about her housework because of the increased severity of all her symptoms. Examination revealed partial rupture of perineum, prolapse of anterior vaginal wall and rectocele; vagina roomy, uterus low, cervix being within an inch of vaginal outlet, retroflexed, tender, enlarged and *fixed*, the cavity measured 4 inches.

A slight resistance was felt in the right vaginal vault. In left vault, posterior to cervix and low down an ovoid mass size of hen's egg was made out, tender on pressure, slightly elastic, *firmly fixed*. Removal of diseased appendages, and ventro-fixation of uterus was recommended and accepted.

Curettage and celiotomy were done April 1, 1895. Chloroform anesthesia was employed. The uterine cavity was found to be four inches in depth; the diseased endometrium was removed, *comp. tr. iodin* applied and the uterine cavity and vagina were packed with gauze. A small incision was made in the median line and the abdominal cavity opened. The large and cystic ovary that was wedged in beneath the retroflexed uterus easily left its bed when the *fundus uteri* was brought forward. *No adhesions were found* and



MULTILOCULAR CYST AND ENLARGED OVARY FROM  
CASE NO. XXVI

tubes were normal. The cyst was as large as a goose-egg and was removed entire (see cut) together with the left tube. The right ovary,  $2\frac{1}{2}$  times normal size and degenerated, together with the tube was removed very close to the uterus. A hysteropexy was then performed and the wound closed up without flushing or drainage. The operation was completed in twenty minutes and the patient left the table in good condition, pulse 74. Recovery was uninterrupted, and she went home at end of fourth week. June 1st, 1895, she returned for examination. Found uterus small, in position high up, pelvis clear, uterus not tender, all symptoms complained of have disappeared.

### LIST OF OPERATIONS MADE DURING THE YEAR

|                                                     |                                                |     |
|-----------------------------------------------------|------------------------------------------------|-----|
| Perineorrhaphy...                                   | { Complete tear.....                           | 3   |
|                                                     | { Partial tear.....                            | 2   |
|                                                     | { Partial tear with rectocele (Emmett's) ..... | 5   |
| Anterior colporrhaphy .....                         |                                                | 1   |
| Freund's operation for <i>prolapsus uteri</i> ..... |                                                | 2   |
| Dilatation of vagina for vaginismus.....            |                                                | 1   |
| Condylomata excised.....                            |                                                | 2   |
| Curettage.....                                      | { Senile endometritis.....                     | 2   |
|                                                     | { Simple and specific endometritis.....        | 69  |
|                                                     | { Retained secundines.....                     | 8   |
|                                                     | { Cancer of cervix.....                        | 1   |
| Trachelorrhaphy.....                                |                                                | 16  |
| Dissection of vulvo-vaginal cysts ..                |                                                | 2   |
| “ “ “ “ abscesses .....                             |                                                | 3   |
| “ “ “ “ perineal abscesses.....                     |                                                | 2   |
| Vaginal hysterectomy.....                           |                                                | 2   |
| Celiotomy.....                                      | { Ventral fixation.....                        | 10  |
|                                                     | { Hysterectomy.....                            | 1   |
|                                                     | { Ovariectomy.....                             | 23  |
|                                                     | { Extrauterine pregnancy.....                  | 1   |
| Operations upon rectum.....                         |                                                | 11  |
| Total.....                                          |                                                | 167 |

I have had twenty consecutive celiotomies with but one death since above report, and nine-tenths of them have been pus or inflammatory cases.

There was one death from septicemia following curettage after an abortion. The case was moribund when the uterus was put in a condition to favor recovery. There were also four deaths after celiotomy, making in all five deaths in the year's work.

## A METHOD OF PREVENTING THIRST FOLLOWING CELIOTOMY

BY WILLIAM H. HUMISTON, M. D.

(Reprint from the July number of *The American Journal of Obstetrics*.)

No one who has had any experience in the after-care of abdominal cases, will deny the important place that thirst occupies. It is the one prominent, annoying and distressing symptom, and I know it can be overcome.

This is my method of procedure:

The patient should have the usual preparation for celiotomy; *i. e.*, diet, daily baths, cathartics, etc. For three days prior to operation order the patient to drink one pint of hot water an hour before each meal and on retiring, thus drinking two quarts of water each twenty-four hours, *the last pint to be taken three hours before the time set for operating*. Do not omit to give the water the day previous to the operation, while the patient is restricted to a limited amount of liquid nourishment and the bowels are being unloaded. We thus restore to the system the large loss of fluid occasioned by the free catharsis, and we have the great satisfaction of seeing our patient pass through the trying ordeal of the first thirty-six hours after the operation in comparative comfort, with no thirst, a moist tongue, and an active renal function, represented by an excretion of from twenty-eight to fifty fluid ounces of urine during the first twenty-four hours, catheterization being seldom necessary. This is in keeping with the full character of the pulse noted.

The above detail I have recently carried out in twelve cases. To eleven chloroform was administered, to one ether. The time required to complete the operation varied from ten to fifty-five minutes. Whether the case was one of sclerotic ovaries or a pus case with universal adhesions of all the pelvic structures, the result has been uniform and highly satisfactory, thirst being allayed and excretion stimulated (a very essential condition to a prompt recovery).

I believe this method will prove to be efficient in the hands of abdominal surgeons generally, and I publish it early with all confidence that the twelve cases that I have had will soon be fortified by the reports of many hundreds, and that by it we may avoid a condition that is and has been distressing alike to patient, surgeon and nurse.

122 Euclid Avenue.

