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Obstetrics: The Science and the Art - Part III. The Therapeutics and Surgery of Midwifery; Chapter XVII. Induction of Premature Labor

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CHAPTER XVII.

INDUCTION OF PREMATURE LABOR.

In cases of deformed pelvis in which the reduction of the diameters has not gone too far, the child may be rescued, if it be delivered at some period between the attainment of viability and the completion of term, if it shall not have become already too large to pass through the contracted passages.

The fetus in utero is understood to be viable or livable at the completion of the seventh month; at that period the fetal characters of the heart have begun to approach towards those in the respiring child, and the pulmonary vesicles have become so thoroughly developed, that most of the children born at that term are free from the danger of continued atelectasis pulmonum. For a woman with a bad pelvis—with a pelvis reduced, for instance, to three inches in its diameter—it is very good fortune to be prematurely delivered, provided the gestation have not gone beyond the eighth month, for the head of the child at that time is both small and very ductile. The observation of cases in which women with deformed pelves have given premature birth to living children, led at length to the adoption of operations, by means of which the child is ushered into the light, at times supposed to be so happily chosen, that the disproportion between the fetal head and the contracted pelvis should not render its escape impossible.

Dr. Denman, in the tenth section of his twelfth chapter, treats of the propriety of bringing on premature labor, and the advantage to be derived from it. The first information which he obtained upon the subject was derived from Dr. O. Kelly, who informed him that, about the year 1750, there was a consultation of the most eminent medical men at that time in London, to consider of the moral rectitude and the advantage to be expected from the practice; which, it appears, met the general approbation. The first case in which it was deemed necessary, was terminated successfully by Dr. Macauley. Dr. Macauley afterwards performed it several times, and sometimes with success;
and Dr. Denman relates the case of a lady of rank whom he attended with Dr. Savage, in consultation, in which the operation proved successful.

Dr. Lee, in his _Clinical Midwifery_, 2d ed. p. 81, relates the history of the operation in the labors of Mrs. Ryan, æt. twenty-one, _primipara_: she lost the child after an embryotomy operation. In her second labor, Dr. Lee opened the membranes at the eighth month; he perforated the head. The third labor was brought on at seven months and a half; the feet presented; child lost. Fourth labor, induced at seven months; footling; child dead. Fifth labor, induced at the seventh month; the child born alive, died in sixteen days in convulsions. Seventh labor, induced at seven months and a half; the feet presented; child lost; great force required. Eighth labor, induced at seven months and a half; feet presented; child dead. Ninth labor, induced at the seventh month; the feet presented; child lost. Tenth labor, membranes perforated at the seventh month; child lost. Eleventh labor, induced at the end of the sixth month; child dead. Twelfth labor, induced in the seventh month; child dead. Thirteenth labor; at the end of the sixth month, labor induced; child lost. Fourteenth labor, seventh month; child extracted alive, but soon died. Fifteenth labor, seventh month; child lost. I have cited this case of extraordinary perseverance, on the part of Dr. Lee, as much to show the resolute energy of that gentleman, as to show what may be expected in many of the cases of induction of premature labor.

It is not to be doubted that the operation is legitimate, and that he who does it properly acts within professional rules and usages; but, inasmuch as every premature labor furnishes some just grounds of apprehension, both for the parent and child, I am clear in the belief that well-understood motives alone can justify the accoucheur who performs it. A woman may lose her child in one labor, and so on throughout a succession of labors, from faults not at all relative to the state of the pelvis. A lady was under my care in this city, who, in sixteen pregnancies, had given birth to only one living child; she subsequently gave birth to two children, of which the first was born a little past the eighth month, whereas the gestation of the last son continued until the close of the ninth month. There was never suspicion of the least fault in the dimensions of the pelvis. A lady was under my care in this city, who, in sixteen pregnancies, had given birth to only one living child; she subsequently gave birth to two children, of which the first was born a little past the eighth month, whereas the gestation of the last son continued until the close of the ninth month. There was never suspicion of the least fault in the dimensions of the pelvis. A lady of this city, out of eight children, lost seven in labor. It was proposed to her, previous to the birth of her ninth and last child, to submit to the induction of premature labor. I had been long convinced that the cause of the death of the children, in this person, was a cause relative to the action of the uterus and not to the resistance of the pelvis, because
children, the transverse diameter of whose heads amounted to full four inches, had been drawn forth with the forceps. I had always maintained that the loss of the children was occasioned by the preternatural energy of the uterine contractions, which, from the beginning to the end of the parturient effort, were of a character deserving truly to be called ergotic—the contractions of the uterus being permanent; and, as the children were large, the placental circulation was always suspended by the pressure of the after-birth against the child's body, so that, when born, it was born dead from asphyxia.

The deep interest I took in the misfortunes of the parents, thus deprived of the hope and comfort of offspring, did not prevent me from resisting the proposition to bring on labor prematurely; and I felt prompted, from a desire I had to explain myself to the gentleman, to address him a letter, which I publish here, not as an argument against the induction in cases suitable for it, but as a caution to such as might feel tempted, unnecessarily, to resort to this method. I do not suppose I could make a better array of the motives for delaying the operation than I have here done.

The following is the letter which I addressed to the gentleman, who, being himself a physician, had assisted at the very large consultation of physicians summoned for the purpose of deciding the question as to the induction of premature labor in the case.

**Thursday, August 17, 1843.**

My Dear E.:—

As you appeared yesterday to be at a loss to decide upon the steps proper to be taken in the approaching crisis, and, as I suppose, rather inclined in favor of the operation for the induction of premature labor, I think I shall feel better satisfied if I lay before you, in writing, the reasons which compel me to entertain an opinion perhaps wholly contrary to your own sentiments and wishes, yet maintained, as I think, for your real interest and happiness. I prefer that you should have this written statement both for your own greater satisfaction and also in order that I may not be at all misunderstood. Opinions thus deliberately expressed and defended are safer than those delivered *vivâ voce*.

I am sure that you already know that I approve of the operation for inducing premature labor, in all cases where it is not performed too early to admit of the viability of the child, and where the withholding of it altogether, involves the mother in the certain necessity and risk of a severe embryotomy operation.

If the antero-posterior diameter of the upper strait is below 3½
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inches, there is always the greatest probability that embryotomic instruments will be required; I say, the greatest probability; for it is certain that children have been born without their aid in cases of pelvic deformity even greater than this. Such a deformity, then, if it does not go too low, would warrant the operation, and recommend it as an act of professional duty. Now my opinion on this point is, I hope, very clear. But where the pelvis is of such magnitude as to admit of the transit of the foetal head, and further, renders the application of the forceps practicable, I hold that no man would be justified in inducing premature labor, without exigent necessity arising out of some well-understood, highly probable peril of the mother herself.

In the case in question, we have seen delivery effected in a labor of four hours with a foetal head of dimensions which may, without exaggeration, be termed enormous; for a head of four and a quarter inches in the bi-parietal diameter is equal to the largest head I have ever seen at birth, and is just nine-twentieths of an inch above the average magnitude.

The history of the past labors shows that the difficulty does not depend upon the smallness of the pelvis, either actual or relative. The history of hundreds of labors issuing happily will show that the fetus can bear longer and severer pressure of its cranium than ever has been borne in our case. In fact, the history of these labors, as I know that history, shows that the evil has been in the uterus, and not in the pelvis. This, perhaps, you may not admit.

Peradventure, a premature labor might be marked by a character of uterine action different from those that have fallen at term: but shall a man feel justified to enter on an important operation, one admitted to be dangerous to the mother and uncertain for the child in the proportion of 50 per cent., upon the ground of a mere peradventure? I cannot think so.

I am not much accustomed in my medical transactions to be guided by what are called authorities. In the first place, every case of disease, and every case of surgical disorder or accident, is a specialty. The action upon each case should be determined by judgment held upon the case, and not upon reported cases. Besides, I conceive myself to be capable, after the clinical experience I have had, of judging for myself; of making up my own opinion of what is my duty in every instance of disease submitted for my opinion. Were I, however, very readily inclined to follow the masters, I know not where I should look to find an authority for this operation. The only one that has the least resemblance of favoring it is that of Denman, who twice induced a premature labor successfully for women who had
previously lost their fruit in utero in the seventh month. The cases, you see, are not parallel, and, if they were, I should not be moved by them; for I have seen a woman lose four children in successive pregnancies, from the sixth (or fifth) to the seventh month, who yet bore children afterwards at the full term, and in good health. Dr. Denman's patient might have done likewise, and I think he was not justified even by his good fortune in the dangerous operation he performed; I think he acted like a rash and injudicious man, whose success is no palliation of his error.

To force or invite the womb to enter into action before term is to do violence to the organ by a voluntary interference with the law of its organism. It is a rule, universally accepted, that we must not do violence to the womb except upon urgent necessity; I adopt and teach this rule; and I can never feel myself justified in recommending such action, unless I can have very clear perception of the necessity for it, as relative both to the mother and fetus. So it is pretended that such exigency exists in relation to your lady.

I believe you have taken too flattering a view of the operation, even as it relates to the child itself.

A child is esteemed to be viable at the end of the seventh month. It is, I say, esteemed as viable, yet the facts show that a very large proportion of seven months children fail to live long. Indeed, it is understood that fifty per cent. of the whole sum of human progeny is lost at the end of the sixth year after birth: how much greater the percentage in the cases of premature parturition!

If you will examine the results of the operation in Dr. Churchill, you will observe that he states in all 945 cases of the induction; I suppose that many of the 945 cases are restatements, i. e. they are cases stated over and over again; but, admitting that there have been 945 operations in fact, we still find that only 536 children lived. Lived, I say, but no man knows how long; and it is not uncharitable to say that, if we knew the whole truth, we should be obliged to make a very large subtraction from the number of 536. I have not the least belief that near one-half have been saved! and it is admitted that many of the operations were unnecessary, and even preposterous.

Dr. Chailly tells us that of the 211 cases collected by Stoltz, though more than one-half of the children were living, one in fifteen of the women died. Such a result proclaims the operation to be dangerous. It is true that we cannot here decide as to the difficulties and dangers of these 211 cases, and it may be true that the operation is less dangerous for a woman with an ample pelvis than for her who has a de-
formed one, and that in our own case the danger would be less on account of the known capacity of the organ. Be it so—but the argument is a *felo de se*; for it goes to show that it is not demanded by Mrs. E., but only by the child.

Has the child claims? Yes! but the claims of the mother are paramount. Is it demanded as referable to the gratification of an anxious desire to have a living offspring? That is a holy and righteous desire. God grant it may be satisfied; but the function of the surgeon and accoucheur appertains to the *health* of the patient; the happiness of the patient is the gift of God. The surgeon cannot lift the veil of the future; and if he could, he would, perhaps, be even more reserved than he is now as to the institution of attempts, whose object goes beyond his true vocation. Let him adhere to his vocation, which is fulfilled when he preserves or restores the health of his clients. The mother is his client in the paramount degree.

Let us essay to set in order some of the reasons for waiting until labor shall begin spontaneously in this case.

1. She has given birth to one living child.
2. She has had one unassisted delivery.
3. She has had children of enormous magnitude.
4. There is great reason to suppose, even if it be not absolutely true (as I believe), that the fault is in the nature of the uterine fibre, and not in the form or dimension of the pelvis. If so, then no operation is admissible.
5. She has recovered well.
6. She has been delivered of a child beyond the average size, in a labor of only four hours.
7. No man knows whether the child now in utero is above the average size.
8. If there is a breech, knee, or shoulder presentation, what should we gain by violence done both to the mother by the operation, and to the child by hurrying it into the struggle before it is completely developed and prepared for the strife.
9. Who knows if it be or be not a twin pregnancy? If it be a twin pregnancy, what vain, what poignant regrets over a step signally false!!
10. Possibly, she may spontaneously enter on labor at eight months and a half.
11. Do we know that it has not already a prolapsed cord?
12. Suppose the operation done, and the lady attacked with the chill so common in the case—suppose her the victim of a metritis—with a living orphan child? *cui bono!*
But, my dear E., I will not continue to string together objections; they are all comprised in the single fact that she is a fit subject for a forceps operation, if that should be demanded by the circumstances. This fact is an unanswerable one, in my estimation. It is true, I could set forth reasons of a moral complexion for refusing intervention, but I shall refrain considering them, as equally obvious to you and to me. I pray you, however, in this matter, not to misapprehend me; I have no doubt of the morality of the induction; nor of our legal right to do it, under the diploma given by the authority of a State. I look upon that diploma as an authority given to me by State commissioners, and, in the name of the State, constituting me judge, to act at my peril under the indications of an upright and enlightened conscience and judgment. But the spirit of my commission is caveat as to all rashness and irregularity of proceeding.

I hope the effect of this letter may be to lead you to submit with readiness to the voice or will of the consultation, which was not given in favor of the induction. We admit we do not know, and no man can know, what the result will be; but I trust you will believe that, should it be fortunate, I shall greatly rejoice in your mutual happiness; if it should be unhappy again, I shall sympathize in your distress. I shall in any event steadily adhere to this, viz.: that it is better to suffer the ills that Providence sends for our chastisement than, by rash and ignorant measures of precaution against them, make them tenfold more intolerable.

I am, &c.,

* * * * * * *

The following notes were furnished to me by my friend, who was present at the birth of this ninth child. The history of the labor and the measurements of the foetus, as well as its weight, serve, I think, fully to confirm my opinions in opposition to the operation that was proposed in the case.

NINTH ACCOUCHEMENT.

August 29, 1843.—Eight months and one-quarter (or one-third at most) of utero-gestation.

Labor commenced about seven P. M., a short time before reaching home after a long ride. Quarter past seven.—Reached home, and went immediately to bed; pains recurring, at intervals of ten or fifteen
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minutes, until eight o'clock, when they became more frequent and of shorter duration.

8 1/2 P. M.—Dr. Hodge arrived; found os uteri size of half a dollar.
9 P. M.—Vs. 3xxv; Dr. Meigs arrived during the operation.
20 minutes past nine.—Gave 40 grs. Dover's powder by enema.
45 minutes past nine.—Gave 35 drops laudanum, by mouth.
50 minutes past nine.—Pains recurring; membranes protruding; os uteri fully dilated.
55 minutes past nine.—Pains on and off; intermitting; uterus relaxes after pain, which is unusual in her case.
10 P. M.—Pains every few minutes.
10 minutes past ten.—Cramps in left leg during pain.
20 minutes past ten.—Anodyne effects decided; patient complains of feeling sleepy; pains continuing regular and natural until
5 minutes before eleven—when a strong pain came on, with bearing-down efforts.
11 P. M.—Good pain; head descending rapidly; membranes ruptured.
5 minutes past eleven.—Child born; no accident or artificial interference; weight seven and one-quarter pounds, dressed.—Male.

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\begin{align*}
\text{Bi-parietal diameter} & = 8 \frac{3}{6} \\
\text{Occipito-frontal} & = 4 \frac{5}{6} \\
\text{Mental} & = 5 \frac{1}{6} \\
\text{Bi-temporal} & = 3
\end{align*}
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In the only case in which I have ever been desirous to bring on a premature evacuation of the womb, I could not obtain the consent of the woman to its performance, yet I have had a good deal to do in consultations relative to the cases of this kind that were under the care of my professional friends and correspondents. In all those instances that have presented of late, I advised a resort to Kiwisch's method, or to that of Braun—and I now feel convinced that Braun's is to be preferred to all others.

Kiwisch's method consists in using a douche of water, directed by means of a proper apparatus against the os and cervix uteri, and I believe it will be always found that, if a strong current of water is daily thrown by a proper douche apparatus into the vagina, the os will dilate and the ovum be expelled. This mode of bringing on premature labor, however certain it may be, and safe in its results, is less expeditious than the new method of colpeurysis. Both of these, however, are much to be preferred to the old method by puncture of the membranes, because in both of them, there is good reason to expect
that the waters of the amnios will not be discharged until in an advanced period of the labor, when the neck of the womb, and possibly, the vagina is sufficiently dilated. For a premature child, there is always considerable risk of dying soon after its birth, or while the mother is in labor, and its risk is greatly increased by a too easy discharge of the waters. As neither Kiwisch's upward douche, nor Braun's colpeurysis are chargeable with such an objection, they should be preferred to the method by puncture.

By the douche method, labor may be brought on in three or four days; by Braun's colpeurysis, it is found that about four hours suffice to dilate the os uteri sufficiently to provoke good labor pains, that end in discharging the fetus and secundines very much in the same way as they are expelled when premature labor comes on from some constitutional or other cause independent of violence. I now refer the Student back to page 253 for an account of Braun's colpeurysis, with a figure of his colpeurynter, and shall make no further remarks on the subject here, as I have sufficiently explained the use of the implement at the above mentioned page.