IS CONSERVATIVE OBSTETRICS TO BE ABANDONED?

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THE past three or four years have brought forth a number of new ideas in the way of routine delivery of normal or approximately normal cases. The parturient woman is entitled to and should receive all amelioration of suffering which may safely be given her, that is, without endangering her or her child. Efforts to diminish the duration and suffering of labor are commendable, provided they genuinely accomplish the objects sought for, and provided, also, that operative measures which are made use of in the effort to accomplish this end, are carried out by men of sufficient technical skill and of judgment sufficiently mature that the operation itself does not become a menace.

It may well be questioned whether the routine teaching of operative measures which are to be employed generally to classes of students is wise. Indeed it is a grave question whether the teaching of such methods to the profession as a whole is justified. In such teaching must be included the description of methods in widely circulated periodicals. Such publication must necessarily indicate the recommendation of the author for the procedure and the caution, often added, that certain operative procedures are for the experienced operator only, does but little good, for there are not wanting in every community of any size, men who do not hesitate to attempt any operative maneuver, obstetric or otherwise, with a minimum of preparation or with none whatever.

At a recent meeting, the able director of a well-known clinic in an eastern city presented some interesting statistics pertaining to a series of 1000 ward cases delivered in that clinic, demonstrating very well the results of an expectant plan of treatment, seconded, when definite indications existed, by expert operative intervention. The results, as indicated by fetal mortality, maternal mortality and morbidity, and showing a low incidence of operative intervention were excellent. The essayist, however, stated that in dealing with his private work the operative incidence ran higher. This, of course, is the experience of every obstetric specialist, as his practice tends to include a greater number of cases in which intervention of some sort is unavoidable.

It is with the desire of showing that, in a series of cases which includes a considerable number of private patients, expectant methods not only are possible, but will yield good results, that this series is reported.

It includes first my own private work composed of cases largely

coming from a district containing probably as large a proportion of people of comfortable means as any residential section anywhere, and a very fair number of families, the female members of which have been accustomed to every luxury that ample means may procure, in short, the class of women among whom it is said that revolt against the normal processes of labor exists. Among the number, too, are a considerable number of cases who come, as they come to all men who specialize, because of trouble in a previous labor, or who are sent by their physicians because of anticipated pathology. A number of these had come long distances for some of the reasons named. It includes the cases of the junior attending man and also of a number of other members of the hospital staff who all follow our definitely established technic and who are usually prompt to call assistance in case of grave pathology. It includes also a modest number of ward cases which were delivered by internes under the supervision of the junior attending man. These were less than 20 per cent of the whole number.

The cases number 500,—multiparae 283 and primiparae 217. Our cases are drawn as indicated above from a neighborhood in which malnutrition is rare and the women are largely of native extraction, hence pelvic deformity is uncommon. There was one case of generally contracted and five of simple flat pevis.

Cephalic presentation occurred as follows: L. O. A. 330—66 per cent; R. O. P. 65—13 per cent; R. O. A. 40—8 per cent; L. O. P. 1.7 per cent; and Face 1—0.2 per cent.

Posterior positions were treated expectantly and the greater number of them rotated anteriorly without interference. The remainder were delivered by operative means.

Abnormal presentations included the following: Breech 28; Prolapse of arm 1; and Prolapse of cord 4.

The incidence of operative intervention included 12 high, 25 mid and 61 low forceps, a total of 98, or 19.6 per cent.

Version was done 9 times, breech extraction 18, cesarean section 8, induction of labor by bag 19; and the uterus packed 9 times.

The incidence of operation in this series is larger than in the report alluded to above, but a series containing a large proportion of private patients must contain more cases needing intervention of some sort than one composed purely of clinic cases. What I desire to bring out is, that private patients will go through normal labor without a demand for routine shortening of the normal processes of parturition by operative methods. The low forceps deliveries were done after a reasonable delay on the perineum, and in estimating what is reasonable, we are accustomed to give the mother the benefit of the doubt and to interfere after a short time if progress is not continuing. We auscultate the heart tones frequently as the head nears the perineum, using

the head stethoscope of Hillis, interfering at once if notable slowing in the fetal heart rate is apparent. Cragin reported a series of 500 private cases in which the frequency of forceps was 22.6 per cent. This is about the same frequency as we note in this series. Cragin also reported an incidence of forceps of 12.3 per cent in 20,000 cases in the Sloane Hospital.

I am strongly in favor of episiotomy in primiparae, should laceration appear likely, and believe that spontaneous delivery will occur if it is used in some cases which without it would require application of forceps. I believe, also, that if this is done, it should be done before the perineum is greatly stretched in order to avoid damage to the perineal structures. It has seemed to me that a better ultimate result is obtained when one repairs a clean incision through structures, the integrity of which has not been impaired by too great stretching and possible submucous separation than by allowing either a laceration or submucous injury to occur. Inspection of a large number of these, six to eight weeks after labor has shown that satisfactory results are obtained.

Version has been used only on definite indication, in this series for prolapsed cord three times, placenta previa twice, and for a compound presentation, with one arm prolapsed, once.

While admitting the skill in the performance of version which is possessed by the foremost advocate of its elective use and admitting also the elaboration of its technic which has resulted from his work, we cannot agree with the indications for which he does this operation. Our own corrected fetal mortality in labor of 1.4 per cent with expectant methods supplemented by operative intervention when indicated, as compared with a rate of 7.5 per cent with routine elective version will speak for the correctness of this view. One of the followers of the originator of the method of elective version publishes fetal mortality rates of 8 per cent to 17.5 per cent. Surely this is too high a price to pay for a little shortening of the normal course of labor, particularly when the pain of the second stage can be so greatly mitigated as is possible today. Some of the cases in the report last referred to were delivered by beginners. A high degree of operative skill cannot be expected when that is the case. However, one may not unreasonably argue from that fact that operative work should be taught only to those who have attained proficiency in normal work.

Our use of the bag practically is limited to induction of labor for toxemia and for placenta previa. For induction of labor in cases other than these, castor oil and quinine with digital loosening of the membranes is used, and even in the milder degrees of toxemia, where need for haste is not so apparent, it is first tried. It is very rarely used

for the treatment of contracted pelvis, and in this year's work, has not been so used at all.

My experience with the bag corresponds with that of some other observers. I have not found that it will always accomplish the result we desire. Many of us have introduced bags, only to find that after the expulsion of the bag labor ceases. I saw in consultation one case this year, a para 3, in which three bags had been used in a mild case of toxemia, labor ceasing on the expulsion of each bag. It was advised to let the woman alone as the toxemia was not alarming. Two days later she delivered herself precipitately. It must, of course, be admitted, that in reserving the bag for those cases which have proved refractory to less vigorous measures, causes it to be applied in those which are hardest to bring into labor, hence we have a larger proportion of unsatisfactory results than in services in which it is more routinely used. We cannot fail to recognize the danger of infection which accompanies the use of hydrostatic bags. Even though this, in well run institutions and with a proper technic, may be greatly reduced, still the introduction and retention of the bag within the uterus must carry with it some slight risk of infection. I have been asked to see two cases in which intrapartum rise of temperature had followed the introduction of in one case two, and in another, three bags.

Cesarean section was done more frequently than would be the case in a series composed of clinic cases exclusively. This is because of the number of women coming in with the history of a former disastrous labor, or who were sent by their physicians because of fear of possible complications. The indications shown in Table I were present in our series.

TABLE I

Flat pelvis,—previous child lost—test of labor	2
Primiparity at 43 with toxemia—rigid cervix	2
Flat pelvis, (prior section in Europe)	1
Flat pelvis,—primipara,—test of labor	1
Flat pelvis,—transverse position,—primipara—no test of labor	1
Generally contracted pelvis,—previous pubiotomy	1

We have tried to limit abdominal section to those cases in which reasonable indication existed. It was adopted in the cases of the elderly primiparae because it seemed likely that labor would be difficult, and because the mothers were extremely desirous of saving the babies, as they represented probably their only chances for children. The indication is, of course, relative, but, I believe, fair. The constantly widening indications which are being invoked for the employment of this operation should be carefully scrutinized, even though we admit the great value of the operation in properly selected cases. In the

lesser degrees of pelvic contraction, the high percentage of cases in which spontaneous delivery occurs, or in which delivery may finally be accomplished by simple low forceps, has caused us to be slow to adopt this mode of delivery without a preliminary trial of labor, which often demonstrates the lack of need of section. In addition to the cases of flat pelvis shown in Table I as sectioned after a trial of labor there were a larger number in whom the possibility of operation was considered, but which delivered either spontaneously or with the aid of forceps. In one case, in which the possibility of section was considered, labor was allowed to proceed with the idea of terminating if necessary after a thorough trial of labor by a low section. The head however after some time engaged and the labor was ended by forceps. The child did not do well and died in 48 hours. Autopsy showed no cranial injury whatever but that atelectasis was the cause of death. It is a question whether, had early section been done, the child would not have been lost from the same cause. We employ section but rarely in placenta previa and have not treated a case by section in the past four or five years. It is not excluded and would be considered in a perfectly clean case, with undilated cervix, with a central previa and preferably in a primipara. Such cases are, however, rare.

Complications of pregnancy included: toxemia 11; cardiac disease 1; placenta previa 5; placenta ablata 2; hydramnion 8; and prolapse of cord 6.

Excluding 5 premature babies and considering those delivered at or near term the fetal mortality is as follows: dead at delivery 10; dead after delivery 8; hemorrhage 2; malformation 3 including one each of anencephalus, spina bifida, and cleft palate harelip.

The smallest child which we were successful in saving weighed just over three pounds at birth, the weight declining to two pounds, fourteen ounces. For co-operation in cases of this sort, in case of hemorrhage of the newborn, and in fact in all matters pertaining to the babies, I am under obligation to the attending pediatrician and his associates, who assume entire charge of them.

The difference in mortality rate between that which I have just given and those obtained by elective version are sufficiently striking. Let me emphasize again that immediate intervention in the second stage is done when auscultation indicates any fetal danger. Furthermore, the mother is never allowed indefinitely to exhaust herself at this time in the absence of definite progress.

Complications affecting the mothers. Rupture of uterus, 1; postpartum hemorrhage, 11; suppurative mastitis, 1; infection, 1; embolism, 1; deaths, 2.

Of the two deaths, that charged to embolism was unavoidable. The woman bled moderately severely, the uterus was packed at once by

the junior attending man who was her attendant, but she became promptly cyanotic although the pulse rate did not go over 100. She died in an hour. In reviewing this case later I could not see that anything had been overlooked which should have been done. There was no autopsy. The other death followed a version done in a case of placenta previa by an interne before the arrival of the junior attending man. The rupture was not detected by an intrauterine revision of the field after the operation and its presence was not suspected until too late. Autopsy showed a tear upward on the right side in the region of the broad ligament with retroperitoneal bleeding. It is fair to ask ourselves whether this case should not have been saved.

Our mortality from all causes up to the end of labor was 2 per cent. Of children born dead at term there were 10. Of these one was a case of toxemia in which the child was dead at the onset of labor and one was the child of a woman with a flat pelvis, admitted after many hours of labor, with the cord and one arm prolapsed and the child already dead. This case was treated by craniotomy. Eight, therefore, were living at the onset of labor and died during or immediately after labor. One of these was an anencephalus; one died immediately after delivery in a case of placenta previa treated by metreurysis and version, one of asphyxiation caused by the cord being around the neck and one arm, one following a high forceps delivery and three were breech cases, two complicated by prolapse of the cord. Two of these were service cases and three were patients of physicians not especially interested in obstetrics. Concerning three of these cases, the high forceps and the breech cases not complicated by cord prolapse and the baby lost by asphyxiation due to the cord being around the neck and arm, we may inquire whether better obstetrics might not have saved one or two of the babies.

There were eleven premature babies, reckoning all born before the beginning of the ninth month as premature. Of these four were saved and the remainder lost. Five of the seven which were lost were less than seven months.

Of babies born alive but dying before the mother's discharge, there were eight. One of these was the smaller one of a pair of twins, the other twin surviving. One was a child referred to above which died of atelectasis as shown by autopsy. Another died of atelectasis two days after delivery, no autopsy. One was a spina bifida which lived one day. Another was a child which lived thirty-six hours after a normal delivery, but was constantly cyanotic. Autopsy showed an unusually large opening in the interventricular septum which had failed to close. Another was a child delivered by breech extraction in

a primiparous labor. This child lived 24 hours and died, probably of cerebral injury. No autopsy was obtained.

The total number of deaths, therefore, was 18. This includes all deaths up to the time of the mother's discharge and gives a total infant mortality of 3.06 per cent. Obviously we cannot be charged with the loss of the child which was dead at the time its parturient mother was admitted nor with the loss of the anencephalic child as neither of these was lost as a result of our obstetric errors. Allowing for these gives a corrected fetal mortality in labor of 1.4 per cent. We may ask ourselves whether some of these could not have been saved.

Of those dying before the mother's discharge, it seems fair to assume that neither the spina bifida nor the loss of the tiny twin could be ascribed to technical errors. The loss of the child with the patent ductus botalli could also not be ascribed to lack of skill on the part of the physician. The corrected mortality for this group would be 1 per cent, or a total corrected mortality previous to discharge of 2.4 per cent. In estimating these mortalities I have not included premature babies, as the loss of these infants is as a rule not fairly chargeable against obstetric errors.

The results of a series of 167 cases under my own care, almost all of which form part of the large series discussed already, are as follows: L. O. A., 122; R. O. P., 28; O. D. A., 2; L. O. P., 4; breech, 3. Operative incidence in this series is as follows: Low forceps, 33; mid forceps, 7; high forceps, 5; version, 1; cesarean section, 6.

There were four premature deliveries counting those prior to the end of the eighth month as premature. Of these three were less than seven months and were lost. Two of these were dead on admission, one on account of a severe toxemia and another following a separation of the placenta in a woman who had a chronic nephritis. The fourth one was a baby of a little over seven months which lived.

There were no maternal deaths. Of fetal deaths during or immediately following labor at term there were two, one due to asphyxia caused by the cord being around the neck and one arm, and one case in which the child died about half an hour after delivery in a case of placenta previa treated by version. This was a referred case, considerable bleeding having occurred before the case arrived in the hospital.

One death occurred forty-eight hours after labor, this being the one alluded to before in which death was the result of atalectasis as shown by autopsy, the child having been delivered by forceps in a case of flat pelvis.

The total fetal mortality at term from all causes in this series is 3, a percentage of 1.79 per cent from all causes up to the time of discharge. This of course represents results attained by rigid prenatal observation with immediate meeting of any indication disclosed by

observation and immediate admission to the hospital and constant observation after the onset of labor. Forceps incidence in this series is 26.9 per cent, considerably higher than the percentage for the entire year's work in the maternity, but this smaller series contains a very much larger number of women who had had previous difficult labors or who were referred because of complications present or feared.

It has been interesting to note, as indicating the comparative results of hospital obstetrics as compared with that carried out in homes, the difference in the fetal mortality in the large series reported in this paper and that reported for the Municipality of Evanston. The latter was almost 50 per cent greater. When one considers that this district contains only a very small number of midwives, that the general average of the medical practitioners is above that found in most areas of Chicago or indeed any large city which would correspond in size to the district considered here, and finally that the figures above considered as well as all deaths reported from a neighboring hospital within the town are reckoned into the report of mortality from the whole town, it would seem a striking argument in favor of the safety of carefully conducted institutional work.

This comparison becomes more striking if one considers that our hospital series contains many cases from the northern part of Chicago and elsewhere, a considerable portion of which had come because of former abnormality or fear of complications.

The safety of institutional methods, however, it seems fair to conclude, depends very largely upon the judgment and skill of those who determine them. We believe that a watchful conservatism, allowing the forces of Nature to accomplish delivery if possible, with careful operative interference at once upon proper indication, still remains the safest standard of obstetric practice.

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