Original Articles.

TEN DAYS' EXPERIENCE WITH INFLAMMATIONS OF THE VERMIFORM APPENDIX.[1]

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Appendicitis is frequently a very mild disease, and many cases doubtless recover without perforation or abscess. From numerous consecutive cases of this kind, the clinical aspects of which at times may have been alarming, the practitioner feels a security in the management of subsequent cases which may be followed and frequently is followed, by the most deplorable results. The proper treatment of appendicitis can be determined only by the study of a great number of cases of all types. The opportunity of watching this disease at the outset is seldom given the consultant, most cases having become well advanced at the time of his first examination. Early observations made by intelligent physicians are of great value in deciding the question of treatment in the first few hours of an appendicitis, and it is to be hoped that every practitioner who sees a case at this time will give us the benefit of his experience.

It has been said recently by an eminent English surgeon that the importance of appendicitis is very much exaggerated in this country, and that operations for its relief have fallen into well-deserved disrepute. Such statements do much harm, in my opinion, not only because they make light of a most serious matter, but because they encourage unwarranted confidence in treating palliatively a disease conspicuously treacherous and disparage the only possible means of averting death in a large percentage of cases. To show conclusively that the field is *not* a small one, and that the operation is not unimportant, I have only to say that in 1891 and 1892, in my private practice, the total number of deaths from appendicitis exceeded largely the total number of deaths from all other causes, and that in 1892, out of 150 private operations 34 were on the appendix, with eight deaths.

During the ten days beginning October 30, 1892, I was called to seven cases of appendicitis. They seem to me of sufficient interest to be reported in connection with Dr. Broughton's paper, inasmuch as they present clinically the chief features of mild, severe, and fulminating cases. In all I was assisted by Dr. Mumford.

Case I. Mrs. H. C., age fifty, I saw at Wakefield on Sunday, October 30, 1892, with Drs. Heath and Odlin. This woman had always been well and strong, and had a good family history. Eight weeks before she had been seized with pain under the liver extending into the splenic region. There were chill and fever. The pain continued, gradually increasing in severity and extent. At the end of four weeks it had become localized in the right flank, and was very severe, extending along the course of the right ureter and onto the anterior aspect of the right thigh. The temperature for the ten days before the operation had been ranging from 100° to 104°; the pulse about 100. Her general appearance was bad; the tongue was red; and there was marked cachexia, suggesting malignant disease. Dulness and tenderness existed over the whole right half of the abdomen. The right thigh was drawn up. The temperature was 100.8° and the pulse 100. Vaginal examination was negative. Diagnosis, abscess of appendicular origin.

Through a cut made in the right flank, extending downward and forward, large quantities of pus of strongly fæcal odor were evacuated. The appendix could not be seen nor felt. The discharge contained fæcal concretions, which could come only from a perforated appendix. Very good dependent drainage was established in the flank with rubber tubes and gauze. Convalescence became rapidly established and a satisfactory recovery followed.

In this case the abscess was slow in formation, and its walls therefore strong. Its contents were under considerable pressure; and both constitutional and local evidence proved the presence of a septic focus. Although her symptoms were not of alarming severity, the patient was profoundly septic and much exhausted.

A favorable termination without operation could not have been reasonably anticipated, nor would further delay have been justifiable. A localized peritonitis in any region not remote from the usual or occasional seat of the appendix, occurring in robust health, is so much more frequently caused by an affection of the appendix than by any other pathological condition (in the absence of pelvic disease) that I feel confident that the abscess sprung from an inflamed and perforated appendix from which had escaped the fæcal concretions found at the operation. From a clinical standpoint the remedy was obvious, whatever the pathological condition may have been.

Case II. A. H. B., age fifty-five, Wakefield, a patient of Dr. Charles Jordan, was operated on immediately after the preceding case. On the evening before (Saturday, October 29th) operation had been declined because the case seemed hopeless. On the preceding Tuesday, after six hours' tramping in the woods, he began to have pain in the right inguinal region, which rapidly became worse. He had had, last spring, two attacks of pain in the abdomen similar to the present, but not so severe. The day before (Monday) he took for constipation some of "Carter's Little Liver Pills," which produced two or three loose dejections. The pain was "irritating and cutting." There was vomiting once after a slight chill. On the second day (Wednesday), the day of Dr. Jordan's first visit, the pulse was 102 and the temperature 100°. There was great tenderness over the cœcum, but there was no general tenderness or distention.[1] On Thursday morning there was general distention, but less pain. He felt more comfortable, but in the course of an hour there was "tremendous pain," requiring opiates. The temperature was 101°, and pulse 114; no vomiting. On Friday, the fourth day, there was distention, tenderness, pain and fever. No change for the better. On Saturday, the fifth day, the distention was somewhat relieved by dejections and passage of flatus. I found a much distended and tympanitic abdomen, with great general tenderness. The facial expression was good. The pulse was 100, temperature 100.8°, tongue heavily coated, and general appearance fair. His mind was somewhat clouded. Rectal examination was negative. There was a right inguinal hernia. The diagnosis was general peritonitis from appendicitis. Operation was declined by the family because of the grave prognosis.

On the following day (Sunday), the sixth day, I

[1] Read before the Boston Society for Medical Observation, December 5, 1892.

[1] In the light of the subsequent history, an operation at this time would probably have been successful.

found the patient in better condition than I had thought possible. The hernial protrusion was so marked that it seemed possibly the cause of his symptoms. I therefore advised a rapid exploration of the right inguinal ring. No strangulation was found. The bowels presenting were much injected, covered with lymph-flakes, and bathed in thin, foul-smelling fluid. The appendix was perforated and sloughing and there was a hopeless peritoneal inflammation. I tied off the appendix, washed out the abdomen and packed with gauze. The patient rallied well from the operation, but died on the following Tuesday.

An operation on Saturday would have been better than one on Sunday, though the same result would probably have followed. The latest hour when a cure could reasonably have been expected was on Wednesday, the second day. By an exploration on the first day the patient, in my opinion, would have been exposed to a very slight risk, and would very probably have recovered.

CASE III. J. R., age sixty-nine, a patient of Dr. F. C. Granger, of Randolph, Mass., was seen for me by Dr. Mumford on the 31st of October. There was a history of three months' debility and constipation following the grip. On the 28th of October he had been suddenly seized at night with extreme pain in the right inguinal region. This was followed by vomiting, which was obstinate, and obstipation. This condition had continued for three days, accompanied by tenderness over the appendix, general abdominal distention, restlessness, occasional mild wandering, heavily coated tongue, a temperature ranging from 98° to 100°, and a pulse of from 70 to 90. On the 31st he was seen by Dr. Mumford. His expression was anxious and haggard; the abdomen distended and board-like, pain and tenderness everywhere over it, the knees drawn up, and the general condition so excessively feeble that operative measures could not be considered. A large, resisting, doughy mass could be felt in the region of the appendix and by the rectum, where he was exquisitely tender. He failed rapidly, and died the following day. An autopsy was performed, the result of which I have not been able to get. This was a case in which — whatever may have been found at the autopsy — the symptoms pointed very strongly to an inflammation of the appendix, and I have therefore included the case in my list. Some other pathological condition may have been found, but the symptoms to which this condition gave rise would have demanded an abdominal exploration if the general condition had been better.

CASE IV. R. S., 3d, age twelve. This case I report in some detail to show that it would have been better to operate during the first attack. Perfect recovery followed the operation, but I am inclined to believe that the patient was subjected to an unnecessary risk.

History (by R. S., 2d).—"R. S., 3d, age twelve, a strong and healthy boy, had had no illness of any kind during the preceding six months. On Saturday morning, October 22d, he complained of a pain in the abdomen. This was not intense, yet sufficiently severe to make him glad to go to bed. As there had been no movement of the bowels for twenty-four hours, a laxative was given. The pain was still persistent during the rest of the day and evening, with a certain amount of general tenderness over the abdomen. The temperature was not taken. There was one movement of the bowels during the night. On the morning of the 23d, the condition was about the same, except that the abdominal pain was somewhat less severe. Soft food was given during the day, and he was kept in bed. Examination of the abdomen at about six o'clock in the evening showed tenderness, now confined to a small area in the right side and flank, beginning at a point three and a half inches to the right of the umbilicus, from there extending backwards about two and a half inches, and reaching from the crest of the ilium below to the border of the ribs above. The tenderness was very trifling, and there was absolutely no pain over the tender area except on palpation. Dr. Richardson, in consultation about nine o'clock the same evening, considered the general condition to point to some affection of the appendix. The temperature at nine o'clock in the evening was but 100.5°. The tenderness on pressure in the right side continued to be noticed till Thursday. From Monday till Thursday there was almost nothing in the general condition of the patient to point to any serious trouble in the abdominal cavity. The bowels were moving freely, the appetite was good, the tongue clean, and there was no elevation of temperature, the only indication of possible trouble being a slight amount of tenderness. On Friday, Saturday, and Sunday he was able to be up and about. On Monday morning he was sent to school with directions to return at about eleven o'clock. On arriving home he looked very pale and tired, complaining that his side pained him, and that the teacher had made him stand up at the blackboard, which he found fatiguing. About twelve o'clock there was a chill, followed by considerable fever and increase in abdominal pain. There was well-marked dulness at the seat of the previous tenderness, with an increased area of resistance. The temperature at three P. M. was 102°. During the night there was one large operation of the bowels. The temperature on the following morning was 102°. Dr. Fitz, in consultation, confirmed the previous diagnosis of appendicitis. On Tuesday the temperature was 102.2° in the afternoon. The appetite was poor and the tongue foul. Wednesday morning the temperature was 102.2°. There was no increase in the area of pain or dulness. The right thigh was not flexed at any time, and the dorsal decubitus was maintained throughout. Dr. Richardson saw the child at eight P. M. The temperature at that time was 103.5°, and there was no abatement in the local symptoms."

On the following morning, November 3, 1892, after a consultation with Dr. Fitz, an incision was made four inches in length half-way between the crest of the ilium and the ribs. A collection of pus was found behind the ascending colon. Great care was taken not to break down the adhesions of the abscess and no attempt was made to find the appendix. The temperature immediately fell and an uneventful convalescence followed, during which a small fæcal concretion was discharged.

The diagnosis, which was clear before, was made absolutely certain by the presence of the fæcal stone. I have no doubt whatever that the prognosis in this case would have been much more grave had I made any attempt to remove the appendix. Unless the indications are very clear for the excision of the appendix itself the exploration should be very cautious and should be limited to free drainage. The absence of thigh flexion in this case, (and its presence is rather exceptional in my experience,) is not remarkable inas-

much as the inflammatory process could not have involved either the psoas or the iliacus. This symptom is seldom present unless the muscular fibres of these muscles are directly involved by a retro-peritoneal inflammation, or unless there is a tense abscess well down in the iliac fossa. The presence or absence of this symptom has little weight.

Case V. Mrs. ——, age fifty, I saw November 4, 1892. She had always been well, and came of a strong family. Last July she was taken with pain and tenderness in the right iliac region, with increase of temperature and pulse. At the end of three days a tender bunch was discovered at the seat of pain. During the next ten days the tumor gradually disappeared and her symptoms subsided. Some few weeks later she was thrown from a carriage and bruised quite severely, but had no return of the abdominal symptoms.

Sixteen days before I saw her she was as usual till ten P. M., when she was seized with very severe pain in the lower part of the abdomen. An hour later she had a very large movement of the bowels, accompanied by pain. Dr. J. A. Gordon was summoned and found a temperature of 102°. The lower part of the abdomen was tender, and there was pain of a lancinating character requiring morphine in quarter-grain doses. The temperature and pulse gradually rose, and the abdominal pain gradually became more general, though confined to the right side. She had three or four loose movements a day. At the end of seven days the temperature returned to normal, and the general symptoms had improved. On the eighth day the temperature began to rise again, and the local signs reappeared in the right iliac fossa. On the tenth day a large swelling was found in the right lower quadrant. On the twelfth day the temperature was 103°; on the thirteenth and fourteenth 99.5°. On the fifteenth the temperature was 105° and the pulse 130. November 4th, a swelling was discovered in the right side of Douglas's cul-de-sac.

During her illness there was occasional nausea and vomiting. The pulse most of the time was quick and feeble. I found what seemed to be an abscess pointing in Douglas's fossa. There was extensive dulness over the right lower quadrant. Her general condition was alarming.

In the afternoon, after consultation with Dr. Fitz, I made an incision in the right iliac fossa. We came down immediately upon a mass of inflammatory thickening about the cœcum, containing one or two small abscess-cavities filled with thick pus of foul odor. The inflammatory process had been going on a long time. The exploration was made with the greatest care, and the peritoneal cavity was not opened. The appendix was not found, but a thickened mass adherent to the cœcum presented itself, and seemed to be the remains of a long-inflamed and obliterated appendix. Examination *per vaginam* revealed a boggy condition in the pouch of Douglas, with an enlargement of the fundus uteri. The uterine body was thought to be retro-flexed, tender and inflamed, filling the cul-de-sac and pressing upon the rectum. It did not seem at the time best to interfere with the pelvic condition. I explored the right side of the pelvis between the uterus and the brim through the abdominal wound, but could feel nothing definite. The incision was packed with gauze.

On the following day the abdomen was very much distended and the general condition alarming.

During the following week there was no evacuation whatever of the bowels, nor was there any escape of flatus. There was marked gurgling in the intestine, showing that there was no interference with peristaltic contractions. The mass in the pelvis gradually increased in size, pointed behind the cervix, and pressed distinctly upon the rectum. The cœcum, which presented in the wound, gradually became much distended, until there was marked bulging of the intestinal coats. It seemed to me that there was a mechanical obstruction low down, and that the pelvic swelling was sufficient to prevent the passage of intestinal contents. I considered seriously the question of making an artificial anus through the distended cœcum which presented itself in the wound.

At the end of a week I made an incision through the posterior cul-de-sac and evacuated quite a large quantity of odorless pus. Drainage-tubes were placed in the wound and it was thought there would be no further obstruction. The obstipation continued, however. The bulging of the intestine in the right iliac fossa became more marked, until finally the intestinal contents burst through the remains of the vermiform appendix, making an opening about the size of a ten-cent-piece. For the next few weeks the cœcum emptied itself entirely through the abdominal wound, and there was hardly any discharge per rectum. Gradually, however, the abdominal wound closed, and natural passages of the bowels began to take place. From that time the convalescence, though slow, has been progressive.

This case has seemed to me one of the most remarkable and unusual cases of inflammation about the appendix that I have ever seen. At the present time (February 11, 1893), I have seen one or two cases which were very similar. The symptoms which were difficult to explain and to meet were those of an acute intestinal obstruction. More or less complete obstruction may undoubtedly be caused by the pressure of inflammatory masses in the pelvis. Such a cause existed in this case. If the contents of the bowel had not escaped by their own pressure through the stump of the appendix or through an incision in the gut, I have no doubt whatever that the patient would have succumbed.

The existence of fæcal fistulæ in connection with inflammations of the appendix is not uncommon. In my experience there is very frequently a fæcal discharge for some time after the operation. It is rare, however, for the entire contents of the bowels to escape in this way. I have recently operated twice for large openings in the cœcum resulting from appendicular abscesses. In each case the suture has been followed by a perfect recovery. Dr. Keen has recently reported a similar case, in which he closed a large opening by suture, and Dr. Ela reported one some time ago. Such conditions, I think, have resulted from the breaking of the abscess into the cœcum and not from rupture of the cœcum caused by intestinal pressure. The latter event seems to me quite unique. The combination of mechanical obstruction with an open wound at the ileo-cœcal valve and an intact gut must be excessively rare. There is no doubt as to what happened in this case, for we watched the progress of the distention and observed the appearance of the bowel daily. At first there was a bulging through the inflamed tissues of the outer wall of the intestine. At one spot in the cœcum, apparently weaker than the rest, a small, soft swelling appeared, which became more and more prominent un-

til finally, with a gush, the bowel gave way and there was an enormous discharge of fæcal matter. It seemed to Dr. Fitz and to the rest of us that this condition was due to the giving way of the stump of the appendix.

One is often annoyed by the existence of a fistula following operations upon the appendix. It seems to me, no matter what the operation may be, that such an escape of fæcal matter can seldom be avoided. The fistulous tract almost always closes: in fact, invariably closes unless the opening in the cœcum is very large. It would seem that operations for the closure of large intestinal fistulæ are very successful. In the cases referred to of my own the convalescence was rapid and complete, and the same results were obtained by Dr. Ela and by Dr. Keen. Dr. Porter's successful intestinal resections for fæcal fistulæ following gangrenous hernia are familiar to all; and in a recent case of my own complete resection and suture for the same cause were followed by gratifying results.

CASE VI. B. McG, age sixteen, I saw in consultation with Dr. Chandler, of Townsend, Mass., Novem ber 5, 1892. A young, robust girl. She was taken on Thursday night with grumbling pains in the bowels. On the following day she attempted to go to Boston, but had to stop at Ayer and return home. During the next week there was continual pain, elevation of temperature and pulse. There gradually formed a tumor in the right flank and in the right iliac fossa. A week from the following Saturday I went to Townsend and found the girl in great pain, with a tender tumor occupying the whole right side of the abdomen. Dulness extended from the median line to the back, downwards into the iliac fossa and upwards as far as the liver. She was profoundly septic, but there was no general peritoneal inflammation. I made a large incision in the right flank and evacuated an enormous amount of fæcal matter. Great care was taken not to break up any of the adhesions, nor was any attempt made to find or isolate the appendix. The pus contained several very characteristic fæcal concretions. Two large drainage-tubes were placed in the wound. The abscess cavity was washed out with a weak solution of creoline. The incision was carried well down into the flank so that drainage was dependent. The convalescence was good.

This case illustrates a type where the general peritoneal cavity is protected by inflammatory adhesions. The symptoms, while not fulminating, were violent; septicæmia was pronounced, and pressure upon the abscess wall considerable. The adhesions were strong enough to withstand much pressure. The girl was in imminent danger, however, of further extravasation. Fatal collapse might have occurred at any moment from separation of the recent adhesions. All cases of this kind, it seems to me, should be treated by incision and drainage as soon as the tumor is discovered. The results in this class of cases are very brilliant; and unless at the time of the operation the adhesions are separated by careless manipulations, the prognosis is very favorable indeed.

CASE VII. H. B., North Abington, Mass., Tuesday, November 8, 1892. This case is one of the most interesting that I have ever seen. It is remarkable for the rapid development of the symptoms, for the early operation, and for the apparent improvement under the most hopeless conditions. Although death followed in this case, yet it is a very encouraging one, considering the fact that no one present believed he could live through the night.

H. B., age forty-one, a patient of Dr. Wheatley, was taken on Monday morning, November the 8th, with pain in the right side of the abdomen. He had complained of this pain several times before, and had had attacks, the initial symptoms of which differed in no way from the present. Vomiting was associated with the pain. His pulse was 80. On Monday night the temperature was 100°. He had a comfortable night. On the following morning (Tuesday) his temperature was 101° and pulse 120. The temperature remained at 101° during the day, but before night the pulse had risen to 132. During the second day there was no vomiting. On Tuesday evening at five o'clock I found the abdomen much distended and hard; the pulse was 132 and weak. The general appearance was bad; rectal examination negative. There was no dulness anywhere. The tenderness and pain were general. I made a diagnosis of perforation of the appendix and general peritonitis.

Although the prognosis was very unfavorable, it seemed to me that the only chance was to open the abdomen. An incision was made over the usual seat of the appendix, in the right linea semilunaris. The tissues of the abdominal wall were œdematous. The mesentery immediately presented, and was gangrenous. The abdomen was full of pus; the intestines were bathed in thin, foul-smelling fluid; the serous surfaces were covered with flakes of lymph; the intestine was distended; there was an acute general peritonitis. This condition of things seemed to me hopeless. On account of the patient's alarming weakness and the plainly hopeless local conditions I made no prolonged efforts to find the appendix.

This case seemed to me before and during the operation practically hopeless. The intestines floated in thin, offensive sero-pus, and in places were covered with diphtheritic-looking patches. The swollen and gangrenous omentum was cut off, and the bleeding-points tied. Gauze was packed deeply into the pelvis about a double drain, and also down into the right flank. After the operation the pulse was better than before. At the time I thought that he would die before morning. The next day the pulse was 112; and the temperature was normal. There was no movement of the bowels on that day. The bowels moved on the following day, and he was very much improved. This improvement continued for a day or so; but he finally died on Saturday, persistently vomiting, and much distended.

The operation in this case was performed within thirty-six hours from the time of the attack. The fæcal extravasation had become so extensive, however, that there was a marked general peritonitis. This is one of the few cases in my experience where I have been able to operate within the first forty-eight hours; and yet the condition of things found shows that an operation to be successful must be done much earlier in cases of this variety. The onset of the disease did not differ from that in cases of much less severity. The constitutional and local symptoms were not as severe as in other and milder cases, and yet the condition of things found at the time of the operation indicated a most extensive and fatal peritonitis.

The fulminating cases in this brief series died, as it was supposed at the time they would. The cases of localized abscess all recovered after suitable drainage.

The earliest operation, undertaken under most unfavorable conditions, though it did not succeed, was encouraging. I think I may safely assert that the results, on the whole, would have been better if every case had been explored within twenty-four hours of the onset of pain. We should probably have saved all the lives and should have avoided much unnecessary risk and suffering.

TREATMENT OF CHRONIC ENDOMETRITIS BY CURETTING AND GAUZE DRAINAGE: WITH A SYNOPSIS OF TWENTY-SEVEN CASES.

BY WALTER L. BURRAGE, A.M. M.D.

To Dr. William M. Polk, of New York, is due in a large measure the credit of having developed and perfected a method of treating endometritis that is rapid in its performance and efficacious in its results.

The method consists of divulsion, curetting and thorough irrigation of the uterus and then packing it lightly with an antiseptic wicking of gauze, the gauze being allowed to remain in place for several days.

Although gauze has been employed as a uterine packing time out of mind, it had not been used in just this manner until Dr. Polk so used it, and called the attention of the profession to the matter in a paper read before the Practitioners' Society of New York in the spring of 1888. In this paper he spoke briefly of the unsatisfactory results obtained by the usual methods of treatment of endometritis. A consideration of the conditions present in endometritis, he said, should lead to the institution of a more rational therapy. In this affection there is an inflamed and suppurating surface lining a nearly closed cavity, and the conditions are almost exactly comparable to those present in an abscess with an opening of insufficient size for the free escape of pus. The discharge is retained in the cavity bathing the already inflamed surfaces, keeping up the irritation, and preventing thereby any attempts on the part of nature to effect a cure. In the case of an abscess-cavity with a small opening the plain indications are to enlarge the opening and drain away all the irritating discharges as rapidly as they are formed, and a similar mode of procedure should be equally effective in the analogous condition found within the uterus in endometritis.

Again, in the same year (1888) he read a paper before the American Gynæcological Society on this subject, and referred to nine cases he had treated with success. Last December, in a third paper, before the New York Academy of Medicine, Dr. Polk advocated his plan of treatment in cases of endometritis associated with salpingitis or other periuterine inflammation, opposing the ground taken by most writers of text-books, that where there is periuterine inflammation, the cavity of the uterus should not be invaded. He reported forty cases.

There is no doubt that treating the uterus in this way is a radical procedure; it is, however, founded on solid surgical principles, on cleanliness and drainage. The idea that pelvic inflammation following the passage of the sound was due exclusively to violence is giving way to the belief that the inflammatory trouble was caused largely by lack of asepsis, as to the sound, the vagina or both.

[1] Read before the Boston Society for Medical Observation, December 5, 1892.

In case of salpingitis, ovaritis, retroversion and pathological anteflexion, it has been my experience that by correcting the endometritis in the method about to be described the symptoms of these affections have been ameliorated. Curetting and drainage should accompany the Alexander-Adams operation for retroversion, for the reason that the replacing of the uterus is not alone sufficient to overcome the deep-seated inflammatory condition of the endometrium that is found in retroversion of long standing: so in many cases of old lacerated cervix, the accompanying endometritis persists for years if not treated at the time of repairing the cervix. The same is true in some cases of cœliotomy for the removal of pus tubes. We have all seen bothersome hæmorrhagic endometritis causing annoyance a long time after the tubes and ovaries were out. It certainly seems to be a more rational plan to treat all the disease at once, rather than a part of it.

Curetting and gauze drainage confine a patient to the house for from ten days to three weeks. The average stay in the hospital of Polk's forty cases was eighteen days. I have not looked up the statistics of mine, but should say the average was a little lower. Most of the older methods of treatment, besides not being as thorough, took months of painful applications, and then the results were far from satisfactory. One especial advantage of this method is that the physician has the immense benefit of an ether examination, a procedure of inestimable value in the diagnosis of pelvic affections in women.

Chronic endometritis will be treated of in this paper from a clinical point of view. The different anatomical varieties enumerated by Pozzi are, — interstitial, glandular, polypoid, and the lesions of the cervix, and inflammation of the ovules of Naboth, granulations and folliculitis. A positive diagnosis of many of these without a microscopic examination of the scrapings is impossible. I have classified the cases as hæmorrhagic, painful, catarrhal and purulent. Where there has been good reason to believe from the history that a purulent discharge is infected with the gonococcus, it has been called gonorrhœal. I have not demonstrated microscopically the presence of the gonococcus in any of the cases reported to-night. By endometritis is meant an inflammation of the endometritium involving in most instances both cervix and body. It is a mistake, I believe, to consider inflammation of the endometrium of either the cervix or the body as a circumscribed lesion. The disease is apt to be more pronounced in one than the other, but treating one to the exclusion of the other gives unsatisfactory results.

The symptoms of endometritis, broadly, are pelvic pain, leucorrhœa, irregular catamenia, dysmenorrhœa, metrorrhagia or scanty menses, bladder and rectal symptoms, and reflex neuroses. Common symptoms are dyspepsia, neuralgia, constipation, sleeplessness and lack of energy and strength.

The physical signs are alteration in consistency and volume of the cervix, sensitiveness to light pressure bimanually of the cervix, body or both; the presence of erosions and dilated Nabothian follicles; a discharge from the os of clear transparent white-of-egg mucus, or opaque tenacious mucus, pus or blood, or a combination of any of these. Passage of the probe or sound shows increased uterine depth and is attended by more or less pain.

The hæmorrhagic form effects the body more than the cervix. The diagnosis is established by almost