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DYSTOCHIA FROM IMPACTION OF THE SHOULDERS.

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The topic to be presented forms one of the minor difficulties that beset the accoucheur on his way through the world, and one of the lesser dangers that menace the fœtus on his way into the world. That difficulty of delivering the shoulders after the birth of the head does occasionally occur, all physicians, especially those of largest experience, will admit; and that danger to the fœtus from this cause does exist, the following list of accidents will prove: Rupture of the fibres of the sterno-cleido-mastoid muscle with subsequent abscess of the neck, injury to the brachial plexus followed by temporary paralysis of the arm, fracture of the shaft of the humerus or separation of its epiphysis, cerebral effusion, or asphyxia, with consequent death of the child. Incredible as it may seem, the head of the child has been torn off in endeavors to deliver the trunk when the shoulders have become impacted.

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In ordinary labor, after the expulsion of the head, there is rest for a few seconds followed by turning of the fœtal face toward one or the other of the thighs of the mother. A movement of advance begins and the child is extruded in the antero-posterior diameter of the pelvis. First one shoulder appears and then the other followed by the trunk, the knees, the pelvis and the feet. If the maternal pelvis be large, if the child be small, or if the pains be strong, no restitution takes place, and the shoulders appear in the transverse or oblique diameter. Regarding which shoulder is born first, the anterior or posterior, authorities differ. The truth of the matter seems to be this: If the delivery be left entirely to nature, the anterior shoulder slips out first in ninety per cent. of the cases. If, however, the head be lifted from the bed and we endeavor to make the delivery slow and gentle, the posterior shoulder appears first in the great majority of the cases.

I have given above the external phenomena of ordinary births of which the internal mechanism is as follows: Restitution is caused by the child's shoulders engaging in the oblique pelvic diameter opposite to that in which the head has descended. The anterior shoulder slides upon the anterior inclined plane of the pelvis under the symphysis pubis; the posterior shoulder passes along the posterior inclined pelvic plane into the hollow of the sacrum thence to sweep over the perinæum into the world.

This familiar mechanism has been rehearsed at length because it has a bearing upon the proper management of the class of cases now to be considered and which form the true material of my theme.

We frequently find multiparæ of the following character: They are wives of poor men and have borne their husbands from four to nine children at the regular tenement-house interval. In their youth, they were slender girls of less than the average height and have married early. Their sylph-like proportions have long since disappeared so that they present the large limbed, full bosomed, cuboidal aspect with which we are all so familiar. Repeated child bearing has caused separation of the abdominal recti, weakness of the oblique abdominal muscles, subinvolution of the abdominal walls so that the uterus falls forward when enlarged, and what they call their high stomachs become markedly accentuated during pregnancy. There may be no suspicion of rachitis about them, but their pelves are very shallow, the pubic rami widely divergent and one or all of the pelvic diameters small. When they stand erect, the axis of the uterus is nearer the horizontal than the perpendicular. If one has occasion to remove an adherent placenta

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from such a uterus he will be painfully impressed by the extreme extension of the hand necessary to reach the anterior border of the placenta, or the anterior uterine wall. These women bear, as a rule, large children which frequently present in the occipito-posterior position.

When such a patient comes in labor, the head engages badly, progress is slow, and even if the forceps be used the uterus is in a condition of partial inertia by the time the head is delivered. The pains are inefficient to deliver the large body. One shoulder is caught above the symphysis at the angle of the parturient canal, the other is at the promontory of the sacrum or slightly below it. The head of the child is extended and laterally flexed at a right angle to the trunk.

It is just this condition concerning which so little has been written and the best management of which is not to be found in any text-book. It is plain that this position of the child is one of great danger; for the pressure of the maternal parts upon the body of the child without any corresponding pressure upon its head soon leads to death from asphyxia or effusion within the skull. We are all familiar with the cyanotic face and the pouting lips of a child in this position. Jacquemier, the first to mention this variety of dystochia, lost twenty children in twenty-six cases; and Parvin says, (Science and Art of Midwifery, p. 435,) "I have met with this hindrance to delivery in three cases in which the child could not be extracted soon enough to prevent death."

Treatment.—Jacquemier, who as has been said, was the first to make a special study of this condition, advises bringing down the arms by extending them over the head. This procedure is acknowledged by himself and other writers to be difficult and to cause fracture of the arms. Hodge advises pressing the child's neck against the symphysis and in this manner bringing the posterior shoulder to the edge of the perinæum. When the posterior shoulder appears the child is to be carried backward and the anterior shoulder disengaged. Parvin advises traction with the finger in the axilla of the perineal shoulder or with the finger in each axilla. Lusk advises traction upon the sides of the head, or with the finger in the axilla. Mann advises pressing the neck backward upon the perinæum with traction till the anterior shoulder appears under the symphysis, and then forward pressure till the posterior shoulder is born. This is all that is written upon the subject.

By means of any of these procedures we would be able to deliver in the great majority of cases, but in none of them does

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the proper rationale obtain. How does nature relieve herself in this condition? In the *Medical Record*, Vol. 37, p. 444, may be found the report of a case of impaction of the shoulders in which the pains were strong and delivery took place without external aid. In this case restitution was toward the right thigh of the mother. The face then turned backward toward the perinæum until it looked toward the left thigh. By this semi-revolution the posterior shoulder passed under the symphysis pubis and the anterior shoulder passed into the hollow of the sacrum. The mechanism was exactly analogous to that which obtains in most cases of occipito-posterior presentation of the vertex. This spontaneous rotation then is nature's solution of the problem and should furnish us a proper basis of treatment. Bearing in mind that the shoulders engage in the oblique diameter of the pelvis we should endeavor to rotate the child in the direction of the least resistance. And this direction will be that in which the anteriorly lodged shoulder passes away from the medial line of the mother and not toward it.

In practice this rotation will be best accomplished in this manner: Introduce the finger of the hand corresponding to the maternal thigh toward which the child is looking. If the restitution has been toward the right thigh use the right hand and conversely. The finger thus introduced will enter the axilla of the posterior shoulder on its dorsal aspect. Pull the shoulder sidewise and toward the symphysis. Don't push, but pull. Make the dorsal side of the posterior shoulder the advancing surface. In this way the anterior shoulder is pushed away from the symphysis and is not crowded against it. Passing into the transverse diameter the shoulder glides into the hollow of the sacrum, thence to sweep over the perinæum.

This proposed method of unlocking the impacted shoulder is not mere theoretical reasoning, but has stood the test of actual experience. Previous to its adoption I had had one case of paralysis of the arm from injury to the brachial plexus caused by traction on the head. I had also lost a child from asphyxia during delay while trying in succession the methods given in the books. Since the adoption of this manœuvre, I have had neither accident nor difficulty.

DISCUSSION.

Dr. Jewett:—Mr. President, we are indebted to Dr. Kortright or something new in the obstetric procedure and for a very lucid explanation of the technique. The difficulty in the cases in ques-

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tion consists in the fact that the anterior shoulder is fixed behind the pubes. Dr. Kortright's manœuvre is an easy method of releasing it and unlocking the difficulty.

The little things of practice receive too little attention. Yet so simple a measure as that which has just been proposed, has a far greater value as a life-saving procedure than most capital operations to which much more *éclat* attaches. The man who saves a life in this unpretentious way is entitled to the same credit as he who saves a life by Cæsarean section. The capacity for attention to detail which is shown in the experience just related is a talent which is none too common.

In regard, however, to the management of the complication to which the paper alludes, I have been accustomed to depend upon a method something like this: When the posterior shoulder presents I lift the head well towards the mother's abdomen. I then place the fingers in the posterior axilla and lift that shoulder over the edge of the perinæum, pushing the perinæum gently back. The posterior arm can then be released. When this has been accomplished, the other shoulder may be delivered usually with no difficulty. In other words, I deliver in detail, the entire bisacromial diameter never being allowed to engage at one time. This method has always served my purpose; yet I fully recognize the fact that there may be cases so difficult that it may fail; and I heartily commend the method of Dr. Kortright and shall hold it in readiness for use when the other does not serve.

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