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## THE PRESENT STATUS OF CONSERVATIVE GYNÆCOLOGY

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IT is undoubtedly a fact that the present tendencies in the treatment of diseases of the internal genital organs of women are markedly towards conservatism, and the time has passed when a woman with a backache, or a persistent pain in her groin, is hurried to the operating table and subjected to the removal of organs which are of the utmost importance not only to herself but to the race, without an attempt being made to save her from such a loss and mutilation by the employment of the local and constitutional measures that are at our command.

One of the first to sound a note of warning against the indiscriminate removal of important organs from a woman's pelvis was Dr. William M. Polk, of New York, who, in an able paper in 1886, said: "In the interest of conservatism, let us hope that this will not always mean extirpation of the tubes and ovaries, for who can say that the abdominal surgeon may not devise means by which those organs may be so treated as to secure health without robbing of the possibility of maternity. The operator who fails to note the distinction between acute and chronic salpingitis, and loses sight of the fact that the first, and even the second, may be cured by simple methods, sacrifices many tubes and ovaries which might better be left in place, a mutilation to be avoided unless imperatively demanded in the interest of the life and health of the sufferer."

I am of the opinion that gynæcological conservatism should, in the first place, imply the avoidance of operative interference whenever it is possible, and that, when surgical intervention becomes imperative, the preservation of an organ, or a portion of one, which may be free from disease and able to functionate, and whose integrity is so important to the woman, should be looked upon as the height of gynæcologic skill. One does not need to be very old to remember the time, only a comparatively few years ago, after it had been demonstrated that the peritoneal cavity, which hitherto had been considered inviolate, could be entered with comparative safety, if only ordinary methods of cleanliness were observed, when a woman with a persistent, or even an occasional, pain located in her pelvis, rarely, if ever, escaped the loss of some of her internal genital organs, unless she herself had the temerity flatly to refuse operative interference. All of us have seen women, whom we honestly believed required operation, get well and also bear children after they had been advised and even urged to submit to the removal of the offending organs as the only relief from some serious and extensive pelvic disease.

Little was known at that time of the serious results to the woman of the sudden induction of the menopause, and many good and useful organs were sacrificed to the superstition that disease of one set of adnexe necessarily meant its extension to the other. As a result of this indiscriminate removal of these organs, in which the effects upon the patients were far from gratifying, the conclusions were forced upon us that the surgically produced menopause had a much more disastrous psychic effect upon a woman than the physiological one, and that certain conditions, which we once considered incurable disease of the adnexe, were, in many instances, no disease at all, or, at most, were acute conditions which by rest and appropriate treatment would subside and leave the organs in a normal state.

A woman's internal sexual organs and menstrual function are so intimately associated with her psychical and physical balance that any operation which induces her climacteric suddenly, interferes so seriously with those functions which are necessary to her well-being at large as to produce the most profound mental and physical disturbances. It is therefore imperative that both ovaries should never be removed from a patient who has not passed the menopause, unless they are so diseased that their retention, either whole or in part, would jeopardize the woman's life or complete recovery.

The theory is generally accepted that the ovary is an organ analogous to the thyroid, thymus, pineal, and suprarenal glands, and that, in addition to its function of ovulation, it possesses an internal secretion the absorption of which is necessary to the animal economy during the procreative period. We all know that the function of menstruation should be preserved, especially in a young woman, even if it is unaccompanied by the possibility of conception, and we also know that the removal of both ovaries often produces symptoms which cannot be attributed wholly to a suddenly induced menopause, and which must be due to the lack in the woman's economy of some important

factor. The administration of ovarian extract to women who have had both ovaries removed, and who suffer from these psychical phenomena, sometimes overcomes the reflex symptoms. Surgeons are now attempting to implant pieces of freshly removed, normal, ovarian tissue within the peritoneal cavities of women who have been deprived of their own ovaries, in order to mitigate the psychical disturbances which follow the loss of these organs. The operation is in its incipiency and the results are too uncertain as yet to allow an opinion to be formed as to its efficacy, but the mere fact that surgeons of to-day are doing their utmost to replace organs that were formerly removed so readily, goes far to indicate the conservative tendency of gynæcology. These unpleasant psychical phenomena pass off in time, but they can be avoided entirely by the retention of an ovary, or a part of one, in suitable cases. The value of the ovaries and tubes to the woman's economy is so great that they should never be removed for purely technical reasons, but a portion of a tube or ovary, especially the latter, which is sufficiently healthy to perform its functions, should be preserved even at the cost of the continuance of some of the minor symptoms from which she has suffered.

Before resorting to any operative interference in these cases the conservative gynæcologist should have exhausted all the non-surgical means at his disposal for the relief of such conditions, and should have devoted a sufficient length of time to the trial of these methods of treatment, and not until then should the question of operation be seriously considered. The treatment usually indicated consists in the avoidance of cold and exposure to dampness, especially during menstruation; rest, both mental and physical, more or less complete; ice bag or heat to the hypogastrium; hot, vaginal, antiseptic douches; counter-irritation to the vaginal vault; vaginal tamponing with wool or gauze soaked in boroglycerid and ichthyol, with the patient in the knee-chest position; intra-uterine applications of a twenty-five per cent. solution of protargol; the use of pessaries, where indicated, and, in obstinate cases, a prophylactic uterine dilatation and curettage. Everything possible should be done to enable a patient with diseased adnexæ to avoid the necessity for an operation even though treatment may be prolonged; but when an operation becomes imperative, then that operation should be sufficiently thorough to insure the patient, as far as we are able, a future of comparative comfort with a fair degree of certainty that a subsequent operation will not become necessary to complete what might have been done at the first.

Conservatism in gynæcological surgery is even of greater importance than conservatism in the general and local treatment of these cases. The objects of treatment, whether conservative or operative, should be, primarily, to restore to the patient all her functions without pain or discomfort, but should this be impossible, then we should endeavour to preserve her functions of ovulation and menstruation, and to restore her organs to such a condition that pregnancy may be possible. If the disease has been so extensive that all of these results may not be obtained, the woman should be insured at least the function of ovulation and the internal ovarian secretion. If the disease of the adnexæ has been so extensive and of such a character as to have destroyed all the ovarian tissue, so that to leave any of it would jeopardize the patient's chances of recovery, or render her liable to the necessity for a subsequent operation, then, and only then, should both adnexe be removed. In a doubtful case a surgeon should never be handicapped by the sentimental wishes of the patient, and be compelled to leave organs which he knows will give future trouble and perhaps necessitate another operation. His reputation is never increased by such a case, even though he has fully warned the patient and her friends of the possible outcome of such an incomplete operation.

A radical gynæcological operation is usually comparatively easy,—the removal of both tube and ovary requires but little thought and a moderate amount of surgical skill; but to decide quickly, during an operation, upon a conservative measure that aims to retain the function and usefulness of an important organ, and at the same time to execute it successfully and produce a symptomatic cure, requires a deeper knowledge of pathology, a greater degree of surgical skill, and a closer insight into end results than is needed by those who would rather remove than save an organ.

Perhaps the diseased condition of the adnexe that comes to our attention most frequently is an acute inflammation of the tube, or acute salpingitis, due to the introduction of some infection, usually gonorrheal, by way of the vagina and uterus. I do not think that any of us would now advocate the removal of such a tube as long as the inflammation is acute and limited to the tube itself, but how many thousands of such tubes with their accompanying, and perhaps uninvolved, ovaries have been sacrificed in past years because they were inflamed, enlarged, and tender, and how many other normal adnexe have been removed during such operations because the operator thought they too might become affected at some future time?

It is now commonly observed that these tubes, given a little rest, vaginal tamponing, and other local and constitutional measures, supplemented, perhaps, in obstinate cases by uterine dilatation, curettage, and drainage, will return absolutely to the normal in a comparatively

short time, and there are few women who would not give up months of their time to such treatment, with a fair prospect of recovery, rather than submit to a cœliotomy, with its attendant dangers, for the removal of the inflamed organ. There are cases of tubal infection where the fimbriated end becomes closed by adhesive inflammation, and as the tube fills up the pressure becomes sufficient to overcome the obstruction at the uterine end, and a free discharge of pus through the uterus takes place. After such a discharge all symptoms subside for a time, and the patients continue in fairly good health until the phenomenon recurs. Much can be done in these cases of periodic pyosalpinx, between the attacks, by uterine dilatation, curettage, and free drainage, or even by the employment of intrauterine applications of antiseptic or bactericidal solutions.

Undoubtedly many cases of gonorrheal salpingitis get well, not only symptomatically, but functionally, and such cases should not undergo salpingectomy until one is positive that recovery is impossible, and after every non-operative plan of treatment has been exhausted for their relief. When, however, the abscess in the tube has produced enough distention to cause its rupture, forming a pelvic abscess, the sooner such a collection of pus is evacuated, preferably if possible, per vaginam, the better for the patient. It is frequently necessary to remove the diseased tube by a subsequent operation after the patient has thoroughly recovered from the first. Whether this secondary operation is done by the vaginal or suprapubic route, depends upon the operator's preference. Personally, I employ abdominal section for these cases, for I find it more satisfactory in dealing with the adhesions, and, although the patient's convalescence is not quite so rapid. the results as a whole I consider much more satisfactory. It is really remarkable in how many of these cases of pelvic abscess, which have been freely drained per vaginam, the tubes return to their normal condition, and absorption of the peri-uterine and peri-ovarian adhesions takes place. I have, on a number of occasions, opened the abdomens of women who have had such pelvic abscesses, and have been surprised at how little permanent damage had been done by a very extensive inflammatory process, and how quickly and thoroughly the adhesions had been absorbed. Of course this only takes place where the drainage has been sufficiently free to get rid of all the infective material. At other times one is also surprised at the many severe and distressing symptoms which may result from a few apparently unimportant pelvic adhesions.

In hydrosalpinx and hæmatosalpinx, where the distension has not been sufficient to destroy its integrity, the tube may be slit at its distal extremity, and after evacuating the contents and thoroughly washing out, the mucous and serous surfaces may be stitched together with fine catgut. Then, after relieving all adhesions, the tube may be returned to the pelvic cavity with the expectation that the tissues causing the stricture at the uterine end will be absorbed and the tube become patulous again. If, however, the tube has been too greatly distended, its chances of recovery are practically nil, and I always remove it, of course leaving the ovary or whatever part of it may be normal.

After a tube has been thoroughly infected with a pyogenic bacillus. and the uterine and fimbriated extremities closed by adhesive inflammation forming a pyosalpinx or abscess of the Fallopian tube, it is doubtful whether by emptying and draining such a tube it ever becomes patulous again and resumes its functions as an oviduct. When the disease has been of long standing the tubal contents may be sterile. but when we realize how eroded and hypertrophied the walls of an old pyosalpinx become, due to hyperplasia from infiltration of pathogenic germs, it does not seem reasonable to me to expect them to return to normal, and if they do not become normal and patulous, what is the use of leaving them within the pelvic cavity, where at any time they may become the source of future inflammatory processes that in all probability will require subsequent operative interference? I should, therefore, question the advisability of the ultra-conservative operative procedure which is being done quite extensively of late, where the pus tube is exposed through a vaginal or even a suprapubic section. all adhesions broken up, and then the tube opened thoroughly, washed out, and drained either by gauze or tubing through the cul de sac. Tubes treated this way may close up, but I cannot imagine that an old pus tube, perhaps of years standing, will, as is claimed by the advocates of this operation, return to its normal size and patency, and absorption of all surrounding adhesions take place. Of course, where both tubes are involved in such disease, and the patient insists that one tube at least be left to give her whatever remote chance there might be of a future conception, I would treat it in this way after explaining to her fully what I considered the danger of such a procedure and allowing her to assume the full responsibility.

An early stage of tubal infection is treated by some operators by stripping the tube of its purulent contents, washing out its cavity with a 1-5000 solution of bichloride, and then dropping it back into the pelvis. I have never followed this plan, for it seems to me about as justifiable as opening an infected and strictured appendix, evacuating its contents, washing it out with an antiseptic solution, and then returning it to the peritoneal cavity, and how many surgeons would advocate

that procedure? We all know the care necessary to disinfect one's hands or the patient's skin before laparotomy, and who would think of contenting himself with simply washing his hands in a 1-5000 solution of bichloride and going into the peritoneal cavity without any further precautions against infection?

I frankly admit that I am afraid of free pus in the peritoneal cavity, and I may be behind the times in refusing to close one in which pus has been spilled, no matter how thoroughly it has been removed. I feel much safer after such an operation if I know that I have a good drain reaching to the infected site, and I believe that such drainage, from the patient's standpoint, is far preferable to running the chance of a secondary opening of the abdomen for infection.

Where the distal end of the tube is the site of a small, circumscribed collection of pus or serum, and the uterine end is fairly normal, the diseased portion should be removed, cutting diagonally through the healthy portion of the tube, and stitching the serous and mucous coats together with fine catgut. Tubes whose fimbriated extremities have been sealed by some preëxisting disease that has subsided, may be opened by slitting up the lumen and uniting the mucous and serous surfaces with fine catgut.

When the ovaries and tubes are found imbedded in a mass of old adhesions, indicating that an inflammatory process has existed at some previous period, due to an infection extending from the uterus through the tubes, the original disease having run its course, it is sometimes found that these adhesions do not necessarily signify any existing disease in the organs themselves, and the pain and other symptoms experienced by the patients are due to mal-nutrition or congestion caused by interference in the circulation by the adhesions. Freeing the tubes and ovaries from these adhesions, and restoring them to their normal position and circulation, will frequently have the effect of relieving the distressing symptoms, and perhaps give the patients a chance of future pregnancy.

I am not in favour of the breaking up of tubal and ovarian adhesions by manual effort, without incision and with the patient anæsthetized. I practised this method to some extent until I carefully separated a small pus tube and ruptured it. This caused me to modify my ideas upon the subject, and now I want to see and feel the adherent tubes I am operating upon. In freeing the adnexæ from such adhesions, care must be taken to free them entirely from every band constricting or binding them in any way, the operator bearing in mind the fact that a single kink in a tube, or a single band constricting an ovary, may interfere with the result of what might otherwise be a very successful

operation. After freeing an ovary from such a mass of adhesions it is sometimes necessary, in order to prevent its future prolapse, to stitch it to the posterior aspect of the broad ligament, and, if the uterus still has a tendency to retro-displacement, to restore it to its normal position by a suitable operation. Personally I am disposed, where feasible, to do an intra-abdominal shortening of the round ligaments by a method of my own, an account of which will be published shortly. Ventral suspension and fixation have never appealed to me as an operative procedure, for I fail to appreciate the advantages of the formation of a strong band of adhesions in front of the uterus, aside from the dangers of an intra-abdominal hernia.

In an endeavour to elevate a prolapsed and adherent ovary, it has been suggested, after relieving all adhesions, to pass it through a slit in the upper part of the broad ligament and attach it to the anterior aspect of that structure. This method does not appeal to me, for in the process of repair I should expect the slit in the broad ligament to close up and exert more or less constriction upon the blood and nerve supply of the transplanted ovary, causing hyperæmia and consequent discomfort and weight.

When the ovary is the seat of large unilocular or multilocular cysts, in the walls of which all ovarian tissue is apparently lost, it is of course necessary to remove the entire growth, especially if the patient has a good ovary on the opposite side. If, however, the other ovary has been removed, it is advisable to strip off some of the cyst wall adjacent to its attachment to the broad ligament in the hope of retaining some of the ovarian tissue, removing all the cyst lining. When the cysts are small, whether single or multiple, with some portion of the ovarian tissue intact and in fairly good condition, it is always advisable to remove the growth either by excision or by incising the cysts, removing their lining membranes, and suturing the rents in the ovarian tissue with fine catgut. It is always advisable to leave a portion of ovarian tissue, however small, if it is free from disease, even if the patient has a good ovary on the other side, for it is impossible to say that this good ovary will remain normal all her life.

In removing a diseased tube, the entire tube should be excised, making a wedged shaped incision into the uterine cornu in order to get all the tubal tissue. When the ovary, or a portion of it, has been left, Boldt advises stitching it into the slit in the uterine cornu made by the removal of the tube, claiming that the patient's chances of future pregnancy are increased thereby. When a Fallopian tube has been removed, using a running suture, the uterus loses a portion of its support, and it is well to shorten the broad ligament by stitching the ovary to the

uterine cornu. This procedure not only puts the ovary out of the way of pressure and future adhesions, but restores to the uterus the support of the broad ligament.

In operating upon an ectopic gestation, the involved tube should be removed, especially if the patient has normal organs on the other side, for a tube in which pregnancy has once occurred is very likely to have a recurrence.

Cirrhotic ovaries are frequently due to the mal-nutrition incident to misplacement of the organs and adhesions binding them down and cutting off their blood supply. When such is the cause, the release of these adhesions and the elevation of the ovary to its normal position will usually relieve the patient of her symptoms. If, however, the cirrhotic ovary is perfectly free, then it should be removed.

Unless an ovarian abscess is so small that it can be excised without rupture, leaving some normal ovarian tissue that can be saved, the entire, suppurating ovary should be removed, together with its tube.

There is no room for doubt as to the advisability of extirpating the affected organ in such diseases as fibroid, fibrocystic, dermoid, malignant, hydatid, and tuberculous degeneration of the ovary, and in these cases the tube on the affected side should be removed also. Malignant disease of the ovary, of course, demands the removal of the affected organ and its tube, but if the ovary on the opposite side is normal it should be left.

I have frequently found women with prolapsed adnexæ, who suffered an amount of pain and discomfort entirely out of proportion to the apparent abnormal condition found on examination, who, upon abdominal section, presented a varicose enlargement of the veins of the pampiniform plexus in the broad ligament. This condition is due to the interference in the circulation of the uterus and its appendages caused by the prolapse, or other displacement, of the organs, and the amount of benefit obtained from any operative measure undertaken for the relief of the condition will depend largely upon the restoration of circulation. It is my practice in these cases, even though I do not remove the appendages on that side, to pass two ligatures through the broad ligament, so as to obliterate most of the veins of the plexus. Of course, where the appendage is removed, the plexus will be obliterated.

Not all uterine myomata require an operation for their removal, but only those which by reason of their size, peculiar position, or the unpleasant symptoms which they produce, render the patient's existence unendurable. In many cases the administration of such internal remedies as stipticin, thyroid extract, and ergot, produce marked beneficial results, and is particularly advisable in cases approaching menopause, or in those in which for some reason an operation is contraindicated. The most effectual conservative treatment applied to these cases is the removal of the tumours themselves, by enucleation either per vaginam or through an abdominal incision. Some years ago it was thought that only those tumours which were pedunculated could be removed successfully. Later, subserous and even intra-muscular tumours were enucleated, there being practically no limit to the number of tumours that could be removed successfully by this method. At the present time, gynæcologists do not hesitate to enter the uterine cavity and remove these growths while operating through an abdominal incision.

In the selection of cases of uterine myomata suitable for removal by enucleation, it should always be remembered that a uterus once the seat of a fibroid generation is likely to continue to develop these growths even after the removal of all tumours that can be felt. In a case of multiple fibroids there may be many foci of fibroid degeneration so small that they cannot possibly be appreciated except microscopically, and, of course, cannot be removed during an operation, and if these foci continue to grow, the patient may have to undergo a subsequent operation for the removal of the myomatous uterus.

Enucleation of multiple fibroids, and taking the risk of their recurrence, is justifiable where the patient is young, and where the ability to conceive is an important factor. Beyond the age of forty, the complete removal of the uterus, of course leaving one or both ovaries, is the better operation. In removing the uterus for multiple fibroids it is well to bear in mind the fact that small fibroid foci may exist in the cervical tissue without being large enough to be felt. The enucleation of the cervix is advisable in these cases to avoid the risk of the growth of a fibroid in the cervix which has been left.

In order to prevent the sagging and prolapse of the vagina and pelvic floor after the removal of the uterus, the severed ends of the round and broad ligaments should be brought together and stitched to the upper end of the vagina, and the ovaries should be disposed of in such a manner that they will not be caught in adhesions nor pressed upon after the pelvic contents have readjusted themselves.

Vaccine and serum therapy have been used during the past few years in cases of gonorrheal endometritis and salpingitis with varying success, but at the present time the whole subject of the treatment of gonorrhea and its complications in women, by vaccines and serums, may be considered as still in the early experimental stage. The reports concerning their use in pelvic inflammatory disease are too scanty to justify conclusions as to their efficacy in these diseases.

I have purposely avoided discussing the treatment of gynæcological conditions by electricity, because the subject is too broad to be embodied in a paper of this size, and I have had very little personal experience in its use. The conclusions I have reached in the treatment of gynæcological cases are:

Treat the case expectantly as long as there is the slightest chance

of recovery without operation.

When operation is imperative save all the organs or parts of organs possible.

3. A conservative operation is not necessarily an incomplete operation. Remove all the organs, or parts of organs, that are so diseased that to save them would necessarily expose the patient to the dangers of a second operation.

4. Except in extreme cases, or in those near or past the menopause, save the patient her function of ovulation, or, at least, leave her some part of her ovarian tissue to avoid the psychical disturbances which follow the total ablation of these organs.