# THE PROGRESS OF TEACHING AND PRACTICE IN GYNECOLOGY DURING THE LAST FOUR DECADES*

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THE review of the progress of teaching and practice in gynecology during the last four decades is a large task. To survey all the achievements of this period in any branch of medicine would require years of work by a medical historian. My only qualification is to have lived in this era, and as an humble follower of William Osler in his advocacy of the peripatetic philosophy in medicine, not to have been blind to what I have seen.

It is not my intention to dwell on the lamentable ignorance of the past in the light of the present knowledge, a trait of the human mind older than Cicero, who commented on the wonder of each generation that its predecessor could be ignorant of what is so evident; a mental state conducive to a smug complacency with the present, but inimical to future progress. A more profitable undertaking is to contribute, no matter how little, to a future that shall be as superior to the present as the present is to the past.

In the latter spirit a retrospect of teaching and practice in this locality, a survey of the present and a glimpse into the future, might point the way to some of the improvements for which we should hope.

A description of practice and teaching forty years ago is familiar enough to men of my generation but it must sound strange to younger men. The women who went to hospitals for delivery were usually paupers and the illegitimately pregnant. There were few places for them to go. In this city (Philadelphia), Blockley, the Preston Retreat, the Lying-in Hospital, and the Maternity Hospital comprised the list; all small, none of them frequented by the well-to-do; in fact, a stigma attached to residence in them. Consequently, the delivery of a woman, a surgical procedure, was always conducted in her own home; difficult enough to do now with all our knowledge of asepsis and our transportable operative equipment, but doubly difficult then with the hazy notions about infection prevalent in the early antiseptic era and lack of equipment. High forceps operations were common; failing in that, version was the next procedure tried, with little regard to the relative size of head and pelvis, often with disastrous results. These operations were done with the patient on her bed, with no assistants. Cesarean section was such a rarity that throngs of spectators rushed to see it in a public clinic and it was considered so dangerous that patients were offered the choice between craniotomy on the living child and the

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cesarean operation in cases of insuperably contracted pelves. For this was the only indication for the operation in those days; no one considered its employment in placenta previa, toxemia and the other indications of today. The accepted technic of a cesarean section here at that time was of an incredible crudity; a huge abdominal incision; the eventration of the unopened uterus, its evacuation, the transfixion of the lower uterine segment with a couple of skewers, the ligation en masse of the cervix and broad ligaments by a rubber tube, the amputation of the corpus uteri and the fixation of the stump, as large as one's wrist, in the lower angle of the abdominal wound, to slough away in the course of five or six weeks, invariably leaving a large incisional hernia if the woman survived the operation itself or the sepsis and secondary hemorrhage that frequently carried her off during convalescence. It was Baer, of this city and of this Society, who taught us to drop the cervical stump after hysterectomy, an important historical fact that should be remembered. We knew nothing of leucocytosis, differential blood counts, blood cultures, blood chemistry, the sedimentation test and blood pressure; nothing of hypercholesterolemia, responsible for the gall bladder complications of pregnancy; nothing of functional tests for kidneys and liver; of pyelitis, of the Wassermann reaction; of the intravenous treatment of syphilis, and of gestational toxemias. We did not yet possess the primitive cystoscope over the credit for which Kelly and Pawlik wrangled later. Endocrinology was as yet unborn. Bacteriology was in its infancy and was not utilized in diagnosis or treatment. Early gestational toxemia was a neurosis and late gestational toxemia, nephritis. Appendicitis was perityphilitis, treated by poultices and opium. Salpingitis was parametritis, treated by iodine to the vaginal vault and tampons. I heard the late Professor Goodell, in a meeting of this Society, say that he never saw a pus tube and that he did not believe there was such a thing. We knew nothing of the refinements of aseptic technic in pelvic examinations and manipulations, with which we are now familiar. We knew none of the methods of precision in the diagnosis of pregnancy, none of the specific treatments for blood infections. We had no radium or x-rays. Antisepsis, in gynecic surgery, if attempted at all was Listerism with its carbolic spray and occlusive dressings to exclude the air. For disinfection of the birth canal, corrosive sublimate was the remedy. Cleansing of the hands was neglected and rubber gloves were unknown. When I went to my professor of clinical surgery in great distress of mind about the dreadful infections in the surgical ward of the University Hospital, I was told that I had no more to do with them than I had with the next thunderstorm above the city; that these infections all came from the air; so I continued with a clear conscience to infect everything I touched and to shovel out of

the bran dressings of open wounds live maggots that had bred overnight.

If a young physician were suddenly thrust backward forty years, one of his strangest experiences would be to miss so many names with which we are familiar in our branch of medicine. There was no Stroganoff to systematize the use of morphia in eclampsia; no Watkins to show us how to cure a cystocele; no Wertheim to teach us how to do a panhysterectomy for cancer; no Potter to improve the technic of version and to enlarge its indications; no Rubin's test for patency of the tubes; no Titus or Thalheimer to demonstrate the advantages of the intravenous treatment of the toxemia of pregnancy with glucose and insulin; no Kielland, Barton or Piper with their new models of forceps.

So much for a brief review of the practice of the day that was necessarily a reflection of the teaching of the time. To enter the medical school a page of English composition was required, nothing more. The farmer's boy could drop his plough, the conductor leave the platform of his street car, the mechanic desert his trade and enter a medical school. No wonder the manners of our medical students were not exactly Chesterfieldian. Our medical course had recently been increased to three years. The last two years we heard the same lectures repeated. The course ended, as I remember, somewhere about the middle of February, and we graduated in March. For the care of women and their infants in childbirth, the most responsible duty demanded of a young physician, we had no training at all; nothing but didactic lectures, inimitable, it is true, as given by Professor Penrose, but entirely inadequate to fit anyone for the emergencies of that branch of medicine.

It was in Europe, eighteen months after my graduation, that I first took care of a woman in labor. It was the first day of my internship in the Royal Frauen Klinik in Munich. I was demonstrating the management of labor to German medical students, many of whom had a greater experience than I, and the head nurse serving under my direction had, as a midwife, delivered eight thousand women.

In what is carelessly and incorrectly called gynecology our instruction was better. We watched Goodell operate both in large clinics, in which we saw practically nothing, and in small ward classes, in which we saw plastic operations, such as they were, and were given an opportunity to make a few vaginal examinations. The effect of our theoretical teaching, mainly by lectures, was illustrated by an incident of which Goodell told me privately. A young graduate called on him one day to ask him how he removed ovaries, many women being spayed in those days for indications that would not now be justifiable. Goodell good naturedly described the technic of oophorectomy, but then in alarm said, "You do not propose to operate on this verbal descrip-

tion?'' ''Oh, yes, I do,'' replied the young man. Meeting him some time later Goodell asked how the operation had prospered. ''I did exactly as you told me, but unfortunately forgot one step in the technic. I neglected to ligate the blood vessels.''

And here let me digress for a moment by an incursion into etymology, to explain a recent phrase in this manuscript about the careless and incorrect use of the word gynecology, and to point out the disadvantages we labor under in maintaining a provincialism in teaching, study, and practice of this subject, commented upon with surprise and evident disapproval by every foreign visitor. In response to Juliet's query, ''What's in a name?'' a physician might answer, there may be life and death in it; there may be clear thinking or mental confusion; there may be progress or retrogression in it. Hundreds of lives have been lost in consequence of the careless use of the word curettage to denote the instrumental evacuation of the uterus after childbirth or abortion. Gynecology means the study of everything peculiar to women, whose sole biologic purpose in life is reproduction. The chief item in this study therefore must be the act of reproduction with all its consequences, anomalies and complications, which include all the diseases of women. To usurp this term gynecology, therefore, for a minor branch of the subject, mere gynecopathy, is to give the latter undue importance and to confuse both the professional and lay mind. If gynecology were only gynecopathy, the surgeon's taunt that such a specialty is unnecessary, would be justified. Why not agree on a correct nomenclature, not a fanciful *lucus a non lucendo*, but the clear expression of a true idea? Gynecology includes its major subject, genematology, the science of reproduction, and its minor subject, gynecopathy, the study of the diseases which are the results or the complications of childbearing. Neither one of the two branches of gynecology can be studied, taught or practiced successfully without the closest correlation with the other. Of this, however, more later.

Now as to our comparative position in those early days. In comparison with Europe we were woefully deficient. Any one going from our medical schools to the best of those in Europe was astonished and humiliated. The instruction of medical students was then better there in some ways than it is here now. The primitive conditions here however were not surprising. We were only some two hundred years removed from the log cabin stage of civilization and many parts of the country were just emerging from it. Europe had the start of us by more than a thousand years. The marvel of it is that in a generation we have attained in some respects an equality with Europe, in a few, even a superiority.

In contrast with other parts of this country our position needed no apology. The Medical Faculty of the University of Pennsylvania forty years ago was the strongest in its history, composed of really

great figures in our medical world. The medical education, poor as it was, was the best to be had in America. The Medical School here was at the peak of its reputation and influence. Pepper, Agnew, Goodell, Wormley, Ashurst, Leidy and their colleagues were keenly aware of the restrictions imposed upon them by lack of equipment, poverty of means, the impracticability of advancing faster than the country would follow. The great mind of William Pepper, without an equal in this city, I think, since the days of Franklin, had the vision and the compelling energy to lay the foundation of the advantages we enjoy today.

What now of our present and of the immediate future? We tread here on delicate ground.

For many years this city had the unchallenged hegemony in the teaching of "genematology," to be consistent in the etymologic reform just advocated. Shippen, James, Dewees, Hodge and Meigs were without rivals in their time. But this very supremacy engendered too great a confidence in what appeared to be an unassailable position. Shippen, in 1765, founded the first maternity hospital in North America for the practical instruction of medical students. James conducted classes in the Philadelphia Hospital, but their successors became more and more indifferent to the necessity of practical training so that many years had elapsed before the induction of the last incumbent of the chair, without a bed or a patient; with no training in that branch of medicine that is as much if not more of an art than any other and is unsurpassed by any other in its importance to the individual, the family, and the State. Meanwhile, other places had awakened to the defects of our medical education. New York was given the Sloane Maternity for the instruction of the students of the College of Physicians and Surgeons. Boston had its Lying-in Hospital for the Harvard students. Baltimore had its Woman's Hospital for medical students. There may have been other institutions of the same kind elsewhere of which I am not aware. The University of Pennsylvania had its first beginning of a maternity hospital in a ridiculously inadequate little pavilion with five beds, which the professor at that time had to pay for out of his own pocket. This was thirty-eight years ago. Since then, throughout the country, the progress has been prodigious, a progress in which we have shared to a modest degree. Let the facts speak for themselves: Montreal has a unit for gynecology, that is, a woman's hospital for both the major and minor branches of the subject, under one head, with two hundred and forty beds, erected at a cost of $1,600,000. Columbia University is incorporating the Sloane Hospital for Women in that stupendous mass of buildings on the banks of the Hudson in New York City. This institution is also organized on modern principles, accepted now almost everywhere in this country as they always have been in Europe. Announcement has just been made of a new medical center in New

York City on the East River, next to the Rockefeller Institute, for which millions of dollars are promised. A rival to the Sloane Hospital will unquestionably be incorporated in these buildings. Professor Bill of Cleveland is at the head of a Woman's Hospital in that city. Professor Peterson of Ann Arbor is recently housed in a similar unit. Professor Polak of Brooklyn has ample accommodations for teaching both branches of gynecology. The Johns Hopkins Woman's Hospital has been in operation for some years. Chicago had set aside a city block across the street from its new medical buildings for a Woman's Hospital under one head. Even smaller cities, with no medical schools, are building splendid maternities. There is a new Maternity Hospital in Providence, R. I., costing over $900,000.

To be classed in the first rank today a medical center must have an equipment second to none in buildings, organization and clinical material; a balanced state of mind in the directorate, supple enough to keep abreast of modern medical progress, keen enough not to chase the *ignis fatuus* of some vagary masquerading as progress, and above all without a reactionary tendency that balks at advancement because it is an innovation.

These few remarks on local medical history, our present position and future prospects may sound pessimistic. They are not meant to be. No one could know the younger generation to whom we hand the torch of medical enlightenment and progress, without confidence that they will have a wider vision, greater attainment than ours. That these thoughts were prompted by discontent is true, a feeling with which I would imbue all here; not the discontent ending in captious criticism, but the "divine discontent" of which Charles Kingsley spoke that incites one to greater accomplishment.

In conclusion a word about our venerable Society, without which a history of the last four decades of gynecology in Philadelphia would be incomplete indeed. Founded at a meeting in June, 1868, it numbered among its original members such names as Robert Harris, Albert H. Smith, George Pepper, Ellwood Wilson, Wallace, D. Hayes Agnew, Duer and Parry.

The famous debate between Goodell and Ellwood Wilson on the relative merits of version and forceps; Goodell's paper on concealed accidental hemorrhage of the gravid uterus, the basis of all subsequent study of the subject; his description of chorea complicating pregnancy; the fiery onslaught of Joseph Price on some of the mistaken practices and beliefs of his day turned the eyes of the whole profession toward our meetings. I wish we could claim the honor of incorporating in our transactions Goodell's sketch of Louyse Bourgois, a literary gem of the first water; the most charming bit of English ever written by an American physician with its exuberant wit and rollicking humor, its facility and originality of expression, its profound knowledge

of history and literature. But we must relinquish this distinction to the County Medical Society.

If the transactions of late years do not command the attention they once did it is because, in the absence of revolutionary changes or discoveries that are not likely today or in the near future, we have perhaps busied ourself with minor details and none of us have the pioneer's enthusiasm of our predecessors. But much remains to be done in literary, clinical, and laboratory research, in animal experimentation, in the careful correlation of known facts, in compiling statistics according to a well-considered, generally accepted plan and in the study of comparative genematology.

If we possessed a center for this work at least the equal of anything of its kind in America, and equally well organized, there would be a stimulus to investigation by which our society would again become the vehicle for conveying information of great value to the whole medical world, giving to its transactions a rank commensurate with its past reputation.