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OUR OBSTETRIC AND GYNECOLOGIC RESPONSIBILITIES *

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The specialty of obstetrics and gynecology—it will be noted that I speak of "the specialty," not the "specialties"—is composed of two parts, which are so related and interwoven that they cannot be divorced without disadvantage to both. This specialty comprises the study of the physiology and pathology of the reproductive system of woman, and as such should be considered in toto.

As one of the most important sections of this great association representing one of the fundamental departments of medicine, we must appreciate the responsibilities which rest on us when we realize that obstetrics is the general practitioner's specialty, and that with the possible exception of pediatrics, there is no one of the special departments of our profession which concerns him so greatly and which touches so vitally the welfare of the community.

What may be said here is broadcast to the general medical public and is rightfully regarded as authoritative, and consequently will mold the opinions and guide the trend of obstetric practice for the good or ill of womankind. It must always be that the great bulk of obstetrics will be done by the general practitioner, and the measure of mortality and morbidity of the child-bearing women of the community will be in direct proportion to the sound obstetrics that he practices.

That there is a great need of propaganda to awaken the profession to the fact that obstetrics, as generally practiced at the present, is wofully below the standard that maternity hospital statistics show is demonstrated by a recent study made of the maternal mortality in Massachusetts during 1922 and 1923, wherein 984 deaths in the puerperal state have been analyzed by the Division of Hygiene of the Massachusetts Department of Public Health.[1]

This analysis shows the appalling facts that septicemia, toxemia and hemorrhage, causes of maternal mortality that are generally preventable, were the responsible factors in 58 per cent of the deaths. There was a lack of proper prenatal care in 89 per cent of the cases, and a clear impression was gained that the factor of operative intervention had a marked influence on the total of unfavorable results. Operative procedures were resorted to in 591 of the 984 cases. More than 22.5 per cent died of puerperal infection (nearly one fourth), yet we are living in the age of aseptic surgery. It would almost appear as though Holmes and Semmelweiss, in pointing out the cause of puerperal fever, and Lister, in showing us the remedy, had labored in vain. Twenty-two per cent died of toxemia, a preventable disease and an indication of a lack of or inadequate prenatal care. In these 984 maternal deaths, 430 of the infants were lost.

Polak states that in New York, in 1920, there was one maternal death in every 205, one baby dead out of every twenty-one, and that 61 per cent of gynecologic surgery is the result of poor obstetrics. The fault must lie in inadequate and improper obstetric teaching, or must be due to criminal carelessness, the result of a lack of a surgical conscience, or both. The fact that there is a tendency for a steady decline in the birth rate only adds to the seriousness of the situation. The birth rate for England and Wales in 1925 is the lowest recorded (excepting the war years of 1917 and 1918), and has been steadily falling from 22.4 per thousand in 1921 to 18.3 in 1925, and the rate in the United States is also declining.

It is meet, then, that we should arise to the urgent necessity of sounding an alarm to awaken the man who comes most closely in touch with the life of the people to a sense of his shortcomings, and to spur ourselves as teachers to a realization that our instruction is inadequate and may be deficient in conservatism. The fact that some expert obstetricians can more or less safely hasten labor by operative intervention, thus saving themselves time and shortening the patient's immediate ordeal, together with our national tendency to hurry in the rush incident to competitive practice, has been the cause of the general practitioner and many so-called specialists drifting away from the well proved if circuitous lanes of safety to those dangerous short cuts which too often lead to disastrous results for both mother and child.

He who attempts to make nature deviate from her normal physiologic processes must remember that, while he may accomplish his immediate object, it is very apt to be at an exorbitant price.

Patience is a better obstetrician, in the majority of cases, than dexterity.

Haste is not compatible with thoroughness in the practice of medicine and tends toward developing a commercial aspect instead of a scientific one. Osler, in one of his addresses, pities the "forty visit a day man" and councils the prayer against the evils of prosperity, lest he tend toward slovenliness in his methods of work, and quotes:

> Now sickening Physick hangs her pensive head
> And what was once a Science now's a Trade.

Polak and Lynch, as chairmen of this section, have called attention to the lack of clinical facilities in

* Chairman's address, read before the Section on Obstetrics, Gynecology and Abdominal Surgery at the Seventy-Seventh Annual Session of the American Medical Association, Dallas, Texas, April, 1926.

1. Coffin, Susan M.; DeKruif, Mary F.; Southard, Mable A., and Hamblen, Angeline D.: Maternal Mortality in Massachusetts, J. A. M. A. 86: 408 (Feb. 6) 1926.

obstetric teaching in the majority of our schools, and have pointed out the tendency to ignore physiologic laws and to resort to surgery. That there has been but little improvement in the matter is my reason for bringing up the subject again.

Williams [2] has deplored the lack of productiveness in research by American obstetricians. This sterility is not entirely the fault of the teachers themselves, but is in great part due to the lack of appreciation by many educational authorities of the importance of obstetrics as one of the fundamental branches of medicine, and that proper provision is not made for a fully equipped department of sufficient size to allow of abundant clinical opportunities for teaching. In most of our schools, obstetrics is the least cared for department. Is it any wonder that obstetric research is dormant under such circumstances?

The union of obstetrics and gynecology is essential if we are to expect better obstetric research, as the physiology and pathology of the reproductive system of woman must be considered as a whole if we are to solve successfully the problems that are so interwoven with both sciences. The intimate relation between obstetrics and gynecology that exists in European clinics has, unfortunately for both branches of the specialty, not found universal application in this country. Gynecology in its beginnings was largely reparative and therefore surgical, and its tendency was to develop independently for this reason. But in recent years there has been an awakening to an appreciation of the broader gynecology, which comprises all phases of the reproductive function and of which surgical therapy is only a part.

The important problem of sterility requires an intensive study of the physiologic processes of reproduction as well as the pathologic changes due to disease. Greater attention has been recently paid to the physiology of the female reproductive system, and more detailed studies have been made in this direction. The work of Rubin and others in the determination of the patency of the tubes, the study of the processes of ovulation by Stockard and Papanicolaou, the research being carried out on the ovarian hormones by numerous observers, all have important bearing on obstetric problems, and are only an index of the changing attitude toward a closer association of the gynecologist and the obstetrician as their problems prove to be intermingled. In preventive obstetric measures lie the means of avoiding many gynecologic lesions. If the general practitioner will only do his full duty toward his obstetric patients, more than half of the work that is now done by the gynecologist will not be necessary. This will require the earnest attention of the obstetrician not only during the labor but also in the antenatal and postnatal periods. The care of the pregnant woman before labor has been accorded increasing attention in the United States, and constitutes a contribution to our science for which we may justly claim credit. This development has rendered necessary resort to lay organizations for financial aid and support, and has awakened an interest which, if properly directed, will do much to increase the dignity of obstetric practice. It is important, however, that a proper balance be maintained, so that the lay interest will not dominate the medical interest. The passage of the Sheppard-Towner act at Washington five years ago and its recent extension have awakened the interest of the entire country on the important problem of maternal welfare. Federal participation would probably be better limited to an advisory capacity only, with the individual states each assuming its responsibility for carrying on its own welfare program.

The advent of the nurse specially trained for obstetric work is a result of the increasing demands made by proper prenatal care, as such competent assistance is needed to carry out the work that physicians can only supervise. This training of the obstetric nurse should be given serious consideration. This is about to be done by the special committee on maternal welfare of the associated national societies interested in obstetrics and gynecology.

We would plead for more attention being directed toward adequate postnatal care and an obstetric follow-up. We must not forget that while we hear much about prenatal work, postnatal care is also of importance as a factor in gynecologic prophylaxis.

The gynecology of today has undergone a great expansive change from the gynecology of yesterday, which was largely confined to the narrow field of operative technic. This broader development which has taken place is largely the result of the application of the fundamental principles of physics and chemistry in the study of life processes, and through the sciences of biology, biochemistry and genetics, a better appreciation has been brought about of the intimate relations existing between the reproductive organs and the body as a whole. We are learning to heed the admonition of Plato in the Charmides, that the whole must be studied also, "for the part can never be well unless the whole is well."

There is apt to be overspecialization in all specialties, with a tendency to ignore the outside relations to the problem in hand. The general sugeon and the internist are also frequently at fault in slurring over the gynecologic condition of their patients, although the ovarian function may enter as an important factor in many general problems of disease. While we preach that the gynecologist should look afield generally, we must also urge that the general surgeon and internist should look locally.

As the study of medicine has now become a study of biologic science, our hope for future progress in the specialty must lie in part in that direction. Our present knowledge of the cellular metabolism that is constantly taking place in the blood and the vessels, in the nerve centers and individual cells, and in the endocrine glands during the phenomena of menstruation, ovulation, conception and pregnancy, is very superficial. The physiologic chemist and the biologist must work hand in hand with the clinician in both the operating room and the laboratory to this end. It is essential that we should first know the normal processes of nature in order to be able to cope with abnormal changes. A better knowledge of the physiology of the reproductive system, of which we know very little at present, must be our immediate goal.

Our progress, however, does not rest entirely on biochemical research. A tremendous improvement in our ultimate results is easily possible and within our immediate reach, when we learn to apply the principles of organization and a common sense audit to our daily work. Organization implies system, and system is essential if we are to attain a uniform degree of accuracy in diagnosis. Science is essentially a matter of observation, and our observations, whether clinical at the bedside or in the laboratory, must of necessity be precisely and completely recorded if they are to be of

2. Williams: Tr. Am. Gynec. Soc., 1914.

value for comparative study and deductive reasoning. The day of "snap opinions" as to our end-results not backed up by recorded facts is slowly giving way to the carefully analyzed observations that are becoming more generally available as a result of the better hospital organization which is everywhere apparent. Many of our accepted ideas as to our postoperative morbidity are founded on tradition. These views will be materially changed in many instances when submitted to careful statistical study. Organization means a more accurate diagnosis, and a correct diagnosis is essential for a cure and will often prevent unnecessary surgery. This takes time. There is no short road. The careful history, the complete physical examination, the laboratory check up, coupled with whatever advice with consultants is indicated—in other words, careful preoperative study and preoperative preparation—is, after all, the least that we can do to safeguard the interests of those who place their lives and well being in our hands. This should be considered as the ordinary care that the patient is entitled to expect.

To Codman belongs the credit of awakening us to the need of end-result study if we are to appreciate in true proportion our successes and failures; but a real audit and study of our hospital records is as yet only sporadic, and is not universal as it should be.

The mortality and morbidity results of a hospital staff and the percentage of successes, partial successes and failures of certain lines of treatment are of the utmost importance in influencing the trend of our practice, and therefore the health of the community. On the reliability and completeness of our records, the value of these percentages must depend. For instance, in abdominal surgery the study of the healing of our wounds is of economic importance to both the hospital and the patient as having a direct bearing on the duration of the convalescence. Probably no other postoperative complication which the abdominal surgeon encounters is as generally responsible for a loss of time as that caused by faulty union, of even a minor degree.

CLASSIFICATION OF WOUND HEALING

A recent survey made after several years' experience with an idealistic classification of wound healing, which we employed at the Woman's Hospital, has proved that it was not practical, was too laborious for the staff to carry out with the best of intentions, and did not readily permit of comparative study with other clinics. Consequently, we have discarded it and have adopted the following classification, which may be of interest as an illustration of a postoperative audit:

The classification has been based on the principle that defective wound healing is dependent on either infection (sepsis) or faulty technic, and with the idea of enabling the ready comparison of percentages of infection with other clinics. For our own information we record the minor defects, the result of faulty technic not due to infection. All sutured operation wounds are designated by the surgeon at the time of operation as "clean" or "contaminated" in accordance with whether they have been exposed to infection from within or without, irrespective of whether drainage is used or not. At the time of the patient's discharge, the surgeon records on the record form the healing of the wound according to the following classification:

Class A: Wounds that heal in an ideal manner without defect.

Class B: Wounds that heal aseptically but with minor defects, the result of faulty technic, as eversion of wound edges, stitch or fat necrosis, hematoma, breaking and retention of nonabsorbable sutures, or exudates of serum, blood or serosanguineous fluid without the signs of inflammation.

Class C: Wounds that have the clinical signs of inflammation and infection, including wide separation of tissues from any cause necessitating granulation (potentially infected wounds), and persistent sinuses.

1. Minor: Small local infections, in which the healing of the wound is not materially delayed.

2. Major: Any infection greater than the minor classification, and gross defects and sinuses.

This classification applies to both drainage and nondrainage cases.

The record department files index cards of all cases of infection and faulty union in the clean and contaminated groups for each surgeon. The percentage of infections of each operator is thus made available, and the yearly composite percentage of the entire staff is readily determined.

It is the established custom for business corporations to have their financial audit made and certified by chartered accountants. Great improvement in the accuracy and consequently in the scientific value of our hospital records will be accomplished if we have our record departments regularly checked up and our statistical data compiled and charted by the professional statistician. We have already inaugurated this innovation at the Woman's Hospital.

I have said that our present shortcomings in obstetric practice must be due to inadequate teaching or a lack of conscience. As a remedy for the first, I would urge that a survey be made by the Council on Medical Education and Hospitals of the American Medical Association of the facilities offered in obstetrics at the present time by our American medical colleges, with a view toward fostering a well balanced curriculum of theoretical and practical teaching, with particular attention to the relation between obstetrics and gynecology. Such constructive work would do much toward developing a greater respect and attention for this important specialty, and would show the urgent need of better opportunities in this neglected field of medical education.

As to the second cause of our delinquency, what we need today is an awakening of our surgical conscience. Longyear has reminded us that skilful surgeons may not all be conscientious, and conscientious surgeons may not all be skilful. A full appreciation of this can best be brought to our attention by a proper audit of our results. To awaken our conscience, we must be made to appreciate the existing facts by bringing them out into the spotlight—to this end there is no answer but the word "audit." We must audit the morbidity statistics as well as the mortality statistics of our clinics as systematically and accurately as we do our finances—then only shall we see the light that will stimulate us to live up to our obstetric and gynecologic responsibilities.

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