

MODERN EVOLUTION OF GYNÆCOLOGY

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EVOLUTION is, essentially, development or growth. Both development and growth, as the names imply, demand progress either forward or back and the forward evolution of the science of medicine in the present century has been truly phenomenal. Of the many branches of modern medicine gynæcology and obstetrics are, and must ever be considered as blood relatives, but to my mind the evolution of gynæcology in the past ten years has far outstripped that of obstetrics, indeed outstripped all branches of modern medicine.

One can well remember less than ten years ago when first class gynæcologists in America considered their department almost entirely a surgical specialty. I have heard more than once slighting remarks by eminent men about *Kelly's Medical Gynæcology*. Medical gynæcology—"there warn't no sich animile." Half-way measures were of no avail in the pelvis.

Office gynæcology was a thing of the past. Local applications were purely a source of office revenue, of no value and so scorned by the conscientious practitioner. "We must earn our living in the hospital, not the office. Away then, with local treatments, many douches, pessaries, vaccine inoculations and what nots." Leave petty treatments for petty ills. Did you ask for advice concerning chronic infection of the cervix or tubes, backache in the presence of a retroversion, moderate prolapse, the answer was always "Operate, and no halfway measures."

It is not meant to imply that thorough care was not taken in the choice of treatment. There was. I was always impressed with the care with which patients in a great New York hospital were chosen during my residency there. It was with pride we pointed to the fact that only two in every seven patients admitted

came to operation. This is readily explained in the fact that acute infections, abortions of any sort, and malpositions readily rectified were not surgical cases. The point though is, that the treatment for chronic pelvic infections and persistent malposition was surgery or nothing.

But moderation is the very keynote of existence. Therefore it is evolution that brought the moderationist to the fore in gynæcology. For after all the foreword in medicine must ever be *help* not *eradicate*. Galen expounded wisdom centuries ago when he said "Nature is the Healer, the Physician is but her hand-maiden."

One of the most remarkable changes, to my mind, has been in the use of the intrauterine curette in cases of incomplete abortion. Perhaps no instrument of modern times has fallen into such a state of disrepute. Yet ten years ago and less it was the usual treatment for abortion, either clean or septic, and even routine in some first class teaching institutions. I feel that the man who did more than any other one individual to preach the evils of curettage was Polack of Brooklyn. I think it was Polack I once heard say to a body of students, holding a curette in his hand, "Gentlemen, here is an instrument which has undoubtedly caused more deaths than all the hangmen's ropes, guillotines and electric chairs since the beginning of time." Probably he could have included typhoid fever and the Great War and been still conservative in his estimate. To study the protective histology of the pregnant uterus as first presented by Polack, is to become imbued with a thorough respect for the pregnant uterus. To my mind the curette is to-day relegated to one use—as a diagnostic aid in suspected cancer of the corpus.

The evolution in treatment of the diseased cervix presents also a remarkable change. How long is it since the proper treatment for chronic endocervicitis was amputation without fail? Back in the old days? No, only four or five years ago. One remembers the feeling among good men at that time that trachelorrhaphy was an old-fashioned, haphazard and halfway method; that might improve the appearance of the cervix, perhaps improve the musculature, but failed in its most important errand, the removal of diseased tissue. Amputation alone

succeeded where all else failed. What countless sterilities, backache and leucorrhœas this procedure cured. Very true, it did, but what of the cost? One must always weigh the disease with the cure. Relative sterility due to endocervicitis is truly unfortunate, but fertility following an amputation of the cervix, whatever be the mode of amputation, is also a serious situation in many cases. The argument is not to compare sterility with amputation but rather to show that the modern trend is to treat the diseased tissue along conservative lines first and leave the radical procedure to a last resort.

In an article written recently by this author* an attempt was made to describe the function of the cervix from an anatomical and physiological standpoint. It was thought that by placing more emphasis on the mechanism of this remarkable organ that more respect would thus be shown it, and consequently less radical treatment. One cannot amputate a cervix, I care not how carefully it be done, without very definitely complicating subsequent labour. Because whether you remove muscle tissue or not you will positively leave behind a circular scar, and low grade connective tissue will not dilate.

Furthermore, it has been pretty definitely proven that chronic endocervicitis *can* be cured by other means than operation. It is not the intention here to go into a discussion of the treatment of endocervicitis. Suffice it to say that the application of a germicide to the cervix and vagina following thorough dilatation and removal of mucus, plus the powder treatment of Gellhorn, plus the cautery treatment of Dickenson where necessary, have proved thoroughly satisfactory in a fair number of cases.

One feels that cervical amputation will soon be relegated to the same category as the uterine curette, *i.e.*, for diagnostic purposes and in those cases of chronic infection with hypertrophy, erosion, eversion and discharge, at the menopause or after. But remember the date—at the menopause or after. It may be that this amputation of the cervix which has had such a remarkable vogue will soon be considered a half-way measure. One would never remove but part of a tube for the surgical cure of tubal infection, or part of both tubes even at or near

*Blair, *Surg., Gyn. & Obst.*, Oct., 1925, p. 473.

the menopause. The same reasoning should apply to the uterus.

It is remarkable the number of amputations that are done on the "precancerous cervix." Such a nomenclature is especially dangerous in the hands of the younger generation of gynecologists. Remember, cancer never has found origin in a laceration. Cancer in this area is believed to spring only from erosion and the treatment for erosion is surely cautery, not surgery. *I believe that cervical amputation is destined to be considered a halfway measure.*

The attitude towards salpingitis has gradually changed too in the past five years. Of course it has been long established that no surgery can be done on acutely inflamed tubes. It seems a fact that the operative results of experienced men in chronic tubal infections has been on the whole so unsatisfactory that it too is slowly receding to the category of the acutely inflamed.

It is, perhaps, true that the more one becomes experienced in the practice of operative gynecology the less one operates for the cure of chronic salpingitis. The peritonitis becomes so localized as to cause little or no pain except at exacerbations. Continuous pain comes from adhesions and the general futility of operation for the cure of adhesions is well known. As to the worry about absorption, it is probable that the argument is more speculative than real. Pelvic localization of and immunity towards infection is a very real and remarkable thing.

And what has modern gynecologic therapy evolved to replace, at least in part, the period of operative treatment? First of all bear in mind the teaching of Curtis, now pretty well accepted as truth, that one attack of acute salpingitis of gonorrheal origin has but a short period of chronicity, and eventually disappears entirely, leaving normal tubes. It is the subsequent attacks that cause permanent chronicity. These subsequent attacks may follow, of course, subsequent inoculations from the male, but very often are re-infections from the lower genital tract. Furthermore, granted we have chronically diseased tubes with which to deal (and I believe we will have in more than 50 per cent of our cases) have we any permanent relief to offer except via the operating table?

The initial infection if gonorrheal (and probably 90 per cent are gonorrheal) invariably

leaves tracks as it progresses upwards to the tube. Bartholin glands, Skene's tubules, urethra, cervix—one or all blaze the trail, the "foot-prints on the sands". It is from these depots that our recurrences come far more often than by reinoculation from the male.

We must bear in mind then that the treatment of acute salpingitis consists of more than the usual rest, bowel-hygiene, diet, icebag, vaginal douches, sedatives, etc., but that after the attack has subsided then do we in turn instigate a vigorous offensive against those entrenchments of the enemy enumerated above. I think it is generally found that the greatest trouble is experienced in Skene's ducts and in the cervix. I find the electro cautery necessary in most cases in both areas. A word of warning about the treatment of the cervix may here be well-advised. In order to treat properly one must dilate the canal. Be very gentle about the dilatation. Trauma of the chronic infected cervix is a common cause of subsequent attacks of salpingitis.

The treatment of chronic salpingitis closely resembles that of the acute condition. We must not only treat the condition *per se*, but must cope with the cause of the recurrence, as discussed above.

Little need be said about the usual and time-honoured treatment of chronic inflammation. It is the same in whatever part of the body it be found. Concisely it might be said to consist of *plenty of leucocytes in the right place*. Heat is the usual means of attraction of blood to the part and heat in any form is most advisable. Just here may I say a word regarding the vaginal douche. The douche has fallen in and out of repute so often that one hardly knows its status among reputable physicians from one year to another. The chief cause, of course, was that for so many years vaginal douches were used as a medium of medication. But the vaginal douche as a medication is and must always be a failure, because the medicine in such a vehicle does not reach the seat of trouble unless the trouble be wholly vaginal. No, the real use of the vaginal douche is as a purveyor of heat and properly used is unexcelled in that capacity in inflammations of the pelvis. The patient must be carefully instructed as to detail, that the douche be taken invariably lying flat on the back with hips slightly elevated:

that the douche be taken at a temperature of about 110° to 115° F.; that the water be allowed to circulate slowly by having the bag held low and herself holding the labia together, not too firmly; that the ceremony should take *at least* one-half hour and that the amount of fluid used is of no interest. The question to be answered is not "How much?" but "How long?" I do not picture a vaginal douche properly given with less than four gallons of water. Douches taken with directions as above are of inestimable value in pelvic inflammation.

Another great method of supplying heat to the part is by diathermy. Here is but another vaginal douche using different media but getting the same results, *i.e.*, heat to the part. We remember, of course, that it is not electricity that does the work, but plain old fashioned heat.

Now it is not only very necessary to attract blood to the part, but it is desirable to have in the blood content as many leucocytes as possible. In acute infections nature generally supplies a liberal leucocytosis, but unfortunately not so in chronic conditions. The best way we know to meet the difficulty is by protein therapy.

So much has been written about foreign protein therapy that the most biased must at least give it recognition. As is usual with any new therapeutic measure some are carried away with enthusiasm, while others are equally sure that it has nothing in its favour. Like glandular therapy it will take a long time to get down to a therapeutic working basis, but like glandular therapy it has its ultimate place in the sun.

The physio-chemical explanation of protein therapy is highly interesting; colloidal chemistry borders even on the mysterious. It is, perhaps, sufficient to keep in mind that the product of bacterial invasion, toxin, is antigen and protein in essence; that antigen causes the formation of antibodies in body fluid and that antigen is invariably colloid in nature, therefore protein in nature.

The idea is that cellular activity at the seat of trouble, known as colloid dispersions bring about the remarkable results.

Apart from all this, though, the thing that must arrest attention from the clinician's point of view is that in any form of protein injection

it is *absolutely essential* that one gets a positive systemic reaction in order to get results: that is, we must produce that condition of mild serum sickness just short of anaphylaxis known as preanaphylaxis. The findings are fever and leucocytosis.

The days of marked publicity toward vaccines is not so far past. One remembers the autogenous vaccine, and that gradually the profession found that stock vaccines in most cases gave about as good results as did the autogenous. The whole thing was just foreign protein therapy under the name of vaccine treatment. Now whether or not we understand all about the colloid dispersions that doubtless take place, the leucocytosis that invariably accompanies satisfactory treatment results, is readily understood. When, however, in spite of all conservative measures the patient remains a sufferer, then operate.

It is probable that operations for the correction of retroversion of the uterus are still being done oftener than any other single operation on the female pelvis. It is also probable that no other single procedure has done more to discredit gynæcology, excepting the use of the intrauterine curette. Not only is operation for correction of *retroversio uteri* alone inexcusable and indefensible, but it carries with it unquestionably an active danger of gut strangulation. The question of uncomplicated *retroversio uteri* is more an obstetrical problem than a gynæcological one.

I question very much if retroversion in itself ever caused many symptoms. I feel sure that a mobile retroversion never did. Backache, that commonest symptom, comes from many causes, but mobile, uncomplicated retroversion is not one of them, and for those uteri retroverted and adherent, much can be done before operation becomes the final solution. If these cases be given a thorough course of hot vaginal douches for six days twice a day with monkey walk fifteen minutes immediately following and when at rest lying on the stomach; then, on again presenting herself, one can with time and pains replace the uterus in good position in the great majority of cases. Adhesions holding the retroverted uterus against the sacrum are not as common as is generally thought. Probably most men have struggled conscientiously with an apparently adherent uterus and on opera-

tion have been chagrined at the ease with which the uterus came up into position. There were not any adhesions at any time, but a rounded, moist ball had been held in a rounded, moist, yielding cul-de-sac by suction only.

May one be permitted for a moment to turn to the realm of obstetrics while on this subject.

Probably 90 per cent of all displacements are puerperal in origin, either from labour or miscarriage, and no wonder. The habit of lying on the back is the most unnatural posture to which the human race has become heir through habit only. No other animal sleeps in such a position and certainly no other female would dream of so abusing herself following labour. But our female does it almost invariably and the heavy, soggy uterus, probably hundreds of times its normal weight, with the usual means of support, the pelvic floor, newly stretched, weakened, even injured, has really no alternative than to gradually tumble back against the sacrum. How the very animals must laugh at our utter ignorance of certain fundamentals so well understood by them. Parturient women should begin to lie on their stomachs not later than the fifth day, if there be no complications and continue to lie, and certainly to sleep that way *for the rest of their lives*. It has been frequently said that one of the greatest duties of our young girls' boarding schools should be to teach regularity in bowel hygiene. Get her to form the habit. Let us also teach her to sleep on her right side with the right arm behind her and the left knee drawn up and the body far enough forward that the abdominal organs will be against the front wall of the abdomen where they belong. If all people had a normal bowel movement once or twice a day and slept on their stomachs or nearly so, what a vast improvement there would be in this vale

of tears and suffering. An ounce of prevention was ever worth a pound of cure.

Recent literature continually shows the trend toward conservatism in the treatment of fibroids of the uterus. The use of x-ray and radium has unquestionably come to stay, thereby greatly reducing the number of operations for this common trouble.

And so we might go on down the long line of gynaecological diseases. Everywhere men are conserving whenever possible, and so are gynaecologists coming finally into their own true field. For the duty of the gynaecologist fundamentally is to conserve the reproductive function of the female in his community rather than to remove uteri and tubes in large numbers. A gynaecological specialist, I take it, is not a man who can remove a uterus with especially brilliant technique and eclat; many general surgeons can do it just as well. *The gynaecological specialist is he who can tell the general surgeon when not to remove that uterus.*

Some years ago a great political leader in the British Commons drew scathing criticism when in a time of great national emergency he persisted in saying "Wait and see". Emergency in any field permits no such dictum. The science of gynaecology, however, is but seldom in this category. Plenty of time is usually given the specialist to examine the situation from every angle, and the important angle is the essential duty expected by God of this woman while on earth. Surely you interfere with and certainly you eradicate, only as a last resort. To the young gynaecologist the dictum is here offered "Wait and see". Just study the case carefully and *Wait and See*. It may be that careful consideration will decide you against the initial decision of surgical interference. For I say to you that he is truly great in gynaecology who knows what *not to do*.