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BY

FERNAND HENROTIN, M. D.,
CHICAGO, ILL.



REPRINTED FROM THE
AMERICAN GYNÆCOLOGICAL AND OBSTETRICAL JOURNAL
FOR JUNE, 1896.

THE CURE OF SEPTIC PELVIC DISEASES IN WOMEN.*

BY FERNAND HENROTIN, M. D., CHICAGO, ILL.

A very large part of that which is practicable in the attainment of the purpose suggested by the above title having emanated from the sayings and doings of the gynæcologists of New York, it may seem presumptuous to address this Society upon such a subject. But there is still so much to be desired in the results usually obtained by the profession at large that your essayer appears before you with the greetings of the West, urging that you persevere in the work in which you have so long and so patiently labored, and presents this paper rather as an exhortation than with the belief that his humble effort can add to your knowledge. Dazzled by the brilliancy of the symptomatic cures obtained by the modern aseptic abdominal amputating radical methods, it seems evident to the rational, well-balanced observer that gynæcology has breathlessly rushed into treacherous depths, and that the magnificent records obtained by our experts have proved alluring temptations to the inexperienced and ambitious. Moreover, the every-day insights gained by modern methods of formerly unknown pathological conditions have solved many intricate problems and opened up possibilities of treatment of which we were ignorant. Every skilled gynæcologist of to-day, who was already in active work twenty-five years ago, can not fail to recognize the truthfulness of these remarks if he refreshes his memory and recalls the utter helplessness that followed his discovery at that time that his patient's uterus was fixed by adhesions. Certainly his agony was mitigated by his grand faith in the latest pattern of hot-water douche

* Read, by invitation, before the New York Obstetrical Society, March 17, 1896.



and the artful manner in which necessity has taught him to dodge the question of prognosis; but truthfulness insists upon the acknowledgment of the fact that at that date what was known of the means of cure and the character of morbid processes in pelvic septic diseases of women was most shadowy and uncertain. In the highest ethical sense, the term cure as applied to a local affection means the removal of the disease without the removal of the organ or organs affected by it, or at least without destroying or altering the particular physiological function which is characteristic of that particular organ. To amputate a limb for a tuberculous disease, for example, is not a cure in the highest sense of the word, because it destroys or impairs the physiological function of walking, and in the same sense of the word to remove a pelvic disease by removing the ovaries is not a cure. At least that is the manner in which we propose to treat the subject.

The question of treatment of septic pelvic diseases in women can not be condensed in a discourse of an hour, but we can select salient points, particularly those usually the subject of difference of opinion, not forgetting that we are only dealing to-night with methods that contemplate complete and perfect cure of patients with restoration of absolute physiological functions of perfect type.

Little need be said of inflammatory affections of the cervix *per se*. Surface infections are usually curable by simple means, while the hyperplastic forms are disposed of by plastic methods, notably amputation and the Emmet operation.

The importance, however, of taking cognizance of cervical lesion lies in the fact of their being frequently the initiatory step in the production of both uterine and peri-uterine disease.

Limiting ourselves for the present to the uterus, the next most common affection is the invasion of the cavity of that organ producing the condition commonly styled endometritis. The treatment of this difficulty has always presented so many disheartening failures that the presentation of the subject to any society always leads to the most enlivening discussion, as well as to the most dissenting opinions. It is most refreshing, however, to witness the pertinacity with which the subject is constantly being presented, and, no doubt, good will come of it all, for it represents the fact that our entire profession realizes the logical fact that in the cure of endometritis lies the keynote of success in the eradication of a very large proportion of septic troubles.

The cavity of an infected uterus, if curable, is only so by following

the same general surgical rules that govern the treatment of any infected cavity—namely, opening, cleaning, and draining. To gain the desired result, then, these conditions must obtain in all but in an infinitesimal number of cases. Just as we occasionally cure an abscess by aspirating, and it may be destroying or neutralizing the germ contents by a chemical agent, so it may be that rarely we may cure an endometritis by topical applications thrown into its cavity, but there is reason to believe that this seldom occurs. Usually the condition cures by reason of manipulations that are necessary for injecting, better drainage is established, and the fluid mechanically brushes out infected matter, or Nature manages gradually to establish cure by draining and purging itself. When we inject a closed tubercular cavity or joint with iodoform we are simply destroying a specific noxious element with a specific remedy, and the same with occasionally other forms of pus sacs containing so-called sterile pus; but how seldom we succeed in mixed infections, the conditions that hold good in the infected uterus. We then resort to the trinity mentioned above. We open, clean, and drain. Opening the uterus in gynæcology is called dilating, because the sphincter action of the lower uterine muscle prevents to a great extent the keeping of the cavity open. In all cases where dilatation is necessary, to use the words of one of your members, Dr. Pryor, “the functions of the cervical ganglia must be so obtunded as to prevent uterine contractions.” If necessary to obtain this result, the cervix must be incised. Make a straight cut through the posterior lip in the median line to the vaginal junction, the beginning of the incision being well up above the internal os, and growing deeper until it strikes the posterior fornix, the dilatation being continued, however, with care after the incision, so as not to tear open the posterior cellular spaces too much or open the peritoneal pouch, though such an event will not produce trouble, unless irrigation is employed and washes septic material into the general cavity, and, being unnoticed, no drainage is employed. The uterus must be cleansed, and the sharp curette is the most available instrument in our possession. We must use that even if reckless or clumsy fellows occasionally do harm with it. We can not always reach and remove all the diseased parts with it, I allow, but it is our best resource, and by using it carefully but thoroughly we do the best we can. Then wash out with plain water, and mop out as dry as possible by packing in a strip of gauze and withdrawing it. Then clean out with peroxide of hydrogen, the most searching disinfectant we have, this being done by soaking a strip of gauze in the peroxide and

pushing it lightly in the cornua of the uterus and packing the cavity lightly also, and then withdrawing it. Again introduce the dilator, to make sure of relaxation and good drainage, as well as escape of gas; pack thoroughly with gauze well saturated and tightly wrung out of a ten-per-cent. sterilized emulsion of iodoform in glycerin. An abdominal fistula coming from an infected ligature, when it does not communicate with a large abscess, can frequently be cured by a week or two of washing out with peroxide, followed in a few days by injections with iodoform emulsion, the ligature becoming re-encysted. Having seen this occur several times, the plan is suggested of disinfecting the cavity of the uterus in septic endometritis in the same manner at one sitting, the hydragogue effect of the glycerin being supposed to add to the drainage. Though personally not having used it sufficiently often to form definite conclusions, it is simply presented as a reasonable suggestion with the understanding that harm might come from evolving sufficient gas with the peroxide to penetrate too far into the tubes, and that colic or toxic effects might result from the use of the glycerin, none of which effects, however, have been noticed. This method may not be new, and it may provoke harm and may have to be relinquished, but, as this Society is composed of intelligent practitioners, no better place could be obtained in which to offer suggestions for treatment.

The vagina, in the disinfection of which very great care must be taken before, during, and after the operation, should be packed with iodoform gauze, and this vaginal gauze pack should be changed in twenty-four to forty-eight hours, and as frequently thereafter as necessary to prevent reinfection; for it is manifestly absurd to dilate, curette, and drain the uterus, taking away all dressings in three or four days and being content with carelessly ordering a vaginal douche, and reproducing the disease by vaginal infection when so much trouble has been taken with the operation. There is reason to believe that a reasonable number of cases fail to cure because within a few days the cervix is once more bathing in the same old vaginal microbial pool. The most explicit directions to the patient and nurse, or, better yet, if possible, the personal attention of the doctor to the perfect condition of the vagina for the four weeks following, is a matter of more importance than is generally supposed to the success of this really most important operation.

It will be noticed that this is a simple recital of the most ordinary methods as followed by many practitioners, and is given as a means of cure of a certain percentage of cases of endometritis.

I recognize that the gentlemen before me are not students, to be inflicted by such recital of the alphabet of gynæcology were it not intended as a categorical repetition of simple facts in the efficacy of which your essayer desires to acknowledge his belief as well as a standard from which the derivations must be frequent to insure success. Intelligent men who are not gynæcologists of routine will probably acknowledge that these methods will cure a certain number of cases of the common varieties of septic endometritis of not too long standing, no matter which form of infection may have produced the disease. A reasonable number of gonorrhœal and semi-chronic so-called catarrhal cases, and a large number of puerperal cases, if taken at the proper stage, can be cured in this way; and these procedures, perfected in details by the experience of practice, will very probably succeed more frequently than any other method. To systematically describe to you all the varieties of uterine septic invasions and their symptoms, together with their respective treatments, would fill a book; rather allow your attention to be drawn to some of the most flagrant mistakes made in following out stereotyped treatment. To take exceptions to dilating, curetting, and packing, by indulging in a denunciation of dirty patient and dirty doctor and dirty curette and dirty vagina, is no argument against a practice that is recognized by the profession as having cured, and does cure, many. We speak of a rational procedure based on good surgical principles and accomplished in true surgical manner. Such a procedure often fails because of misapplication. To curette a uterus in a woman because she has gonorrhœa, failing to recognize that the uterus is not invaded, is a serious mistake in diagnosis, and may introduce the virus into the very organ it is sought to protect, but does not militate against the fact that many women whose uteri have been invaded can be restored to health completely by this very means of treatment. That all women are not cured after curettage who suffer from specific endometritis is no argument against the treatment, unless it can be shown that as large a number are harmed; and even then, no better substitute being offered, we still can hope to perfect the old methods. Ovariectomy formerly killed more persons than it cured. A misapplied agent is not necessarily a worthless one. A puerperal uterus large from advanced recent pregnancy, for example, calls for the greatest amount of discriminating diagnostic intelligence in the application of the required treatment.

To use a sharp curette in clearing out the *débris* when the thickened walls are affected with thrombo-phlebitis or lymph-thrombosis

would probably be striking the first match to a general conflagration. The smooth, dull curette, or, better yet, the finger, or the forcible stream of clean hot water or weak solution of creolin, is the way to safety, and yet six weeks later that very uterus, the thrombi having been absorbed and corporeal metritis having subsided, may absolutely demand the sharp curette to put an end to a secondary septic endometritis, an advancing microbial host again threatening its integrity, this time by way of direct penetration from the mucosa. Here is another illustration which demonstrates the most common form of the misapplication of a valuable agent. A woman develops a septic endometritis due to any form of micro-organism. The process is a slow one, not particularly virulent. Nature is on the alert, and closes the portals of the Fallopian tubes at their uterine ends. She throws out a protective wall within the substance of the uterus, and at variable distances back of the mucous lining. The whole difficulty is confined to the body of the uterus. Hyperplastic conditions prevail, hypertrophic connective-tissue development ensues, and in time we have an enlarged, completely sclerotic organ. The clinical picture is that of pelvic pains, with abundant purulent discharge and rather irregular profuse menstruation in the first stages. As the uterus becomes hyperplastic the leucorrhœa becomes thinner and more irritating and ichorous. The pains continue, but are more dull and reasonably bearable, and until atrophy begins the menses remain profuse. Sterility is, of course, absolute. The ovaries and tubes are normal as far as gross changes are concerned. Gradually, as years pass by, the process extends to the tubes and ovaries, but for years that woman, if left alone, will remain in good health; she will never develop pus tubes or ovarian abscesses. Most such patients are in very fair health and grow plethoric. The whole process is so slow that acute distress is not known, and the woman, barring the few symptoms described, considers herself well. We all see many such. It is Nature's cure. Some enterprising but not particularly discriminating gynæcologist, hearing her complain of a little backache, examines and discovers a large uterus. It feels heavy to the patient, and generally rests pretty well down in the pelvis. It is neither retroflexed nor anteflexed, because it is too stiff and hard to bend. Menses rather profuse; the patient feels better during menstruation. Our friend does not realize the density of the unfortunate uterus nor the thickness of its wall. Diagnosis: enlarged uterus, chronic inflammation, menorrhagia, and falling of the womb. Treatment: curette, etc. We all know of such cases. Some of you may understand how to cure them; if so, please publish

the how. Our colleague dilates and loses his breath at the exertion necessary to dilate, or rather to tear through, the cervix. After many efforts of physical strength he worries a curette into the uterus, and wonders how little there is to scrape out and how small the cavity is considering the size of the uterus. A small strip of gauze is cork-screwed into the organ and the lady goes to bed, develops a temperature, is nursed through a long fever, dies from pelvic abscess, or remains an invalid, or is obliged to have the ovaries and abscess removed, to bring on the atrophy that was coming about so nicely before she began to doctor. This is a true picture of the abuse and misapplication of a life-saving method of treatment.

We are told by some of our noted abdominal surgeons who do not stoop to the spoon, that the curette is a murderous weapon, responsible for many deaths. So is the knife to him who is ignorant, untrained, and without conscience—more so, for the sharper the tool the more danger. How much more they might accomplish if they took as much interest in the ideal physiological cure of women as they do in the perfection of abdominal work of the trenchant variety!

Every woman who comes to the operating table has been curetted. Of course she has. Ergo, the curette did the damage. Why she was curetted we wonder, but dare not say. Only a certain proportion are cured by dilating, curetting, and draining, because many are so operated on false indications; because the work is slovenly or imperfectly performed, which is no criticism to correct methods; because the shape of the uterus is such that all the parts of the mucous surface can not be reached; and, lastly, because no methods of diagnosis have yet enabled us to determine the exact limitation of the disease either beneath the endometrium or up the first portion of the tubes. We scrape many patients to whom we do no good, but if we do the work perfectly we seldom injure. What can be more satisfactory than the treatment of the interior of the uterus in septic puerperal cases of the proper type, or of the same procedure for the simple endometritis of the undeveloped uterus of the young, sterile wife, or of some forms of membranous dysmenorrhœa, or, if practiced very early, of many cases of gonorrhœa and other septic varieties?

The younger men, who are doing large general work and see many septic cases in their incipiency, and who have sufficient ambition in gynæcology to learn clean proper methods, are doing magnificent work with the curette, and a great army of women who have had septic uterine trouble never get acquainted with the abdominal surgeon, because, as the boys say, "they don't have to."

To sum up the general rules that should govern the management of these cases, it may be said concerning the treatment of septic diseases confined to the uterus not calling for extreme radical treatment, that rational, sustaining, stimulating, gymnastic, dietetic, and alterative treatment, with the most careful attention to the condition of the excretory organs, may be the only means of value at our command in a certain proportion of very chronic cases, but that a very large number of women can be cured by properly managed local interference; that virtually all that is of value can be summed up in the intelligent application of the methods of opening, cleansing, and draining the uterus, and that the success of each individual will depend upon his discrimination in the application of these curative measures.

G. Bouilly is right when he says that the notion of pyosalpinx has become such a prominent one that it has forced back to second place the knowledge and study of other lesions, and that the discoveries of the operating table frequently forces a modification of the diagnosis which attributed all the symptoms to a diseased tube. Infection in the pelvis originates in a large majority of instances in the cervix or in the uterine cavity. It travels by way of the lymphatics or the veins, or spreads by contiguity along the mucous tracts to the peritoneal cavity, or directly penetrates the tissues irrespective of natural channels. The inroads of the infectious element is in proportion to its virulence and the resistance of the parts affected. Venous and lymph thrombosis, adhesive cohesion of affected parts, or effusion of exudate may arrest its march at any part of its progress. These different conditions may coexist in the same patient and produce disseminated disease hardly to be diagnosed in a distinct manner. Septic affection may be limited to the uterus, or it may by the routes mentioned reach any of the pelvic organs. Lymphatic invasion of the broad ligament of pure type is rare, but has been proved to exist without disease of tubes or ovaries.

Almost all authorities are now rallying to the opinion that many have gone too far in their crusade against the existence of pure cellulitis. Cellulitis from an infected thrombosis or the pure lymphangio-cellulitis does exist with or without tubal or ovarian trouble. I have seen the proof of this in operations several times, notably in one case that I saw operated in this city. The ovary is usually first involved; the tube becomes so later by direct penetration through its walls after it has become imbedded in the mass. Remember that it is not denied that most cases of tubal disease result from the direct infection along the mucous tract. Bouilly mentions a

very recent case in which he opened a phlegmon of the left broad ligament by an incision above the crural arch. A milder form of apparently the same difficulty existed on the right side which gradually subsided. Three months later the right side again began to give trouble, and a laparotomy discovered a large purulent ovarian sac, the right broad ligament the seat of an old indurated phlegmon, and the left side, which had been operated for suppuration three months before, cured and with healthy tube and ovary. Two years later this lady conceived and was delivered normally at full term.

Taking one short step further, I would acknowledge my belief that careful investigation in the future will demonstrate that an ovary can be the starting point to the *development* of an infection, and is so more frequently than we suppose. This is difficult to believe, and is only based on the fact that in several instances I have opened through the vagina apparently well defined ovarian abscesses, when to the touch, and occasionally the sight, the tubes and broad ligament seemed normal. This would mean that the infectious element in the lymphatics to the ovary, finding a better pabulum for development in the ovarian, or rather peri-ovarian, tissue, would develop there primarily to the point of producing at least the first gross lesions before its presence could be noted in the broad ligament proper.

Another clinical form of trouble might be mentioned, and that is a low grade of pelvic peritonitis, with subdued symptoms and involving all the organs in adhesions, fixing the uterus in adherent retroversion, filling Douglas' pouch with adhesions, and by these producing alteration in nutrition of the organ, showing a tendency to the development of cystic ovaries.

These few remarks upon the pathogenesis of pelvic diseases seemed almost necessary to the introduction of the question of treatment, as will become evident.

The day that septic infection has reached beyond the bounds of the uterus, what can we do? According to the general methods prevalent at the present time, there is only one answer. If life is not apparently in danger, see your patient regularly, hypnotize her to the best of your ability, amuse her with poultices and hot douches, give her quinine as an antipyretic if her temperature goes up, or quinine as a tonic if it goes down, and tell her to have patience, and if she does not recover, when her tubes and ovaries are ready and ripe, yourself or one of your friends will remove them. If life seems in danger, let the organs go as soon as consent can be obtained. Sad outlook! Some—yes, many—cases recover and only very few die. Of

the many women brought to the operating table and operated, only a few would actually die in a manner that it would be said they die from the disease direct. But how few recover perfectly, except after passing through indefinite sufferings and repeated attacks, and when apparently well how many have perfect pelvic functions? When you find a patient with an exudative mass against the uterus, and that organ fixed, can any of you tell her whether she will be ill one month or ten years? When the word pelvic peritonitis is uttered loudly in an assembly of women several begin to shudder.

It seems horrible to contemplate removing the appendages at the outset of a disease, and yet it appears very very sad to wait, it may be for months, it may be for years, for Nature's cure, with the ever-present shadow of a future mutilating operation. Your reader has proposed a method, surgical though it be, but not involving the removal of any organ, as a first step in the future treatment of these diseases. In doing this let it be understood that no attempt is made to prove that a cure-all has been found, or that it is a universally applicable method, or that in itself it is even original. Its announcement consisted in the simple recital of personal experience, and venturing the hope that properly applied it might prove a great boon to suffering women, and that it would, moreover, tend most decidedly to a better knowledge of the different varieties of septic pelvic disorders and their respective treatment. The only originality claimed is that it is the first distinct announcement made of the curative value of such a procedure in the treatment of acute inflammatory affections as soon as the diagnosis is established. The dangers of the undertaking are so slight, and the benefit in some cases so striking, that it seems impossible to believe that in time it can hardly fail to prove a blessing. It will not cure every pelvic inflammation. What remedy or operation cures every disease having pernicious elements? It is only a question of time when it will have been proved what cases it will fail to cure and what patients are unfitted for its application.

The operation consists, as you know, in the simple incision of the posterior vaginal fornix and the drainage of the affected seat of trouble when it is reached. The explanation of the technique gives a better understanding of the method. An incision is made following the contour of the posterior face of the cervix at its vaginal junction, but not going too high at the sides to provoke hæmorrhage from the larger vessels. This incision is made by scissors, knife, or Paquelin cautery. When the indications point plainly to pus and long drainage, use the cautery, and the edges, being seared, will not show a tend-

ency to contract so quickly. From the center of this parallel to the axis of the vagina another incision is made of variable length to give free access. Of course the proximity of the rectum must be taken into account. Detach the retro-uterine connective tissue, always working against the posterior uterine surface. The uterus during the operation is held steady by downward moderate traction, the posterior or both lips of the cervix being held by a tenaculum. If you can determine the proximity of the peritoneal cavity, detach the tissues first in that direction. This penetration and detachment of the tissues is done with the finger, alternated, if desirable, with small nicks of the scissors. If working in dense tissues or infiltrated ones, occasionally withdraw the finger and look closely for the possible appearance of pus. If you have reached the peritonæum and have uncovered no pus, open the general cavity at once. This is very important. Almost the only source of danger in the operation results from neglecting this step. The reason is obvious. The manipulations may cause a leakage into the general cavity of pus from a fragile sac within. Even if you use but little force, the traction upon the uterus may do it. Pus into the dependent portion of the cavity does no harm if wiped out and drained. Retained pus without bounds will almost certainly kill. Moreover, it is a great advantage to explore the pelvis before doing anything further; therefore, if the cavity is open wash your hands, disinfect the vagina again by placing a gauze sponge in the wound and irrigating, and proceed to explore the pelvis from the inside, passing the volsella on the uterus to your assistant and using the left hand suprapublically the same as in bimanual examination, bidding the assistant to relax or increase the traction on the cervix as best suits your purpose. If you strike pus before the general cavity is opened you may follow it up, the hand placed above indicating the direction by marking out a mass, and the finger within seeking the way of least resistance and resilient tissue characteristic of exudate. If the finger penetrates a well-defined cavity of pus or sero-pus behind or to the sides of the uterus, and it is evident by bimanual palpation that this constitutes the whole disease, and, to be reasonably sure of this, the result of your examination now, minus the exit of pus, must correspond with the conditions found on examination of the patient while anæsthetized just before the operation, and you are quite certain you have not opened the general cavity, you may stop then, and, after introducing drainage and packing the vagina, the patient may be put to bed. If you have any doubts about these points, clean off the whole field thoroughly, clean the

vagina, clean your hands, put a little pack of gauze into the hole made by your fingers into the abscess, open the cavity of the peritonæum behind, wash the right hand again, and introduce one or two fingers again and explore from within. If nothing is found, drain Douglas' sac and place a good drain in the abscess cavity, and you will be safe. If the cavity is opened at first hand, before pus or abnormal tissue has been encountered, it may be that immediately on entering there will be a gush of bloody serum or sero-pus. In such case empty the containing cavity thoroughly, enlarging the opening if you desire, mop out with iodoform gauze, and then proceed to explore for further trouble. If nothing more can be found, simply drain the cavity. In these cases the intestines will usually be held aloof by more or less exudate, and careful consideration is necessary to determine whether or not to disturb further. If you have doubts, the tactile bimanual sense will indicate to you how to proceed. Do not hesitate, however, to insinuate the fingers between bowel and exudate, or in any direction that seems to be still thickened, making free to separate all adhesions in all directions; there is more danger in doing too little than overdoing, and with the finger guided by intelligent experience serious damage seldom occurs. It may be that you open the free cavity and nothing escapes. You now explore where you have before ascertained mischief exists. It may be extraperitoneal or intraperitoneal, or both. There may be a broad-ligament phlegmon without peritoneal communication. In such case there will be found a mass at the side bulging into the cavity, but easily nearer the tip of the finger thrust in the tissues in that direction, but outside of the peritonæum.

In such cases a large, wide strip of gauze, with string attached if you desire, is packed into Douglas' sac, carefully closing its opening, and the finger separates the tissues and penetrates the mass always beneath the peritonæum. If only exudate is found, it is thoroughly penetrated in all directions and drained, and then the protective gauze taken out of the peritoneal cavity and replaced by a simple gauze drain. A mass may be found on one or the other side evidently intraperitoneal. It may be a pyosalpinx or ovarian abscess, or tubo-ovarian collection, or an abscess in the free cavity walled off by exudate. Here the long gauze pad is arranged in such manner as to shut off to the best advantage the healthy side, the mass is penetrated, the pus, if any is present, is emptied, everything is wiped out, and the fingers reintroduced to explore, for, beware, there may be several pus cavities, and they must all be opened. An ovarian

abscess can sometimes be separated from adhesions and coaxed down very close to or into the opening, and there opened. In quite a number of cases, particularly those characterized by a posterior exudative mass, one can not individualize the different organs thoroughly. The finger penetrates exudate and separates adhesions, only feeling that he is in the peritoneal cavity, but not by any sense of having felt the peritonæum. These cases, of course, make him feel that he is doing blind work; but what matters it if, having opened and drained an abscess, you have not known exactly where that abscess was. Disentangle everything to the best of your ability; after having a few cases you will usually know where you are, and meanwhile you will cure the large majority of cases. In a reasonable portion of patients you will fail to find pus, and are met at the outset by a mass difficult to distinguish, but containing no liquid. These are intraperitoneal or extraperitoneal. When intraperitoneal it will soon be recognized that one is working the finger between intestinal folds glued together by exudate. When extraperitoneal, the fact can usually be established by the greater density of the tissues and the difficulty of getting very close to the opposing abdominal hand. A fibrino-plastic character of the disease does not prevent its absorption if thoroughly penetrated and drained. No fear need be entertained about going too far; the principle involved is that all parts of the inflamed area must be reached, and good and sufficient drainage established. If it can be determined that infection exists anterior to the uterus, an incision can also be made anterior to the cervix, and drainage established there. In all cases the operation is to be preceded by thorough and efficient dilating, curetting, and packing of the uterus. Though it has taken so long to explain all these details, performance of the operation is usually very short. After the uterus is curetted, it often requires only a few minutes to do the work in simple cases. If the procedures just described are in time proved as innocuous, as there is reason to believe, and their value receives the indorsement of our profession, in the near future, when a physician curettes the uterus and finds a suspiciously dense area in its proximity, he will simply make an incision as described and drain the infected area, thereby often aborting an extra-uterine disease in its very incipiency. Regarding the drainage after the operation there is this to be said: The opening through the vaginal wall is usually the first to contract, and must be made to correspond to the character and peculiarities of the particular case.

If a large abscess is found, or much disturbance and breaking up

of adhesions has been necessary, surgical sense dictates the necessity of a large drainage tract, and the vaginal buttonhole may be increased. If Douglas' pouch dips backward to a sufficient extent to threaten obstruction, the post-vaginal structures must be incised sufficiently to make an easy descent, not forgetting, of course, the proximity of the rectum. One of the drawbacks of the drainage by gauze is the tenacity with which it adheres to contiguous parts when removed, and the pain renewal of the dressing gives the patient. This may to a great extent be obviated by draining with gauze wrung nearly dry after soaking in iodoform emulsion of glycerin—sterile, of course. Drainage is to be removed after different lengths of time, according to the variety of cases in which it has been used. If a serous effusion has been found in the *cul-de-sac*, and nothing else, in forty-eight hours the gauze is removed and a very small wick left in. Or, in such cases, the opening may be partially closed by sutures and only a wick left in from the beginning. If a large pus sac has been opened and much exudate is present, and no signs of retained secretions become evident, the packing may be left in four or five days and then removed. In fine, surgical experience is to guide the surgeon. Renewal of the dressing gives pain, and its frequency should be a matter of consideration.

Generally, after three or four dressings, the vaginal opening will remain patent long enough to allow the case to come to a successful close. A short, wide retractor, and two extra long ones, rather narrow, are of advantage, the first to retract the perinæum in making the primary incision, the last to push in the peritoneal cavity when one desires to look in and wipe out after the opening is made. Most of the manipulations in exploring and penetrating are made with all retractors withdrawn.

Dangers and Drawbacks of the Operation—Hæmorrhage.—In a number of cases hæmorrhage will be considerable. One of the causes is the failure to follow the exact middle of the uterus and getting away from the vessels at its side. This mistake is easily made, because the uterus is frequently pushed to one or the other side by a mass on the opposite side. Carefully noting the direction of the uterine canal in the preliminary curettage can obviate this mistake. The hæmorrhage from the vaginal vessels unavoidably incised is also often quite free, and particularly so in the bleeding from puerperal cases. As far as known, all hæmorrhage is controlled by packing of the drainage gauze.

Fistula.—In forty cases of my own, one recently returned ;

operated over a year ago, with a fistula discharging pus from an abscess sac opened at that time, the patient, however, having since been in perfect health.

Failures.—CASE I.—Mrs. C., B— Avenue, had been suffering for three or four weeks with acute pelvic inflammation of severe type, with excruciating pain. A mass fills the pelvis from side to side, perfectly immovable. Uterus not to be outlined further than the fornices. Evidently cellulitis, and what not above. Incision made in the usual manner. Immobility of mass made operation well-nigh impossible. It seemed as if the finger never would reach the cavity of the peritonæum. After penetrating the general cavity no exploration could be made, the tissues on either side being so thick and dense that headway could only be made by unwarranted force. Hæmorrhage very free. Operation very unsatisfactory. After penetrating in several directions, gauze drainage was placed and the patient put to bed, with the conviction that little or nothing had been gained. No reaction. Patient improved at times and then gradually relapsed. Laparotomy offered, but refused. Patient still ill, three months and a half now. Surgeon in charge says, "Mass on the left side can now be outlined distinct from the solid pelvic roof." Apparently not harmed by operation. Surgeon reports, "She may be willing to submit to another operation the same as before." This is a distinct and an undeniable failure. Probably not a proper case for this treatment.

CASE II.—Mrs. F. C. G., S— P— Avenue, puerperal case six weeks after confinement. Typical broad ligament. Phlegmon of right side. Expected to make inguino-crural incision, as mass seems adherent to anterior wall. When anæsthetized, thought it could be reached from below. Usual incision. Subperitoneal dissection between folds of broad ligament, no pus being encountered. Peritoneal cavity opened. Ovary could just be reached. Seemed enlarged, but consistent. Thinking patient would recover, nothing further was done. Absolutely no result.

Fever still continuing and mass still present.

Partial Failure.—CASE III.—Mrs. R., moderate mass, right side. Penetration of mass. Evacuation of slight semi-consistent pus exudate. Convalescence not well established. Irregular fever for three weeks. Gradual cure, patient being about in six weeks. Irregular menstruation and pelvic pains at menstrual time, but is about and apparently well since. Operation seven months ago. Opening in peritonæum not large enough. Gauze drainage not properly placed and not renewed often enough—only once on ac-

count of pain. This patient could have been cured promptly if operation had been done more skillfully. In contrast with these, thirty-six cures, some of them magnificent, for diseases that we know are so intractable. By cures I mean to say that the thirty-six cases recovered and resumed their ordinary methods of living and were free from symptoms sufficient to bring them back to their physicians. I will not venture to say that none of these have had or will not have return of trouble. I presume some will. I can only say that none have had relapses to my knowledge; a large number are still under observation to determine their future, and are known to remain well one to four years after the operation.

An Ideal Case.—Mrs. H., September, 1895, was taken with irregular and rather profuse uterine hæmorrhage with subdued pelvic pains; three weeks later had fever and took to bed. Twelve days later I operated, temperature having ranged from 102° to 104° the previous week. Usual incision. Penetration into general cavity. Left ovary normal. Right ovary as large as a large hen's egg. Adhesions slowly and carefully loosened; an enlarged ovary gradually worked down until presenting at the opening in the vaginal fornix unruptured. Incision through presenting part. Evacuation of two to three ounces of rich thick pus. No contamination of general cavity because of the protection of a long iodoform-gauze sponge placed in this prior to the evacuation. Cavity of ovary carefully sponged out and the organ replaced after being packed with a strip of iodoform gauze, the end of which is brought out of the vaginal opening.

Further cleansing of all the parts, further packing of Douglas' pouch. Temperature normal on fourth day and thereafter. Returns home after three weeks. Examination last week reveals no tumefaction in the pelvis. Slight induration of old point of incision. Uterus possibly a little enlarged yet, but perfectly movable. Has gained many pounds in flesh and is in perfect health. I forgot to mention the important pathological fact that the end of the tube was brought down and was absolutely perfect, the fimbriæ not showing the least appearance of infection, and a probe passed an inch and a half up its channel without obstruction. I grant you, it might have been a little safer to exsect that ovary for the future welfare of the patient, but, in view of the excellent result, the operator will be forgiven the sentiment that gives him the pride of saying, "Now the woman is well, and nothing was removed."

I might give you long recitals of interesting results obtained by this means, but having already encroached upon your patience and

stated at length the most important facts which I desired to bring to your attention, but little remains except to apologize for the length of this paper by saying that if but a mite has been added to perpetuating your interest in this matter, good will result. No particular priority or originality is claimed. These operations have been done from time immemorial by men in all countries. Pus sacs and infected areas have been incised, punctured, and penetrated by trocars and cautery, and scissors and knives, no doubt for ages passed. If any originality belongs to the work it is the enunciation of the principle that, "it having been proved that in the large majority of cases of para-uterine and peri-uterine septic diseases, ordinary medical means or simple local treatment is of little or no value, these demonstrations tend to accentuate the fact that such affections should be attacked from their incipiency in a surgical way, and that the proper method is in the adoption of the standard rule—cut, clean, and drain right from the beginning."

All cases may not be so cured; but tell me what surgical operations have shown better results in their early history? Much remains to be done in this line. Some few cases may be made worse, and some few not benefited, but the results of such procedures at the hands of experienced men will determine boundaries; and the discoveries unveiled in operating patients in this early stage of the disease is almost certain to bring about a perfection of symptomatic diagnosis that will in the future make infinitely more perfect the best methods of cure by making fine discrimination of cases possible. If a virulent fluid from an infected uterus finds its way into the general cavity before Nature has sealed the tube, the very first drop may seal the doom of the patient, and yet we know that if at the dependent portion of the cavity that drop found a drain, nothing more than a simple local evidence of trouble would result. The surgeons of the near future will learn to interpret symptoms and place his drain in time to avert many a calamity, and work in the direction which I have endeavored to point out may be of great assistance in reaching such ideal results. Unthinking and unknowing people sometimes complain of too much surgery, but the lessons learned by us of the great achievements of the past rather spurs us to do more, provided it is done well. This form of treatment is suggested for trial, with a presentation of the evidence of its apparent efficacy by your invited referee. Where better could it be presented for a verdict than from the Society that counts among its members Emmet, still on guard over the fate of cellulitis; or Mundé, or Thomas, who so frequently fought for vag-

inal incision ; or Polk, whose words for conservative work are still fresh to our memories ; or Pryor and many others here who have struggled so honestly to bring to gentle suffering women the greatest boon possible from gynæcology—namely, the cure of pelvic septic disease ?

Gentlemen of the New York Obstetrical Society, I thank you for your flattering invitation.

353 LA SALLE AVENUE.

