

when associated with temperature is a result of the concentration of the urine incident to the cause of the latter, or a co-existing diarrhea, and to uric-acid infarcts in the kidneys, rather than that the temperature is due to the latter. It is hardly necessary to mention that this presupposes a normal anatomic status of the urinary tract.

TREATMENT.

The treatment of infections of the respiratory tract and all other infections in the newborn rests primarily in prophylaxis, a strict observance of asepsis and protection against infection of the infant while in the birth canal, at delivery, and subsequent thereto. The oft-repeated admonition of antiseptic douching at the onset of labor in case of suspected gonorrheal infection in the mother and the immediate care of the eyes by Credé's method ever holds good for the prevention of ophthalmia neonatorum. The douching also removes bacteria that are commonly found in the vaginal secretion and which, according to Kneise, are always present in the mouth of the newborn. The opinion was early expressed by Epstein¹⁹ that contaminated amniotic fluid might be responsible in some instances for infection of the respiratory and gastrointestinal tracts in the newborn, and suggested the necessity of avoiding frequent examination after the rupture of the bag of waters. It is probable, however, that the pathogenic organisms of the vaginal bacterial flora which may be virulent would better explain such infections.

Of vital importance to the infant is the treatment of the cord, for which many methods have been advocated, some of which have been quite radical because of unfortunate occurrences. Because of an experience with tetanus in the newborn, Martin²⁵ advised cutting the cord after ligation with red-hot scissors. Dickinson²⁶ recommends excising the cord entirely, ligating the umbilical vessels, and suturing the skin over them, claiming that the sloughing process at the child's navel is not consistent with asepsis in child-bed. While a moist gangrene of the cord may not be, a normal mummification of the cord can not carry any such dangers.

Occlusive dressings have also been used, but Runge²¹ long ago demonstrated that such a method delayed separation of the stump, which remained moist and fetid. An hygroscopic dressing of plaster-of-paris is also practiced, and Cholomogroff,²² from his bacteriologic investigations, believed that it possessed advantages over other methods. Whatever be the method used, asepsis should characterize its treatment as thoroughly as the stump of an ovariectomy.

When an infection of the respiratory tract or any other organ or tissue develops in a newborn babe in a maternity ward it is evident from the above cases that it should be isolated, and that a nurse attending it should neither attend uninfected mothers nor children. Winckel stated that the same nurse should not at any time care for both mother and child. Where it is not practical to carry out Winckel's plan the infant should receive first care. There is little doubt that some infections in children may be conveyed through the medium of the attendant. In fact, as Kehrer²⁷ urged, the infant should not share the bed of its mother, nor, as might be added, the bed of other newborn, for obvious reasons. The infant should be protected against infections, acute or chronic, of the respiratory tract of the mother or

nurse. It is not improbable that the first infected of the above children acquired the same from the mother or the attendant.

Reich²⁸ reported instances of direct conveyance of tubercular infection by a midwife who was accustomed to blow into the nose of the infant to establish respiration after she had aspirated mucus from the oral cavity of the child, by aspirating directly with her mouth. Ten children so treated died within fourteen months from tubercular meningitis, although their heredity was negative. Later the midwife herself died from pulmonary tuberculosis.

The immediate care of the affected infant must necessarily be symptomatic.

In the above patients the temperature and restlessness were combated by sponging and bathing. The gastrointestinal symptoms were treated when the stools showed undigested material, by diluting the breast milk by the administration of sterile water before nursing, and in case vomiting was present, by prolonging the interval of nursing and giving lime water at that time. Enteroclysis was employed, also small doses of calomel, 1/40 gr., or castor oil.

To overcome the tendency to anuria, water was given frequently, and, at times, small doses of potassium citrate. The most effective measure in this regard, in addition to increasing fluids consumed, is the use of high rectal enemas of salt solution or sodium bicarbonate to be retained. They were given at six-hour intervals, about two ounces being used.

Concerning the immediate treatment of the respiratory tract, the nares were swabbed three or four times daily with boric acid solution. No expectorants were given because of the probability of increasing gastric disturbance.

AN OPERATION FOR PYOSALPINX WITHOUT LIGATURE, CLAMP, ARTERY FORCEPS OR BLEEDING, BY OVERTHROW PROVISIONAL SUTURE METHOD.

REPORT OF FIFTY-NINE CASES WITH ONE DEATH.

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ST. PAUL, MINN.

(Concluded from page 1017.)

CASE 17.—R. D., aged 19, single, was admitted to hospital Aug. 1, 1903.

History.—The patient had diphtheria, when a child, influenza and scarlet fever; had gonorrhea about four years ago; at the same time had four sores on labia; she was told they were chancres; had been taking blood medicine for two years; says she was cured of gonorrhea two years ago, and contracted it again for the second time and was cured; says she was rachitic when a child.

Diagnosis.—Right-sided pyosalpinx; appendicitis.

Operation.—Single salpingo-oophorectomy, appendectomy. The right ovary, right tube and vermiform appendix were found to be bound together with firm peritoneal and omental adhesions; a large band of omentum ran across from the anterior abdominal wall to the fundus uteri. The adhesions were broken up with difficulty. The right tube and ovary were isolated, but in lifting up the tube it ruptured and pus escaped. The opening in the tube was clamped and the tube and ovary (right) removed by making a short incision in the broad ligament and whipping over the uterine edge of the ligament with Billroth's chain suture, proceeding in this way, cutting and tying, until the tube and ovary were almost removed. They were then raised up and slightly drawn on, so as to form a

25. Martin: *Zeitsch. f. Geb. u. Gyn.*, 1900, 42, S. 593.

26. Dickinson: *Amer. Jour. Obs.*, 1899, vol. xi, p. 14.

27. Kehrer: *Befträge z. vergleichenden u. experimentellen Geburtsh.*, No. 4, p. 35.

28. Reich: *Berl. klin. Wochts.*, No. 37, 1878.

pedicle, which was tied off with pyoktannin catgut, No. 3. The apex of the appendix was freed of adhesions, seized with artery forceps and raised up; the remainder of the appendix was freed and double ligated with catgut and removed by cutting between two ligatures. The peritoneal flap was closed with fine catgut suture. The patient was discharged, well, Sept. 29, 1902.

CASE 18.—L. A., aged 54, a widow, was admitted to the hospital Aug. 5, 1903.

History.—The present trouble began three weeks ago with chills and vomiting. She had very severe pain in left side, which was very tender. She had chills three successive days; she went to bed, but got no better. After about ten days she began to have a discharge from the uterus. The pain still kept up and the discharge was very offensive and yellow in color. This discharge gradually ceased and she suffers less pain.

Diagnosis.—Pelvic inflammation, pyosalpinx (left).

Operation.—Salpingo-oöphorectomy. An incision was made in the median line, about five inches long between the umbilicus and the pubes. It was necessary to make such an incision on account of the belly wall. Numerous adhesions were found between intestines and omentum. These were broken up with the fingers and the appendix was exposed; this structure was normal. The ovaries and tubes were found to contain abscesses. Adhesions were found to anterior abdominal wall, and several large adherent portions of omentum were tied off and excised. A broad ligament hemorrhage on the left side was found. A partially organized clot was found about the size of a hen's egg; it was shelled out, and a cyst of the same size was opened. A continuous over-and-over suture was employed, and the ovaries and tubes were removed with very little hemorrhage. The cavity was swabbed out so as to free it from blood clots and other foreign substances; the peritoneum was sutured with pyoktannin catgut No. 2; also the fascia of the rectus muscle. The skin was sutured with silkworm gut, a dry dressing was put over the wound and the patient sent to bed in good condition, but died Aug. 16, 1903.

CASE 19.—F. S., aged 19, single, was admitted to hospital Aug. 18, 1903.

Diagnosis.—Pyosalpinx, cystic ovary, appendicitis.

Operation.—Laparotomy: salpingo-oöphorectomy, appendectomy. An incision was made in the median line between the umbilicus and the pubes, about four inches in length, down to the peritoneum, which was grasped with two pairs of dressing forceps and lifted up and cut. The ovaries, tubes and appendix were then explored; the fundus of the uterus was found in Douglas' cul-de-sac. Some adhesions were found also and a pus tube and an ovary which had a few small cysts on the surface. The left tube and ovary were taken out, the broad ligament being sutured. An extra tube abscess was opened during the operation and pus escaped, which was wiped away by sponge. All adhesions were broken up and appendix removed. A cuff was dissected and the appendix ligated, cut off and touched with 95 per cent. carbolic acid, followed by alcohol. The cuff of peritoneum was closed over the end and the whole inverted. A ventral suspension was performed, two pyoktannin, No. 2, catgut sutures were placed through the peritoneum and through the posterior portion of the fundus of the uterus and tied; the intestines were carefully mopped and the peritoneum was closed by continuous suture of No. 2 catgut. Muscles and fascia were then sutured with same suture and the skin closed by subcuticular stitch of silkworm gut. Patient was discharged, well, Sept. 23, 1903.

CASE 20.—Mrs. H., aged 35, admitted to hospital April 1, 1904.

History.—The patient has had several attacks of gonorrhea. She complained of pain in the right and left lower quadrants of abdomen and of pain in back. Temperature, 100; pulse, 105. She had constipation, headache and furred tongue, offensive leucorrhea discharge.

Diagnosis.—Lacerated cervix; inflammation of uterus and a large retroflexed uterus fixed posteriorly; large packet found on both sides of uterus; considerable pain and tenderness in pelvic region.

Operation.—Salpingo oöphorectomy. The abdomen was opened in the median line with the patient in the Trendelenburg position. Bowel, omentum and rectal adhesions were cut away and tied. Adhesions of bowel were separated and bowel and omentum allowed to drop back from site of operation. A large piece of gauze was inserted for drainage. Pelvic peritonitis was present. The tubes were freed, and the ovarian and uterine arteries were tied on the left side. On attempting to separate the tube from its attachment to the broad ligament, the ligature slipped from the ovarian artery and the profuse bleeding was stopped with difficulty. The bleeding artery after ligating was cauterized. There was considerable oozing from freed adhesions. The broad ligament was stitched and an attempt was made to cover raw surfaces with peritoneum. The patient suffered slightly from shock, but otherwise made an uneventful recovery, leaving the hospital on the nineteenth day after the operation.

CASE 21.—Mrs. W., German, aged 27, admitted to hospital April 1, 1904.

History.—Patient has no children; she has had no abortion; no gonorrhea. She is thin and anemic. She complained of a dragging pain in her left inguinal region. She had typical hysterical crouch and expression of face, with position of palsied hand when attempt is made to examine side. This patient was pronounced a confirmed hysteric. There was a tough, light-colored, stringy, tenacious discharge from the cervix. She was constipated. Temperature was 99.6; pulse, 96. She complained of headache and general malaise. She has had repeated attacks of pain in right side.

Diagnosis.—The patient was examined with much difficulty. I found the uterus deflected to the left side, somewhat fixed laterally on the right side. I made a diagnosis of retroverted uterus. A large mass was felt through the abdominal wall, which wall was thin.

Operation.—Oöphoro-salpingectomy. The adhesions on the right side were very dense. The omentum was separated and an inflamed mass was found, a portion of which crossed the pelvis. Its middle portion and distal end were adherent, respectively, to the tube and to the posterior wall of the uterus. After tying and freeing the appendix it was removed (cuff method). The tube and ovary were removed by clamping and cutting below tube, then following up cut surface by running suture and tying off the tube at the horn. In the left broad ligament a large organized clot, the size of a goose egg, was found. The ligament was split and the clot removed, after which the ligament was closed with running suture. Patient was discharged, well, April 24, 1904.

CASE 22.—Mrs. M., admitted to hospital July 15, 1904.

Diagnosis.—Left pyosalpinx.

Operation.—A median incision, three inches long, was made between the umbilicus and the pubes with the patient in the Trendelenburg position. The intestines were packed back. There were adhesions between the left tube and the sigmoid. The left tube was coiled around the left ovary, which was normal. When the bowel was torn from the adhesions, pus appeared, which was sponged away. No. 2 pyoktannin catgut was used for provisional sutures in stump of broad ligament, as the tube was cut away. On section of removed tube pus in considerable quantity was found in the lumen of the tube. In removal of the tube part of ovary was also removed. The other tube and ovary, as well as the appendix, were normal. The peritoneum was sutured with No. 2 pyoktannin catgut; the fascia with No. 3 pyoktannin catgut, and the skin with a subcuticular suture of silkworm gut. A dry dressing was applied. Patient made a good recovery from the anesthesia. Pain was severe. The temperature varied from 99 to 101.4, which was the highest until she was discharged, August 3, thoroughly recovered.

CASE 23.—M. R., aged 19, white, clerk.

History.—She has always enjoyed good health. The present trouble dates back two weeks. It began with constant, sharp pain in right iliac region, which disappeared in a few days and then returned in left side. Menstruation began at 13 and was regular until one year ago; it was always profuse, lasting about two days. Menses were accompanied by pain and back-

ache. During past year menstruation has been irregular and attended with sharp pain, compelling patient to go to bed.

Examination.—Patient was well developed and had good color. Lungs and heart were normal. Pulse was regular, but fast (120). In the lower part of the abdomen and extending to one inch below the umbilicus a large mass could be felt. It was firm on palpation, dull on percussion and very painful and tender on pressure. The left side was more tender and painful than the right.

Diagnosis.—Gonorrhea, endometritis and double pyosalpinx.

Operation.—June 28, 1904, a median incision was made. The right ovary and tube were adherent. The adhesions were broken up and the broad ligament ligated by a continuous suture. The tube was removed; it was enlarged and inflamed. A number of cysts were found in the mesentery and about the left tube and ovary. The patient was discharged well July 14, 1904.

CASE 24.—Mrs. F. P., aged 32, white, housewife, admitted to hospital June 4, 1904.

History.—The patient has had three children, the oldest is now 14, and the youngest 8 years old. In February, 1904, the patient had an attack of pain in the lower right quadrant of the abdomen. This was accompanied with vomiting and fever. About three weeks before admission to the hospital she was again seized with pain in the lower right abdomen, accompanied by fever. Attempts at vomiting were painful.

Examination.—The patient was well nourished, with a good color. Her eyes were clear and bright; the tongue was slightly coated. Lungs and heart were normal. The abdomen was tender on palpation and the percussion note on the right side was dull. An abscess could be palpated filling the lower right pelvis and extending as high as McBurney's point and an inch to the left side of the median line. Urine examination was negative.

Diagnosis.—Double pyosalpinx.

Operation.—June 7, 1904, an incision was made in the median line. Adhesions were found involving the peritoneum, omentum, intestines, ovaries, tubes and bladder. Those involving the intestines were broken up. A mass was found on the right side, involving ovary, tube and omentum and adherent to the upper posterior part of bladder. This mass was removed after a partial removal of pus from the tube by aspiration. The puncture was closed with forceps and no pus escaped. The broad ligament was sewed up by an over suture, and part of the ovary was stitched to the right cornu of the uterus. The omentum was ligated and cut from adhesion. Right and left extra tubal abscesses were opened. The broad ligament was adherent to the upper part of the uterus and a portion of the rectum, and in breaking these adhesions the peritoneum was pulled from the uterus, leaving it bare. Stitches were taken, bringing the peritoneum from before backward and from below upward and forward, covering the bare upper portion. Left ovary and pus tube were removed without rupture, and the incision was closed. The patient was discharged well, Aug. 11, 1904.

CASE 25.—B. M., aged 21, white, American, domestic, admitted to hospital May 27, 1904.

History.—When the patient was 16 she had an attack of cramps in abdomen, accompanied with vomiting, and pain on the right side. Last February she had a great deal of pain in the right side, though it did not confine her to bed. On Monday previous to admission to hospital, about 10 a. m., the patient complained of pain in the abdomen and on the right side. Bowels have moved fairly regularly.

Examination.—Patient is well nourished; her color is sallow; eyes yellow tinged; tongue slightly coated. Lungs and heart are normal. Pulse is strong and full, but rapid (100). Abdomen was tense, and she complained of pain on palpation over the umbilicus and on the right and left sides. Percussion note showed no tumor on the right. Deep palpation in the right iliac region caused pain. Temperature 101. There was no rash on the body. Urine examination was negative.

Diagnosis.—Double pyosalpinx.

Operation.—A large pyosalpinx was found on both sides, firmly adherent to adjacent parts. On breaking up adhesions on the left side, the sac was ruptured and the pus escaped

into the peritoneal cavity, which was wiped out carefully, the intestines having previously been walled off, by sponges. The left tube and ovary were excised and a chain suture inserted to ligate the broad ligament. An abscess on right side ruptured in freeing adhesions, and the pus carefully wiped out. The right ovary was normal and was left *in situ*. The right tube was excised. Both tubes had become adherent to the sigmoid, and after removal two large denuded areas were sutured over by continuous suture, bringing the peritoneum over the sigmoid. On July 14, 1904, an appendiceal abscess was diagnosed and on July 16 the patient was operated on. She was discharged, well, Aug. 10, 1904.

CASE 26.—M. W., aged 18, white, American, domestic, admitted to hospital May 7, 1904.

History.—Patient complained of pain in abdomen and low in pelvis, on both sides for about two weeks. She had a temperature of 101.2 on admittance to the hospital. She denied having a vaginal discharge, but later admitted that she had. She has some pain and burning on urination. There is no history of syphilis.

Examination.—Patient is well nourished, strong and healthy. Her color is good, eyes clear and bright, tongue coated. Cervical glands are not enlarged. Heart is regular and strong, and lungs normal. There was no rash on the body. There was tenderness on palpation, low in pelvis, on both sides. Albumin was present in the urine.

Diagnosis.—Right pyosalpinx, gonorrhea, inguinal bubo.

Operation.—May 18, 1904. Large right-sided pus tube was adherent to intestines and down in cul-de-sac. It was freed by dry dissection, excised and stump overcast with catgut sutures, a buttonhole stitch covering in abraded surfaces. Pelvis was sponged dry and peritoneum closed. Patient left table in good condition. Recovery was uneventful, and the patient was discharged June 18, 1904.

CASE 28.—L. H., aged 23, white, admitted to hospital June 17, 1904.

Diagnosis.—Double pyosalpinx.

Operation.—June 17, a median incision was made. Tubes and ovaries were adherent to surrounding tissues. The right Fallopian tube and ovary were first loosened, and in so doing an extratubal abscess was perforated and the pus escaped into the peritoneal cavity, which had previously been walled off with sponges. The pus was mopped out. The ovary and tube were removed and the broad ligament sutured by continuous suture. In breaking up adhesions on the left side, another extratubal abscess was ruptured, the pus being sponged out. The tube and ovary were removed and the broad ligament treated as on opposite side. The appendix was sought for and found involved. It was removed and the abdomen closed. Patient was discharged, well, July 30, 1904.

CASE 29.—Mrs. C. A. S., aged 30, white, American, housewife, admitted to hospital April 5, 1905.

History.—Patient had measles as a child, diphtheria at 11, typhoid three years ago and smallpox two years ago. Menses began at 15 and are regular. She has four children, the oldest 8 and the youngest 5 years old. She had a miscarriage last fall, fetus 6 weeks old. She was operated on for pelvic abscess last September. She has been sick for the last month, with pain in the left inguinal region and pain in the left leg. She has had a leucorrhoeal discharge for same length of time. She was in bed first and has been unable to do any work. Bowels are regular, but appetite is poor.

Examination.—Patient is fairly nourished, but anemic. Tongue is clean. Eyes, chest, lungs and heart are normal. Breasts almost absent. She states that they began to disappear after typhoid. She had twins 14 months old, who were still at breast at that time. There was tenderness over the left inguinal region and a mass was palpable. Urine examination was negative.

Diagnosis.—Double pyosalpinx.

Operation.—April 11, 1905. A median incision was made. The entire contents of the pelvis, including bladder, both tubes and ovaries, intestines and omentum, were adherent. These were carefully separated by means of blunt dissection. The fimbriated end of the right tube was adherent to the ovary

and there was a small abscess in between. The right ovary and tube were removed by separating them from the broad ligament by scissors and the edges of the ligament were united by continuous overstretch of catgut. An incision through the peritoneum was made in each side and the same suture continued through horn and tube. On the left side the adhesions were more complicated and involved large portions of intestines. This was all separated by blunt dissection. In one place a rather deep hole was left in the intestine from adhesions, but edges of it were stitched over. The tube and ovary were separated in the same manner as on the right side, but the tissues were so friable that they tore several times. A saline enema was given to see if there was any intestinal leakage; none was found. The abdomen was mopped out, and the peritoneum brought together by a single mattress suture above and an overstretch for the rest. Fascia and muscle were united by another overstretch, taking in line of suture peritoneum. Skin was closed. The external wound was treated by the open method. On April 15 there was a foul odor and a discharge from the vagina. On April 20 there was a profuse discharge from the abdominal wound and four ounces of pus were expressed. The opening in the bowel was searched for and found. After the bleeding was controlled, the edges of the bowel were resected, a Murphy button introduced, the parts brought together and the bowel sutured. At the time of making this report the patient is still in the hospital.

CASE 30.—A. B., aged 22, married, was admitted to hospital April 2, 1904.

History.—The patient had smallpox when 3 years old and "inflammation of bowels" when 21 years old. She is married, but has no children. A week previously was seized with pain in the abdomen, vomiting and general distress. She has had profuse offensive yellowish discharge from the vagina for three weeks, and is still very tender over abdominal region. She is constipated a great deal of the time.

Diagnosis.—Double pyosalpinx.

Operation.—Double salpingo-oöphorectomy. An incision was made in the median line, about four inches long. Both tubes were seen to be adherent and greatly enlarged; a very superficial abscess could be seen in the left tube. The left tube was freed from adhesion, and in so doing an extra tubal abscess was opened, considerable pus escaping. The tube and ovary were removed and the broad ligament sutured. The right tube and ovary were freed from adhesions, another extra tubal abscess opened. They were removed in the same manner as the left. The appendix was examined and found normal, so was left alone. The pelvic cavity was sponged out. The peritoneum was closed with No. 2 pyoktannin catgut. The same suture and stitch closed muscle and fascia. A subcuticular silkworm gut suture closed skin opening. The patient made an uneventful recovery and was discharged May 20, 1904.

CASE 31.—C. S., aged 22, single, was admitted to hospital April 23, 1904.

History.—The patient has been troubled with constipation and some headache. About five weeks ago she had pain in the stomach and pelvis. She has not vomited, but her appetite is poor and she feels distressed after eating. She has a discharge from the vagina of about five weeks standing and complains of pain in the back. She does not sleep well, and has menstruated three times in six weeks.

Diagnosis.—Pyosalpinx (left).

Operation.—Single salpingo-oöphorectomy, appendectomy. A median incision was made about four inches long. Intestines, bladder, tubes and uterus were found to be adherent; adhesions were broken up by dry dissection, using sponge on finger. Right tube was freed and examined; it was somewhat distended. It was aspirated, but no fluid was found. The appendix was found deep in the pelvis; it was freed and brought up. The serous coat was stripped off, forming a cuff. The mesoappendix was cut away and overcast with running suture of No. 2 catgut pyoktannin. The appendix was then clamped and cut off; the stump was cauterized with 95 per cent. carbolic acid, followed by alcohol, turned in and purse-string suture put around cuff and drawn tight. The left tube was much enlarged and firmly adherent, deep in cul-de-

sac. In freeing the tube an extra tubal abscess was opened, allowing a fluid to escape; this was sponged away. The fimbriated extremity was brought out and the ovary and tube cut away, small cuts being taken and each one followed by overcasting with running buttonhole stitch. Skin was closed with subcutaneous stitch of silkworm gut. The patient was given an enema of warm oil and whisky. Recovery was uneventful, and the patient was discharged May 23, 1904.

CASE 32.—G. R., aged 24, white, American, was admitted to hospital June 2, 1905.

Diagnosis.—Double pyosalpinx.

Operation.—June 3, 1905. A median incision was made. The left tube was found much diseased and swollen; it was very thick and distorted and contained an abscess which was broken in attempting its removal. The tube and ovary were removed with scissors and the ligament caught up with suture. When the fundus of the uterus was reached the sutures were continued to approximate the edges after excision of a small fibroid. The right tube and ovary were found diseased, but contained no pus; they were removed in the same way. Abdomen was closed. The abdominal wound was closed with a modified open method. Two pieces of gauze were applied on either side of the wound and only oxid of zinc strips applied. The patient was discharged well June 21, 1905.

CASE 33.—Mrs. M. S., aged 34, white, American, clerk, was admitted to hospital April 25.

History.—Patient has always had good health. She has had one miscarriage. Menses began at 12 years; regular. Seven weeks ago she began to have a yellowish discharge from vagina and shortly afterward began to have pain in the pelvic region. She refused operation at this time. She did not have menses during March, but did in April. She came to hospital on April 25, 1905, for operation.

Examination.—Patient is poorly nourished and anemic. Tongue is clear. Eyes, chest and lungs are normal. Heart gives systolic apical murmur, and second pulmonic sound is accentuated; murmur is transmitted to axilla. There is tenderness over the region of the ovaries; abdominal muscles are rigid. Urine examination was negative.

Diagnosis.—Double salpingo-oöphoritis.

Operation.—April 28, 1905. A median incision was made. The omentum was adherent to the bladder and the adjoining organs and was separated by digital dissection. The right tube was thickened and tortuous, and the ovary had a large cyst, which was ruptured in trying to remove it. The tube was severed from the broad ligament by scissors and the ligament caught up by suture from fimbriated end to horn and the tube removed. The left tube was also much thickened and tortuous and there was an abscess at the distal end which was opened in freeing adhesion. The tube and ovary were removed in the same manner as on opposite side. On the posterior surface of the uterus there was a small pedunculated fibroid, showing cystic degeneration. This was cut off and the raw surface stitched over. The appendix being involved in the inflammatory catarrhal action, was removed, and the abdomen closed. An ether mask was applied over abdominal wound and held in place by two strips of rubber plaster. It was removed on the sixth day and the wound was found completely closed, subcuticular stitch was removed, and two pieces of gauze applied on either side of the wound, held in place by rubber adhesive strip. On eleventh day the wound was entirely healed. Patient was discharged, well, May 22, 1905.

CASE 34.—N. W., aged 18, white, American, saleswoman, was admitted to hospital May 29.

History.—Menses began at 12. As a rule, the flow was irregular, both in time and number of days; rather painful, but not severe enough to compel patient to remain in bed. Loss of blood was excessive. Last menstruation was on Thursday preceding admission, but only of 1½ days' duration. Full term pregnancy four years before. The present trouble began a week before admission with pains in back and in lower left quadrant of abdomen. Patient has had vomiting, loose bowel and headache for past few days.

Examination.—Patient is well nourished. Her color is good; mental condition good; eyes are bright; tongue is coated.

Breasts are well developed and firm. Abdomen is flabby and shows old scars of pregnancy, but there is no abnormality in outline. There is some tenderness over McBurney's point, but not in right inguinal region. Abdomen on right side is soft. On left side there is distinct firmness over left quadrant low down and it is tender on pressure. Both areas are tender on pressure and painful. She has a vaginal discharge.

Diagnosis.—Salpingitis (left).

Operation.—June 1, 1905, a median incision was made. Intestines were pushed aside and kept there by sponges. The left tube and ovary were much inflamed, distorted and adherent. The adhesions were all broken up and the tube and ovary removed by beginning at end and cutting them away with scissors. Broad ligament was caught up by suture to control the hemorrhage. After carefully wiping out the peritoneal cavity the right tube and ovary were examined and found somewhat inflamed, but were not removed. Abdomen was closed. Abdominal wound was treated with two strips of gauze on either side of incision, held in place by adhesive strips. Patient was discharged, well, July 3, 1905.

CASE 35.—Mrs. P., aged 38, white, German, housewife, was admitted to hospital June 9, 1905.

History.—She complains of pain in the lower part of the abdomen and weakness of legs. She has been unable to do her work for some time because of the weakness. There is a feeling of fullness in throat. She has a white vaginal discharge. She was troubled similarly two years ago and came to the hospital and was operated on. A ventral fixation was done, and the right tube and ovary were removed. Recently the trouble returned. Family history was not obtainable.

Examination.—Patient is a large fat woman, with good color and well nourished. There is a scar on abdomen from previous operation. Heart, lungs and abdomen normal. There is a leucorrhoeal discharge. Urine examination was negative.

Diagnosis.—Pyosalpinx (left).

Operation.—June 10, 1905, a median incision was made. The operation was difficult on account of thickness of abdominal wall. The left tube and ovary were removed by cutting the tube from broad ligament with scissors and suturing the broad ligament as the incision proceeded. There was little pus, if any in the tube, but tube and ovary were prolapsed and adherent in the cul-de-sac; there were also adhesions in this region. The tube was ruptured in removal and the ovary was removed in pieces. Hemorrhage was controlled by sutures. A tear in the peritoneum over the sigmoid was closed with Lembert sutures, abdomen closed and external wound treated by modified open method. Patient was discharged well July 6, 1905.

I have selected 35 out of 59 most interesting and complicated of my cases which I have taken from the different hospital records. The time allotted to me will not permit of my reporting all the cases in detail. In 24 which I report, but not in detail, the patients made uneventful recoveries and were discharged well.

DEDUCTIONS.

The most frequent causes of pyosalpinx are abortion and gonorrhea.

Pyosalpinx occurs most frequently between the ages of 16 and 40.

My mortality from operation is less than that from measles, being under 2 per cent.

It occurs, in the great majority of cases, either in the ampulla or distal end of the tube.

It is complicated very frequently with appendicitis.

In the majority of cases, it is accompanied by cystic ovary.

It is comparatively easy to differentiate from appendicitis.

It almost always is accompanied by a pelvic or general peritonitis.

The tube seldom, if ever, ruptures.

The operation, as described by me, is almost blood-

less and can be performed without the use of ligatures or artery forceps.

Drainage is almost never necessary.

Counter openings should not be made.

Extratubal or peritubal abscess is frequently found, in which the walls are made up of bowel, or omentum, tube, broad ligament, sigmoid, uterus, or bands of adhesions. This condition is frequently mistaken for rupture or abscess of ovary or tube, as it is impossible to separate or to encroach on this abscess without opening it.

THE STATE OF NEW JERSEY VERSUS GEORGE H. WOOD.

A REVIEW OF THE EVIDENCE AND OF THE THEORIES
AVAILABLE FOR THE DEFENSE.*

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On Feb. 2, 1905, about noon, George Williams, a grocer of Watchung, N. J., was found in his sleigh, shot through the back, on a lonely part of the road between Watchung and Warrenville (near Plainfield), N. J.

When last seen alive, Williams was in the sleigh with George H. Wood, the latter having hired Williams to take him from Watchung to Mt. Horeb. There was no apparent motive for the crime, Wood and Williams never having met until the fatal morning and no attempt at robbery had been made. Wood was tried for murder in the first degree at Somerville, N. J., May 15-19, 1905, before the Hon. A. G. Garretson and a jury. The defendant pleaded "not guilty," advancing as his defense that he had no clear recollection of anything between the dates of Jan. 30, 1905, at noon, and Feb. 5, 1905, when he awoke in the city prison of New York.

Such a defense, in face of the fact that many witnesses had met and talked with Wood in and about Plainfield, both on the day of the murder and for several days previously, and had noticed nothing peculiar about him, marked the case from the outset as out of the ordinary. It was circumstantially proved, with almost absolute certainty, that Wood killed Williams.

To explain the period of automatism with amnesia, alleged by Wood, several hypotheses were advanced by the experts called in his behalf, all of whom testified that Wood was irresponsible or insane at the time of the commission of the crime. These hypotheses were not accepted by the state's medical witnesses, and it was the general opinion that, had the case gone to the jury, the defendant would have been found guilty.

The defendant's counsel realized this, and at the same time the prosecutor, in view of the impossibility of showing strong motive, recognized that there was sufficient doubt as to the defendant's mental balance to justify a lesser verdict than death. Consequently, at the end of the trial, after consultation between counsel of the two sides and the presiding judge, the original indictment was withdrawn, the defendant pleaded guilty to murder in the second degree and was sentenced to thirty years at hard labor in the penitentiary, the maximum penalty.

The whole interest in the case centered in the story told by Wood. He told and retold it to many persons before the trial, he told it at the trial. It was always the same in important particulars. Under rigid cross-ex-

* Read at a meeting of the Psychiatric Society of New York.