

three times greater after the operation, than if the woman went on to term. This was soon followed by articles by Litzmann and Dohrn, who showed that Spiegelberg had painted the picture in colors far too dark.

Litzmann showed that in moderate degrees of contraction, 8.25 to 7.5 cm. ( $3\frac{1}{4}$  to 3 in.), the operation was indicated in the interests of the mother, as shown by a mortality of 7.4 per cent. after the operation, compared with one of 18.7 per cent. when the woman was allowed to go on to term.

Dohrn stated that the proper method of appreciating what the operation accomplished was not to compare so many cases of induced labor with so many cases of labor at term, but to compare the results of premature and spontaneous labors in the same woman; by this method he found that twice as many children were saved by inducing labor as by allowing the woman to go on to term.

Consequently they proved that the operation was indicated in properly selected cases, both in the interests of the mother and child.

The introduction of antiseptic methods into midwifery almost completely robbed the operation of danger for the mother, as will be readily seen from the following statistics. Thus, Haidlen reports 44 cases from the Stuttgart clinic, with no maternal deaths and 72 per cent. of the children saved.

In 1889, Korn stated that Leopold lost one woman in 45 cases and saved 66 per cent. of the children, and last July Ahlfeld stated that he had induced labor 118 times with the loss of only one mother, and had saved 62 per cent. of the children. At the Berlin Congress, Fehling stated that in 60 cases he had saved all the mothers and 80 per cent. of the children.

From the above sketch we will readily see that the maternal mortality in properly selected cases is very slight; 401 cases collected by Korn showing a maternal mortality of only 2.9 per cent., or just a trifle more than normal labor in a normal pelvis, while the foetal mortality ranges from 20 to 70 per cent., the average being about  $33\frac{1}{2}$  per cent.

So in this operation we have a means of saving about two-thirds of the children, without any risk to the mother. Or, reckoning by Dohrn's method, we save at least twice as many children as if we allowed the woman to go on to term, and then resorted to some conservative operation.

These are the prospects of the operation, but unfortunately the degree of contraction within which the operation is justifiable is very limited, and one can only think of it in moderate degree of contraction. According to Litzmann, in flattened pelvis with a conjugata vera of 7.5 to 8.25 cm. (3 to 3.25 in.); and to Schroeder, 6.5 to 9.5 cm. (2.5 to 3.75 in.).

As pelvis with a conjugata vera above  $8\frac{1}{2}$  cm.

( $3\frac{3}{8}$  in.) offer a reasonable chance to both child and mother at term, and those below 7 cm. ( $2\frac{7}{8}$  in.) offer no chance to the child, I think that the operation should be restricted to these limits; that is, between 7 to  $8\frac{1}{2}$  cm. ( $2\frac{7}{8}$  to  $3\frac{3}{8}$  in.) in simple flattened pelvis.

In the juxta-minor pelvis a conjugata of  $9\frac{1}{2}$  cm. ( $3\frac{7}{8}$  in.) or less will usually be an indication for the operation. In the rare forms of obliquely narrowed pelvis, whatever its cause, we must be guided almost entirely by the history of previous labors.

We thus have the operation restricted to a very small range,  $1\frac{1}{2}$  cm. ( $\frac{5}{8}$  in.), which should only be exceeded when the previous history tells us that the previous labors have all ended disastrously. We should not think of inducing labor in a flattened pelvis with a conjugata below 7 cm. ( $2\frac{7}{8}$  in.), for in that case the prospects for the child are almost nil and the dangers to the mother greatly increased. Here we come to the relative indication for Cæsarian section, when it is best to allow the woman to go on to term, and attempt to save both mother and child by that operation.

With these contracted indications, we readily see that an accurate idea as to the exact size and form of the pelvis is an absolute prerequisite for the performance of the operation; and the only means by which we can accurately obtain this information is by carefully measuring the pelvis.

We should not content ourselves with simply measuring the conjugata vera; but should also take the external measurements and thereby attempt to determine with what form of pelvis we have to deal. After doing that, we must carefully examine the interior of the pelvis, to determine its height; to see if it is generally contracted, and if contracted, if the contraction increases as we approach the outlet. We must look for exostosis of the pelvic bones, and carefully examine the promontory to see if it is double or not.

If we think the pelvis contracted laterally, we should measure the distance between the tubera ischiorum on each side, as Breisky recommended. We should also attempt to estimate the transverse diameter of the pelvis, which is most difficult to do, and the most that can be expected is to examine alternately with each hand and try to stroke the linea innominata and so relatively to get some idea as to the transverse diameter.

Having decided that an operation is necessary, the next question is, when shall it be done? Of course the younger the foetus, the smaller will be its size, and consequently the easier its delivery. But unfortunately, the smaller the foetus, the less chance will it have of living, even if it survive the operation. Generally speaking, we say a child is viable after the 28th week, but its chances of living are almost nil; indeed, children 30 to 32 weeks old have next to no chance of living. The later