

OBSTETRICS, A LOST ART

A CRITICISM OF THE PROMISCUOUS INDICATIONS FOR CÆSAREAN SECTION¹

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THE basis of this paper is not so much the impression derived from a perusal of the literature as it is the opinion substantiated by personal discussion with obstetricians whose judgment is worthy of the most serious consideration. Repeatedly it has been stated in these private discussions that the indications for cæsarean section have been inordinately broadened until very largely they have assumed a dangerous, if not a ridiculous, aspect. The teaching and the practice therefrom at the hands of the unthinking, is a pernicious one, and should be curtailed. The fundamental principles embodied in this paper belong to the writer, yet to a great extent they likewise belong to others. The fact that the opinions are not strictly personal leads him to believe that the discussion is pertinent at this time.

There may be no question that the attendance upon the woman in labor antedates all other medical and surgical activities; during the period when medicine was developing into a system of empiricism, surgery had little to commend for itself, and during this same period obstetric knowledge was enormously advanced by those pioneers who found operative work upon the parturient women an inviting field. During the closing period of the seventeenth century, on through the eighteenth and into the nineteenth hundred years, manual dexterity was developed to a degree which is too little appreciated in these times. We see the discovery of version by Ambrose Paré developed to a high degree by his school; we see the facility of breech extraction enhanced by the recommendations of Maureceau, Deventer, Smellie, Wiegand, and others; then forceps came into being by the ingenuity of the Chamberlain family, perfected in many essentials by Smellie, Levret, Hubert, Simpson, and Tarnier, which discovery largely superceded in practice the teaching of the versionist school; still later we see correctional procedures developed to

a really high art by the contributions of Baudelocque, Schatz, Thorn, and Ziegen-speck; in this connection, too, we see Braxton Hicks mature a maneuver by which the child may be turned by digital means; then, again, we see the development of our knowledge in the production of dilatation by the manual methods of Harris and Edgar, by the instrumental method, of which the Bossi appliance is the prototype; in this same period Dührssen revived cervical incisions, which were so ably practiced by Blundell a half century before; and, finally, Dührssen and Aconci presented us vaginal cæsarean section as a climax. Then the combination of the discoveries of general anæsthesia and asepsis have placed it within our power to cover the operative field of obstetrics painlessly and safely for the mother, and thereby with enhanced safety for the child. These two boons, which aptly have been denominated two of the "modern seven wonders of the world," carry their curse in permitting an unreasonable widening of the scope of this operation, cæsarean section. Within the past thirty years the general rules of conduct have been so clarified that we may truly state that no department of medical knowledge has been so definitely and positively placed in the domain of an exact science and art as has been the case with obstetrics. As the writer reads the voluminous case reports and essays on cæsarean section in our current literature, and has narrated to him the case reports, which never will be published, as they were not justified by scientific teaching, he wonders whither we are drifting. Are we attempting to minimize the precepts and examples of the past masters in the art, or are we attempting to ride, rough shod, past all obstetric rules in the hope of formulating the axiom that the quickest way out is the ethical way? He believes that within a brief period there will be a revulsion of feeling, and the surgical propensities of the present

¹ Read before the Chicago Gynecological Society, June, 1915. (See discussion, p. 663.)

will be enormously curtailed. In this place it can but be well to quote one who has done much to popularize cæsarean section as a sort of makeshift for real obstetric practice:

"With the operation thus shorn of its terrors, it is no wonder that it is being more and more resorted to, where, for one reason or another, the passage of the child through the birth canal is attended with difficulties. But this very ease of performance with its accompanying good results, like almost every abdominal operation, has led to the abuse of the operation, not merely in the number of unnecessary operations performed, but in the kind of cases subjected to cæsarean section. . . . And out of this discussion will finally come the knowledge of the true place of the operation in obstetric surgery." Today the medical profession is seized with the same *furor operativus* for cæsarean section as obtained a quarter of a century ago in the case of oöphorectomy.

The writer holds that there is essentially one, and only one, scientific indication for cæsarean section, and that is where there is such pelvic contraction that it is quite impossible to secure a living child by any other means; here all obstetricians are unanimous in their teaching and practice. It is consistent practice to hold that as the risks of craniotomy or pelvic separation, or even high forceps, are so great when the pelvis is markedly diminished in size — that is, down to six and a half centimeters — that it is wise to extend the absolute indication for a cæsarean section to seven, or even seven and a half centimeters. And yet, in the old days, when craniotomy was more prevalent than now, he has wondered, after the stress of a difficult and dangerous operation, if it were not well to advance even our limit for the absolute indication to a higher point — even to eight or eight and a half centimeters, *when the baby is alive, and the mother in good condition, and free from a potential risk of infection*. We know a pelvic contraction of this degree persists inevitably during the woman's life; we have a reasonable, practically a definite, certitude that no child the given woman will bear will be other than disproportionately large; therefore, the same difficulties will be

present in each labor. However, it must be constantly borne in mind that some women habitually bear small children, and though the pelvic contraction be material, there is no disproportion to be considered. In this connection, there is a vivid picture of the woman upon whom the writer did a prophylactic version, and breech extraction twice, and a colleague likewise delivered her by the same procedure in a third labor, and all the babies did well.

On the other hand, when the pelvis has a contraction whose index is above seven and a half centimeters a domain is entered which is fraught with many problems. There are so many factors concerned that the writer holds that it is questionable practice for any, unless he has a close and intimate knowledge of pelvic mensuration and foetal palpation, and has an accurate knowledge of the parturient woman in normal and pathologic labor, to attempt to lay down indications for cæsarean section. A surgeon, gynecologist, or general practitioner who has not had that experience and practice from a continued obstetric clientele has not the matured judgment or qualification for the interpretation of conditions and indications for a cæsarean section, not alone in this connection, but in the placing of the indication for the operation in any of the specious reasons for a section. The mere fact that a woman has a minor pelvic contraction is no warranty for a section. The evidence of a disproportion must be weighed, the character of the uterine activity must be estimated, the status of the soft parts must be considered, and, too, her surgical risks must be properly balanced. It is a common experience of all trained obstetricians that many a time, the pelvis having a minor contraction, labor pains will be ineffectual during the first stage, due to the fact that the presenting part is prevented from pressing upon the lower uterine segment sufficiently to arouse the characteristic phenomena of labor. The head will float above the brim, suggesting a true cephalopelvic disproportion, and the unwary will deem this as amply justifiable for a section, while the initiated will know that watchful expectancy will be followed by active con-

tractions. *After the membranes have ruptured*, engagement will take place with proper molding, and eventually a spontaneous birth will take place, or, perforce, a simple forcep extraction. It is impossible to quote offhand as to the frequency of such an occurrence in private and hospital practice where it is the writer's rule that all women who have a contraction to nine centimeters, or *below*, are permitted to enter labor. The course of labor is controlled by abdominal palpation and rectal examination. By this method, even where Müller's and Kerr's maneuvers suggest a real disproportion, it is surprising how readily the head eventually will descend. If there be no descent, the writer holds that it produces no jeopardy to the woman or child if we await even the rupture of the membranes. for then only will the lower segment guide the head into the brim. *It is not so much the fact of the rupture of the membranes which determine an infection after the cesarean section as it is due to vaginal examinations, which mean the introduction of the finger within the lower segment and over the exposed crown of the head.* It should be held as an aphorism that vaginal examinations always are a potential source of infection in labor, and particularly when a section is under advisement.

It is a digression, but it is deplorable that physicians in obstetric work have not schooled themselves to make their necessary vaginal examinations in pregnancy, and then to limit further pelvic investigation by rectal exploration in labor. Following this custom it is surprising how well conditions may be properly interpreted by rectal means. To be sure, certain factors will be impossible of discovery unless vaginal examinations are made. Fortunately, generally these doubtful points are inconsequential in most cases where the possibility of a section is under advisement. Further, it is essential that a careful study of the contractions should be made, their effect on mother and child should be noted, the maternal pulse should be watched, and the foetal heart rate determined by repeated examination. It is self-evident that the first signs of cardiac acceleration is indicative of maternal exhaustion; any elevation of

temperature is strongly suggestive of an antepartum infection. A section performed with these signs present, promises a high maternal death rate. It would be infinitely preferable to remove the child through the parturient canal, by such operation as expediency will suggest, than subject the woman to a great danger of death by an ill-advised section.

Again, it is a great error to run precipitately to a section because there is a seeming cephalopelvic disproportion. It is known that minor cephalic displacement, or mal-position, will retard descent of the head. An occiput directed to the rear, the R. O. P., for example, characteristically has the head floating until labor is well advanced. What a parody on good obstetrics it is to do a cesarean section; but it has been done repeatedly, when a manual rotation and fixation of the head would answer every purpose. Some of you may recall that one of our eminent gynecologists, called in consultation on a breech case in a multiparous woman who always had had easy labors, performed a cesarean, as the breech had not yet entered the brim, not knowing that such was a characteristic phenomenon of the normal breech.

In recent years a cursory reading of current literature will demonstrate the frequency that cesareans have been done for face, brow, occiput posterior, transverse presentations, that rightly should have been treated by obstetric art. How frequently we read case reports where no mention is made of the pelvic contraction, or, if mentioned, the degree of pelvic contraction is omitted, where, perhaps, stress is laid on the fact that the external measurements were diminished, but no mention made of the pelvic capacity, when all obstetricians of experience know that external pelvimetry is essentially worthless for the determination of actual internal pelvic deformity. Certainly there is a crying need for a more widespread experience in internal mensuration. In the absence of this knowledge, how is it possible to interpret the indications for operation? It would be infinitely preferable, if we have a difficulty in labor, to test the primiparous woman, and if peradventure the child should be lost, then

if necessary perform the section in the subsequent labors. But it must not be forgotten that a first labor may be ever so difficult and the later labors of surprising ease. This is as true of women with minor pelvic contraction as it is of the truly normal. To have performed a section in the first labor, and doom the woman to cæsareans forever after, is small warrant, when perhaps the trouble was really due to tense soft parts, or a minor deviation of presentation.

TUMORS OBSTRUCTING THE BIRTH CANAL

These matters are so broad that it would be quite impossible to cover them adequately within the limits of this paper. They are mentioned merely to state that many times watchful expectancy may bring the most happy results. To make a practice of cæsarean section in each instance is to be ruthless in operating. If the woman is seen in pregnancy with an ovarian tumor it may be best handled by timely removal, and gestation be allowed to go to term; if miscarriage should take place it is a lesser calamity than to allow her to go to term, do a cæsarean section, and compel her to submit to a like procedure in each subsequent labor on account of the vulnerability of the uterine scar. Oftentimes, when the ovarian tumor is first discovered in labor, the conservative and proper course, when the tumor does not interfere with the descent of the head, is to deliver from below, and later remove the tumor by laparotomy when conditions are more favorable. Per contra, when the tumor does obstruct labor, then the judicious procedure is to do the cæsarean section, followed by the ablation of the cyst.

A fibroid, which generally means hysterectomy when treated surgically, should not be removed in pregnancy unless distressing or dangerous symptoms develop. The danger signs are necrosis, hæmorrhage, infection, or pressure. If the fibroid, at term, does not obstruct the birth canal the wise conservatism is to deliver from below, and later treat the woman as expediency demands. It must not be forgotten that often uterine tumors are true myomata which hypertrophy with the advance of pregnancy, and involute

pari passu with the uterine retrogression, to a complete disappearance. To perform a cæsarean, when the tumor does not obstruct labor, then do hysterectomy, for this type of tumor is to rob the woman of future child-bearing, and is not judicious surgery. The *fibroid or ovarian cyst which blocks the birth canal is as truly within the domain of an absolute indication for cæsarean section as is a like degree of pelvic contraction; but in the case of the cyst, its removal obliterates the indication in subsequent labors, yet the necessity, due to the uterine scar, demands the same procedure in each labor.*

ECLAMPSIA AND CÆSAREAN SECTION

In recent times much has been written of the *treatment* of eclampsia by cæsarean section. The writer believes this is an egregious misnomer. A surgical operation is not the treatment of eclampsia. No one may gainsay that much is gained in the treatment of an eclamptic by the opportune early delivery; but the manner of consummating that delivery is not the treatment, it is the fact that the ovum is eliminated from the uterus. In all the discussions of this aspect of the question, much is stated about the technique of the operation, the number of the convulsions, and general discussion of statistics, but the essential treatment, as we see it today, is utterly ignored. All the polemics on the possible methods of delivery leave out *in toto* the question as to what anæsthesia was used, what measures were instituted before and after operation to secure elimination from the bowels, skin, and kidney; if venesection were employed, if sedatives were exhibited alone or in combination with veratrine viride. Without these complex problems, an argument as to whether this or that procedure was employed for delivery is really specious. Further, who has thought that perhaps a series of thirty cases without a death may not have been due to variations in climatic conditions, as Stroganoff maintains, or seasonal change in diet—or what not! How else do we explain Stroganoff's 113 cases with a maternal mortality of 5.31 per cent against the usual figures of 20 or 25 per cent? We can but take Reuben Peterson's figures to

show the futility of making favorable deductions from the use of cæsarean section; in his paper on "Vaginal Cæsarean Section for Eclampsia," of 530 cases, 124 died, a mortality of 23.4 per cent: in his paper on "Abdominal Cæsarean Section in Eclampsia," of 500 cases, 174 died, a mortality of 34.8 per cent. Can it be debated that the substances which produce the convulsions of pregnancy is other than a systemic paralyzant? Is this not shown by the dry harsh skin with the difficulty of securing diaphoresis, the impossibility, at times, of securing alvine discharges, the suppression of urine, and the blunted if not completely obliterated sensorium? We know that women do not withstand the shock of an abdominal operation as well as when a parallel procedure is done by the vaginal route; we know that abdominal operations do produce now and then a paralysis of the splanchna, as evidenced by the bowel stasis or adynamic ileus, and the suppression of urine. To crowd an abdominal operation upon a woman already with abdominal shock, or better, perhaps, saturated with a paralyzant poison, appears not to be either good surgery or obstetrics.

Unquestionably this explains as much as anything the reason why there is a 11.4 per cent greater mortality by the abdominal route than by the vaginal. Why not return to the simple procedure of Philander A. Harris which so fully meets all the needs in the vast majority of cases? Is it because so few obstetricians know the real method of Harris' digital dilatation? In a great measure this must be true, for the illustrations and descriptions in the textbooks are wrong — even the illustrations in Dr. Harris' own paper are not true, as he himself told me sometime before he died.

We could not question the expediency, yea necessity, for the performance of cæsarean section under certain conditions in the eclamptic woman. When it is done, it should be fully recognized that it is not the eclampsia but the contributory factors which force the operation upon us. The combination of a minor pelvic contraction with eclampsia, the presence of rigid soft parts, placenta

prævia, or pelvic tumors, properly would sway the mind in this direction; for each of these enormously influences the quickness with which a delivery may be consummated.

PLACENTA PRÆVIA AND CÆSAREAN SECTION

You may recall that two of the first practitioners who employed cæsarean section for placenta prævia had their own views as to when one of two methods was to be used. One stated in 1882: "I would recommend cæsarean section, if a man had performed or assisted at 200 abdominal operations and the mortality was below 7.5 per cent, as a substitute to Hick's version, or the alternative measure — if a surgeon is not at hand — do version." The other states: "For the successful performance of version an obstetrician having the necessary experience (performance of 50 versions, for instance, being considered sufficient experience) is not so readily obtainable." Then we have the well-known surgeon who candidly admits he did the abdominal operation for placenta prævia as he knew its technique and did not know how to do a version. In my previous contribution on cæsarean section for placenta prævia we showed that the maternal and foetal mortalities for this method of treatment was 20 and 36 per cent respectively; the obstetric treatment gave a majority of 7 and 55 per cent respectively. As previously shown, cæsarean section saved one baby for each woman who was killed by the procedure. There may be no question that the abdominal operation is a ready means of evading certain complications of placenta prævia, and at times should be the only resort considered; but the writer is convinced that the practice of some operators of making it the only means of delivery are assuming a burden of which they in later maturity of judgment will regret. At the present time, their teaching is a pernicious one. As a working hypothesis, one or more of the following conditions should obtain for the proper performance of cæsarean section for placenta prævia:

1. *A contracted pelvis.* In an absolutely contracted pelvis the prævia is merely an unfortunate complication. In a relatively con-

tracted pelvis, the possibility of watchful expectancy is not to be countenanced—delay may mean the death of the two patients. On account of the difficulty of operating through a diminished birth canal the bag therapy or Hicks' version are fraught with such difficulties that cæsarean section probably, definitely, would be the operation of election.

2. *Cervical rigidity.* This is largely a specious argument for, as shown in our previous communication, it is one of the rarest complications of placenta prævia; hardly one case in a thousand is likely to have it.

3. The pregnancy should be near term, and the child in good condition. Subordinate to this, there should be such a status of affairs as to make a section advisable, though not technically a correct indication; a woman may have been sterile many years, late in life, perhaps at the climacteric, she may conceive, go to near term, and have a complete prævia. In such an instance a section would be expedient. However, this reason is so elastic that it easily may be used to sway the operator one way, as an argument for the "therapeutic abortion" may pull another man toward doing the woman's behest.

4. The fact of a *marked* prævia should be determined, the necessity or advisability for the section be fixed, then an interval of some days should elapse whereby the risks of a potential infection introduced by the examining finger may be eliminated. During this interval the woman should be in a hospital. It is dangerous to examine repeatedly, perhaps attempt dilatation, then resort to the section.

5. There should not be a retraction of the lower uterine segment, for the paralysis of the lower segment may determine a post-partum hæmorrhage, produced by a true paralysis of the placental site.

INDEFENSIBLE INDICATIONS

Many a cæsarean section has been done for indications which have been exceedingly specious, indications which are far fetched. These cæsareans never will be reported, for there was no real justification for their performance. Many of these operations are

exemplifications either of the lack of judgment in placing indications, or of ignorance of true obstetric facts. Many a time, as rumors are bandied about of a cæsarean section being done for strange reasons we could not question the surgical ability of the operator, but we must concede their lack of obstetric equipment. It is not right for the surgeon, gynecologist, or others, to lay down the indications for a grave obstetric procedure when he, perhaps, never had had an obstetric experience, or his limited experience may have been obtained many years before. It is a pernicious system and looks not for the best interests of the patient. At least he should defer to the judgment of the obstetrician, to the man who has an abiding interest and contact with the specialty. And yet it is not alone the man whose training fits him for other fields of medicine who is forgetting the obstetric principles, but too often the obstetricians themselves have wildly seized upon cæsarean sections as a ready and quick means of getting through with a case. How easy it is to spend some thirty minutes in performing a cæsarean, and how hard it is to perform a Hicks' version or perhaps introduce the bag, and then to await the time for the work to be completed, sitting up half the night perhaps. How loath the gynecologist is to give up to his assistant even a minor thing like the simple perineorrhaphy, and yet too often the complicated obstetric case is left to the tyro of the clinic because it is "coming off" in the small hours of night.

Let us just present a few of the indications which have been gathered in the course of informal obstetric talks. Perhaps you may say they are mere rumors, but each one was narrated by the one who knew the facts, or they have been culled from the literature. Within the last few days, a physician, in all seriousness, stated he was about to do a cæsarean (and he did it a day or two later) on a woman, seven months pregnant, with a pyelitis, his defense being that the vulva was contaminated by the colon bacilli which were the etiologic factors of the kidney disease, she having a badly torn perineum. The baby died promptly. Not so long ago

a surgeon did a section on a woman who had been in labor from Monday to Friday evening. As the head was deeply in the pelvis he perforce did a symphysiotomy to withdraw it. The most miraculous thing of all, the mother and baby survived! Recently we saw in the literature the report of two cæsareans for primary inertia. Whither are we drifting when face, brow, occiput posterior, transverse presentations, prolapsed cords are treated by cæsarean section? Only the other day, a physician asked why a cæsarean was not done on a primipara, with kidney of pregnancy, in the eighth month instead of introducing the Voorhees bag—and this in a woman with a normal pelvis and soft parts. What can you expect of medical students when they see more cæsarean sections than they do of any of the ordinary obstetric procedures? Can it be wondered at that they lose the perspective and even recommend that *cæsarean section be done for post-partum hæmorrhage*? What can we expect when right and left cæsareans are being done after repeated questionable examinations have been made, and where attempts at delivery are made which maim if they do not kill the child?

It may come about occasionally that there may be such a combination of circumstances, or of complications, which, each alone, would offer no justification for a section, yet the complexus of conditions may make a section the lesser of evils; but such should be preceded by adequate consultation.

In conclusion it should be recognized as a cardinal principle that a contracted pelvis alone is the real indication for a cæsarean section, for pelvic deformity alone is definitely certain to obtain throughout the woman's life; the indication which prompted the first section will demand it in each subsequent labor. The treatment of a fibroid certainly will determine her sterility, so the woman is no longer considered in an obstetric relation. On the other hand, in the case of eclampsia, placenta prævia, ovarian tumors, and the many other complications which necessarily or unnecessarily may have been managed by cæsarean section leaves the woman in a precarious state if another pregnancy should

occur. No one knows the frequency of rupture of a cæsarean scar, for too often the accident happens, not in the practice of him who made the operation, but in the hands of unskilled aid, so is not recorded. We know that A. Davis had three ruptures in 180 sections, so at least one section in 60 is to be followed by rupture in a later labor. This danger is a real one, and must be clearly appreciated by him who contemplates a section on debatable grounds. Those who now are advocating cæsarean sections for placenta prævia, eclampsia, etc., must bear the culpability for the deaths which may result from the uterine rupture at a later time. In estimating mortality percentages, such deaths must be credited to the primary operation, not placed in a class by themselves. It has been claimed by many if they themselves or other skilled operators do the suturing that no loss of continuity can occur. This is absurd, for none, however skilled or careful he may be, can vouch for the absolute durability of his catgut, can estimate the phagocytotic influence of the uterine wall. Can anyone imagine a more unhappy plight of a primiparous woman who has been treated by a cæsarean section for eclampsia or placenta prævia, with a perfectly normal pelvis, who is, and should be, perforce, doomed in all her subsequent confinements to the same abdominal surgery?

It should be an obstetric aphorism that a *cæsarean section once is a cæsarean section always*. It is but necessary to mention that Franz, Jardine, Cameron, and others have expressed this dictum. The only exception should be in a multipara who has born a child through the parturient canal, with normal pelvis and relaxed soft parts, and her labor should be controlled in a hospital.

CONCLUSIONS

1. A contracted pelvis alone should be considered as the single, definitely permanent indication for cæsarean.
2. No cæsarean should be considered, unless the baby is in good condition, unless it is the only resort.
3. *Per se*, eclampsia, placenta prævia, or other specious indications do not offer war-

ranty for the operation unless there be some contributing obstetric anomaly.

4. All women with a relative indication (pelvic contraction) should be allowed to go into labor so she may have a real *test of actual cephalopelvic disproportion*. During this test no vaginal examinations should be countenanced, but labor should be controlled by abdominal palpation and rectal examination.

5. It is neither wise nor expedient to permit a patient with an absolute indication or where it is a repeated section, to enter labor.

6. A cæsarean scar is a vulnerable point in the uterine wall, and is likely to rupture; therefore, a cæsarean section once is a cæsa-

rean section always. The only exception worthy of consideration would be a multipara with soft, lax, or torn pelvic floor.

7. Cæsarean sections have been performed on inordinately broadened indications which in many respects are not defensible. The indications should be restricted.

8. Obstetric manual dexterity has been compromised by the development of cæsarean section. The beneficent results from obstetric procedures should be emphasized.

9. One who has a mortality of 5 or more per cent for his cæsarean sections should revise his indications—should use discrimination in his selection of cases.