

## MEDDLESOME MIDWIFERY IN RENAISSANCE \*

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According to the Bureau of Census, in 1914 there died in the United States 10,518 women during childbirth. This figure represents the deaths in two thirds of the estimated population of the United States. On this basis we must admit that there are about 15,000 deaths from childbirth in this country every year. This number does not take into consideration the postponed mortality, as, for example, that from operations undertaken to correct the bad effects of childbirth, and that from conditions which are not readily ascribed to the fact of childbirth, such as endocardial disease, nephritis from puerperal infection, etc.; nor does it include those deaths in which the women are buried under another diagnosis, either ignorantly or intentionally. I feel that no exception will be taken to the statement that there die annually in the United States 20,000 mothers during childbirth. The mortality of the newborn children also is noteworthy high, although it is impossible to show by statistics how many children die every year from the immediate and remote effects of childbirth. Most of us, however, certainly those connected with hospitals, know that too many children are lost at birth, or from the late effects of either spontaneous or instrumental delivery.

Of great importance is the continued excessively high morbidity of both mothers and babies as the result of labor. One of the most striking facts of the modern hospital treatment of parturient women is the still high percentage of women who have moderate degrees of fever during the puerperium, in spite of most rigorous aseptic and antiseptic precautions. According to the report of the Census Bureau, 4,664 women died of sepsis in 1914, but it is impossible to even guess how many women suffered from puerperal infections and carry the marks of the disease. If we estimate the mortality of all cases of puerperal infection as 5 per cent., this would mean that there were about 100,000 infected puerperae in the United States in 1914. This

estimate is, I am sure, too low. All the hospitals with which I have been connected for the last twenty-five years show varying percentages of puerperae with fever. At times as high as 15 per cent. has been reported. These women in the majority of instances are not very sick, the fever seldom goes above 102 F., and if it does it is not high long. The temperature is usually ascribed to other causes, but it is most often due to a mild pelvic infection with which the puerpera is well able to cope. But although the women recover, often quite promptly, the pelvic inflammation leaves permanent traces in the form of peritoneal adhesions or parametric thickenings, and later uterine displacements. This fact was emphasized by Emmett long ago, but it deserves repeating. The patient recovers and leaves the care of the obstetrician, but she comes back again for relief of distressing symptoms which he will find it hard to relieve. The procession of women passing through our dispensaries and private consulting rooms, repeating monotonously the statement, "Doctor, I have never been well since my baby was born," should draw our attention to the fact that things are not right in obstetric practice.

I have studied my case cards carefully and find that the majority of women who have borne children suffer from physical damage due to childbirth. As a cause of uterine disease, in my gynecologic practice, childbirth is much more frequent than gonorrhoea. True, vesicovaginal and other fistulas and complete perineal lacerations are more seldom met, as compared with olden times, but minor degrees of laceration, prolapsus uteri, etc., are certainly no less frequent. If we were to judge from the prevalence of operations corrective of uterine displacements, we would have to say they are more frequent than formerly, but we are nowadays submitting more of these cases to operation.

As a producer of invalidism and semi-invalidism, the lacerated cervix is, in my opinion, more often culpable than a corresponding degree of perineal laceration. The patulous os allows the cervical mucous membrane frictional contact with the septic vagina; the open cervix permits the entrance of bacteria into the uterus; the diseased mucosa is a focus of infection, and even low grades of inflammation can produce bad after-effects. The lymphatics, being loaded continually with bacteria and toxins, become inflamed, the connective tissue in the uterine ligaments soon takes part in the process. Parametritis postica is almost a constant attendant on chronic cervicitis. Backache, bearing down sensations, constipation, dysmenorrhoea, semi-invalidism, are the symptoms of parametritis postica. Sooner or later, the infection travels upward along the lymphatics to the uterus, and chronic metritis results. Some authors call the enlarged, fibrous, heavy uterus simply myometropathia. I prefer the other term. Sturmdorff has most graphically described this condition and I agree fully with him that one of the most frequent causes of this disease is the lacerated cervix. I do not need to mention the other evil results of laceration of the cervix, but the tendency toward cancer, although discussable, should be borne in mind.

I feel sure that the accoucheur does not accord the cervix the dignity it deserves. Its mucous membrane is very delicate and easily torn; it is very sensitive to untoward influences, especially infection, and if the latter once obtains a foothold, the eradication of the same is almost impossible. The cervix is the center of the tendinous supports of the uterus. It may be likened to the hub of a wire wheel. The cervix is the protector

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of the asepticity of the uterine cavity. Yet consider to what insults this organ is exposed. The steel divulsors which have a stretching force of 200 pounds or more; the tearing open by so-called manual dilatation; the cervical incisions; the gentlest of all, but still damaging colpeurynter.

Another structure whose physiologic and pathologic dignity is not adequately appreciated is the web of connective tissue supporting the uterus, the bladder and the rectum. While tons of literature have been written on the levator ani and pelvic floor, the importance of injury to this connective tissue supporting webbing has received scant notice. It may be torn or overstretched by the forces of labor or operative interference, or it may be thickened and distorted by inflammatory conditions, as was mentioned before.

Much more could be said along these lines, but sufficient has been brought out in this introductory manner to serve the purpose of certain generalizations I wish to make.

The methods nature employs to expel the child are best adapted to accomplish the purpose. They will produce the minimum amount of traumatism to the maternal soft parts, the least degrees of dislocation of the hollow pelvic organs, and will expose the child to the smallest amount of danger. The essence of these methods of nature is slow dilatation of the passages, and gradual, temperate advance of the child through them. This advance is accompanied by well-planned movements of adaptation and rotation of the child, the whole, when consummated naturally, being a beautiful mechanical accomplishment, and it usually results in only a small amount of damage to either mother or baby.

There is a notion, which both the public and the profession have entertained for many years, and which is becoming more prevalent among the profession of late, that natural labor should be curtailed as much as possible. This latter fact is partly explained by the agitation in the lay press for relief from the suffering of childbirth, and partly by the general operative furor which has gripped the profession. The old, time-tried, time-proved, and time-honored "watchful expectancy" in the conduct of labor has been replaced by a polypragmasia, pernicious in its effects, immediate and remote, and for both mother and child. Methods to shorten the time of labor have been multiplied and great virtues have been claimed for them. One writer brazenly advances as a virtue the saving of the obstetrician's time and sleep. Without doubt, protracted and painful labor does weaken the parturient and requires a longer convalescence, but there are no permanent effects. In natural labor a few hours more or less makes no difference in the immediate recovery. Study of the rapidity of the recovery of women after delivery will show that the main factor in producing slow convalescence is the injury inflicted by labor, or operative delivery. The amount of surgical trauma determines the smoothness of the recovery, even more than the stress of the nerves. The women recover from the latter after the first good sleep, but require much longer to recover from their wounds. From this point of view we must commend the use of anesthetics in the early stages of labor. They permit the parturient canal to be properly dilated. Unfortunately, some of them have the disadvantage of endangering the child and thus necessitating operative interference on its account. The number of injuries spared by the anesthetic is thus made up by the artificial deliveries.

I wish to call your attention to the most common of the evils which have gained foothold in obstetrics. First among the practices which should be condemned as meddlesomeness are attempts to cut short the period of dilatation of the cervix. As already explained, indeed, as every accoucheur knows, the only way to dilate the cervix safely is nature's way. Manual dilatation always tears the cervix. Colpeurynters often do so, and almost invariably, if traction is put on them, and in addition, they pull the cervix downward while the uterine action pulls it upward. Overstretching and dislocation of the cervix result, and gynecologic and urologic disease follows. Furthermore, danger of infection attends all these maneuvers, no matter how aseptically the operation is carried out. True, the women seldom die of sepsis, but the morbidity, immediate and postponed, is high.

Another form of interference is the indiscriminate use of twilight sleep, gas and oxygen and other anesthetics. I have to admit that I use anesthetics too often and too liberally. I know that as the direct result of my administration of morphin and scopolamin, of ether, gas, etc., I have increased the frequency of forceps operations, of lacerations, and of postpartum hemorrhage in my practice. In the dispensary service of the Chicago Lying-In Hospital postpartum hemorrhage is very rare, in my own practice it occurs much oftener. The same is true of the forceps operation. While I almost never deliver a woman without some form of anesthetic I am trying to reduce the amounts required to render the woman comfortable.

Another practice that should be eliminated is making the parturient bear down before the cervix is fully dilated and the head passed through it onto the pelvic floor. The dislocation of the cervix, the stretching of the paracervical tissues, is one of the potent causes of procliptia uteri. How much difference is there between pulling the cervix down with the obstetric forceps and forcing it down by powerful premature bearing down effort? Even after the head has come to rest on the pelvic floor it is wise to moderate the bearing down efforts. We should try to save the levator ani and the pelvic fasciae from too rapid distention and too brisk distraction from their attachments. The desire for rapid delivery should be curbed, unless danger threatens the mother or child, and the forces of nature should be restrained in the interests of the soft parts and the fetal brain. An extra half-hour spent by the accoucheur in this part of the delivery may save the woman from permanent relaxation of the pelvic floor, cystocele, rectocele, and possibly later operation. For this reason I cannot sympathize with the revival, made at the New York Lying-In Hospital, of the obstetric delivery chair. Slow, spontaneous delivery should be the object sought, not rapid delivery.

Too frequent vaginal examinations, "ironing out the perineum," must also be condemned. The danger of such manipulations is in the installation of mild infections which later lead to invalidism. Occasionally such a mild infection leads to fatal pulmonary embolism, and again a virulent sepsis results. For these reasons the rectal examination should be substituted for the vaginal in nearly all cases of labor. It is astonishing what may be accomplished by the rectal examination and it requires very little practice to acquire efficiency in it. I have conducted the majority of my cases by means of this method of exploration. Interns in the Lying-In Hospital often boast of the fact that they make hardly one vaginal examination in twenty

deliveries, and we have diagnosed face, brow, breech, occiput posterior presentation, prolapse of arm and cord, contracted pelvis, etc., in this simple, painless, harmless and rapid manner. I cannot urge too strongly this point.

Of all the meddling practices, giving pituitary extract is the most dangerous to mother and child. Sixteen cases of rupture of the uterus produced by pituitary extract are on record.<sup>1</sup> Dr. Stowe, my associate, knows of two. Others have been recounted to me, and I doubt not that many more have occurred and have never been reported. Hardly a month passes but what I learn of cases in which the baby has been lost in labor rendered pathologic by pituitary extract. I myself have observed the bad effects of pituitary extract on the child. Lacerations of the cervix and perineum are frequent results of the violently rapid delivery under the influence of the drug. I have used it a great deal. First I gave 15-minim doses. Now I give 3 drops and on special indication only. Recently I gave 3 drops to a woman weighing 180 pounds and the resulting contraction of the uterus was so powerful and prolonged that I had to put the patient asleep with ether. This contraction lasted more than five minutes and the fetal heart tones almost ceased. Pituitary extract should not be used except in the presence of a real, scientific indication, and it is governed by the same conditions as the forceps operation, that is, the head must be engaged, the cervix completely dilated, no mechanical disproportion between the child and maternal parts, etc.

The abuse of the obstetric forceps is an old charge against the profession, and, regrettable as it is, we must repeat it today. In the practice of some obstetricians the majority of deliveries are done by the forceps. Most often the indication is "bed time" or "office hours" or some other set appointment, such as an operation or golf. Often, too, the forceps are used to correct bad practice in the early conduct of labor, for example, the use of a colpeurynter, which has displaced the head, allowing the cord to prolapse, or abnormal rotation of the head; or administration of twilight sleep during which the child's life is endangered; or giving pituitary extract, which has resulted in tetanus uteri and threatened danger to the fetus from asphyxia; or permitting too early bearing down efforts, which have tired the woman out so that she has no strength left for the actual delivery.

Another form of meddlesomeness is the too frequent cesarean operation. In some communities it seems that the only method the obstetricians know of solving the knotty obstetric problems is to cut them. I believe some accoucheurs do not do enough cesarean sections. I know that hundreds of women are mutilated by forceps deliveries and their babies killed, and all this could be prevented by cesarean section. I believe the indication for section should be broadened in placenta praevia, in eclampsia, and in the anomalies of the mechanism of labor. Yet one is appalled when the flimsy indications for the frequent operation are discovered. The main reason is the ignorance of obstetrics; indeed, sometimes one must ask, with Holmes, Is obstetrics a lost art?

Even in the treatment of abortion there is too much meddling. It is usually possible to stop the bleeding and procure complete dilatation by tampon, and yet it has been recommended to cut the cervix in such cases,

in order to empty the uterus. Hirst even believes we should not try to induce therapeutic abortion by the usual methods, but do vaginal cesarean section at once. Now it is still possible to empty the uterus in two stages, letting nature do most of the work, and it will be done with less permanent damage than by a cutting operation.

In conclusion, let me urge that we depart not too far from our trust in the natural forces of labor, that we still uphold the policy of "watchful expectancy" or, if you prefer, "armed expectancy," that we remember that the obstetrician's duty is not to make of labor a surgical operation, but to conduct it as a natural function, interfering only when called on by the necessity of preventing undue suffering, or saving fetal or maternal life.

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#### ABSTRACT OF DISCUSSION

ON PAPERS OF DRs. DAVIS AND DELEE

DR. CHARLES S. BACON, Chicago: I would emphasize what was said about the irregular contractions of the uterus simulating fibroid tumors because that is a point often overlooked. I have known serious mistakes to be made in this connection. I would also emphasize the importance of the exact diagnosis of the station of the child before undertaking the forceps operation because I believe that very often forceps are applied to the head still in the inlet with the idea that the head is engaged and that the operation is easy, when, as a matter of fact, we have a high forceps operation. Care in the external examination, as shown by Dr. Zinke, would show in every one of these cases the location or the station of the child. I would raise only one question in what I heard of the paper this morning, the value or even the propriety of packing the uterus after drainage, because I do not believe that packing drains; it has rather the opposite effect, that of increasing the danger of contamination. It prevents drainage rather than improves it. I would like to call attention to one operation that was omitted, and that is, opening the pelvic girdle in the cases of moderate contraction of the pelvis where, after the test of labor and after the time for the safe performance of cesarean section has passed we must choose between destroying the child or doing something that may save it and the mother. Especially in multiparas can hebostomy be performed. The advance in obstetric surgery, I think, can be shown by the disappearance in the last twenty years of the term, accouchement forcé, that dreaded operation which was the only thing to be done in cases of forced delivery before the opening of the cervix and the development of the methods for which we are indebted to Dührssen which have made possible the rapid opening of the uterus in the few cases where it is necessary. I would also call attention to the importance, in cases in which early emptying of the uterus is necessary, of hysterotomy as sometimes more conservative than dilatation and curettement.

DR. RUDOLPH WIESER HOLMES, Chicago: For a number of years there has been very little if any material improvement in the life expectancy of the unborn child: Körosi (1874) showed that 6.05 per cent. of the infants of Budapest died within fourteen days. Williams (1915) showed that in his clinic the mortality was 7.05 per cent. In one large clinic, in 1897 the stillbirths aggregated 3.65 per cent., while in 1913 the stillbirths had gone up to 4.82 per cent. in spite of the reputed beneficence of the cesarean operation. I am heartily in sympathy with Dr. Davis in many of his comments, but I cannot let the opportunity go by without a protest against the widespread, promiscuous performance of cesarean section. Just the other day I prevented a cesarean section on a woman, quadripara, with three living children, the first of which alone was at all difficult; the indication placed by the physician was that he "didn't want to tear her perineum." I was informed by a man in one of our Middle West towns that more cesarean babies were born than were ushered in

1. McNeile: Am. Jour. Obst., 1916, ii.

normally and this was not entirely a facetious remark. Cesarean section has been applied altogether too broadly, and the revulsion is surely coming within a brief period. I am convinced that most of the complications which have been placed as indications may be more scientifically treated along pure obstetric lines; in too many instances the application of the operation is an expression of the attendant's inability to handle the case along such lines, for the cesarean operation, unfortunately, is the most simple abdominal operation, technically, that we have. In the treatment of placenta praevia, I have often interjected the query to my students, How many men would do cesareans if they took all day, and the hysterectomy would accomplish delivery in twenty minutes? There would be few. I heartily agree with Dr. Davis that in general cesarean section is not the appropriate treatment for eclampsia; it is now nearly twenty years since Stroganoff began his defense of his eclamptic treatment—and has the lowest mortality of any authority in the world—it only shortly will mean that Stroganoff will come into his own, and receive the recognition which is his due, that delivery, *per se*, is not the treatment for eclampsia. Peterson has fostered this tendency to operative treatment by his paper on cesarean section for eclampsia, where he divides the sections performed before and after 1908 with a fetal mortality of 12 and 3 per cent., respectively; however, if no deaths be eliminated the mortality jumps to 40.9 and 15.5 per cent., respectively. Dr. Davis did not touch on the vulnerability of the uterine scar after cesarean section, with the probability of rupture in subsequent labor. I have investigated this matter and find that there is an exceedingly high danger of this appalling catastrophe occurring. In the instances in which I have been able to inspect the scars after cesarean sections I find that 16.6 per cent. were vulnerable; Harrar, in 50 cases, found 16 per cent.; Asa Davis, in 33 cases, found 18.1 per cent. had vulnerable scars or the scars had ruptured; v. Leuwen, in 117 cases, found the scar was thinned in 20, 17 per cent. This is a real danger and should be recognized that any woman who has had a cesarean section has about one chance in six of possibly having a uterine rupture.

DR. E. GUSTAV ZINKE, Cincinnati: To teach obstetrics is one thing; to practice it is another; to exercise good judgment in the management of cases is still another. It was Lawson Tait who first suggested cesarean section for placenta praevia. On his advice a few cesarean sections were performed, eight in all, before 1900; five of the mothers lived, and six of the children were saved. In 1901, I recommended the cesarean operation for placenta praevia on theoretical grounds alone. Not a man present was willing to support the stand I had taken. My views were roundly condemned. Today, the justification of cesarean section for placenta praevia, under certain circumstances, is admitted by all. Every case of placenta praevia is a surgical case. If carefully studied before labor the diagnosis of placenta praevia may frequently be made before hemorrhage appears. In the hospital, in the care of a good obstetric surgeon, a timely cesarean section will give more satisfactory results than any other method of delivery in these cases.

DR. JOHN OSBORN POLAK, Brooklyn: I believe with Dr. Davis that the success of obstetric surgery depends on (1) the diagnosis; (2) the training of the individual operator, and (3) the asepsis. Regarding rupture of the section scar in the uterus following cesarean section, the work done by Findlay recently, not yet published, has conclusively shown in the sixty-two collected cases that no rupture has taken place in the scar of a cesarean wound, except where there has been definite morbidity, infection of some kind. This shows us that every labor case should be studied as to its diagnosis, that every questionable case should be given a test of labor under aseptic management. Then when we have a complication and the woman has had the test of labor we are in position to do cesarean section, extraperitoneal, intraperitoneal or transperitoneal as the choice may be, and our mortality will be practically nil. This is not the result at present throughout the country in the indiscriminate use of this operation.

DR. A. J. RONGY, New York: I wish to emphasize the importance of doing a pubiotomy in cases in which cesarean section may not be performed on account of presupposed infection. In the hospital with which I am connected we have done thirty pubiotomies in women, the majority of whom have had two or three dead babies. The women had been attended by a general practitioner and when brought to the hospital, attempts at delivery with forceps had been made which presupposed infection. These women being very anxious for living babies pubiotomy was done; no mother was lost and but six children. By cesarean section the mortality would have been at least 30 per cent., and we would have lost probably eight or nine of the mothers. In placenta praevia also pubiotomy is a life-saving operation. Another important point is the ability to diagnose the size of the baby while in the uterus. This has an important bearing on the matter of induction of labor in the early part of the ninth month.

DR. E. P. DAVIS, Philadelphia: I did eight symphysectomies and then stopped because I did not like the operation. I am in hearty accord with Dr. Holmes in his desire to stop unnecessary cesarean sections and I certainly hope that he will succeed in this effort. Modern obstetric surgery has for a most important part the repair of injuries occurring at labor, and I consider no vaginal operation complete unless the surgeon gives attention to repair of cervix, pelvic floor and perineum. I have not seen intravaginal gauze drainage tend to infection, nor have I seen the uterus rupture after cesarean section. I have had a number of patients on whom I have done cesarean section go through a spontaneous labor. Once a cesarean section does not, in my experience, mean always a cesarean section. For placenta praevia the operation should be immediate, so soon as the diagnosis is made. I believe that injuries to the genital tract and appendages do cause neoplasms. I do not believe in unnecessarily shortening labor; I have no sympathy with the modern fad in that regard. It is the condition of the individual patient, and not the number of hours, or days, or the convenience of the obstetrician, that alone is to be considered. Two things operating against success in modern obstetric surgery are: (1) failure of the man who sees the case first to make a diagnosis; he does not practice palpation; he does not know engagement when it is there; thinks it is there when it is not, and he interferes improperly and sends his funeral to the hospital; (2) visceral disease complicating obstetric operations. Women do not die of hemorrhage and sepsis, but of changes in the liver and kidney, the result of prolonged toxemia.

DR. JOSEPH B. DELEE, Chicago: I wish to subscribe most heartily to the remarks of Dr. Davis. A point of great importance is that of rectal examination. It is too bad that we took so long to learn it. Prolapse of the cord, posterior occipital presentation, breech, face, brow, all I have diagnosed by rectal examination. Another point is that chloroform is not absolutely essential to the general practitioner. I have been a general practitioner, I am still practicing where the general practitioner practices, and I find that the husband can give the patient ether as well as chloroform. The only disadvantage is the increased size of the obstetric outfit occasioned by the ether can, and this is negligible.



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