ON THE MANAGEMENT OF FACE PRESENTATIONS.

BY

EDWARD L. PARTRIDGE, M.D.,
Prof. of Obstetrics in the New York Post-Graduate Medical School.

In this short paper I wish to direct attention to the management of labors in which the fetus presents by the face.

I have selected this subject, first, because I regard it as worthy of more than the cursory mention given it by obstetric authors; secondly, because I hope to acquire information from the experience of those members of the profession who may have met with such cases

There is no great disparity in the views of obstetricians upon the *etiology* of face presentation. Certain clinical facts, in connection with face cases, present themselves with frequency too great to permit them to be regarded in the light of coincidence. We are led to conclude that the transformation

from vertex to face presentation occurs late in pregnancy, generally taking place in the ten days or two weeks immediately preceding labor. During this time there is a settling down of the uterus and its contained fetus upon and into the pelvic brim, and the occurrence of uterine contractions, varying irregularly, but notably more marked than those which occur during pregnancy up to this time. These contractions are often sufficiently severe to produce more or less irregular pain.

According to the prevailing opinion, the elements which, in the majority of cases, favor extension of the head and descent of the face, are uterine obliquity, a dolichocephalic child, and hitching of the occiput upon the brim of the pelvis. Lateral, uterine obliquity, to have an influence in the production of face cases must be toward that side of the abdomen at which the occiput originally, the forehead at a later stage, lies. If such obliquity is present, and especially if of a marked character, it happens occasionally that, as the head descends and impinges upon the soft structures at the pelvic brim, the occiput, which is the most advanced part of the head, hitches upon them, the natural position of flexion of the head on the thorax is overcome, and finally the head reaches a condition of extension and the face is then the presenting part. That an unusually long occiput (which characterizes the dolichocephalic fetus) should greatly favor the occurrence of these phenomena is obvious.

In order to better illustrate certain other points in connection with my subject, a brief narration of cases will be of service.

Case I.—Primipara, age twenty-seven, labor at term. Membranes ruptured and liquor amnii discharged twelve hours before the occurrence of pains. When the os would admit two fingers, the presentation and position were determined to be face, with chin posterior and to mother's right, brow anterior and to the left. The pains were short, occurring at long intervals. When the os was nearly dilated, chloroform was administered, my right hand passed into the vagina, and by conjoined manipulation the child's head was flexed on its body and a left occipito-anterior position thereby established. The manipulation required the introduction of the fingers only into the uterus. The palms were passed over the occiput, and, by slight downward traction, the change in the presentation was easily effected. The left hand

assisted in the maneuvre by external upward pressure, lifting, to some extent, the head out of the pelvis. During the next three hours the presentation showed no disposition to alter, but no advance was made as the pains were as inefficient and infrequent as before. Remaining in the house, I retired to bed, to be called when the pain increased in severity. Six hours later, however, the uterine contractions had not improved and a face presentation again existed, with position as originally described. Chloroform was again administered and the operation of inducing flexion of the child's head was again successfully performed. The forceps were immediately applied and the head brought well down in the pelvis. The instrument was then removed and good uterine action occurring, the labor terminated naturally in less than half an hour. Mother and child did well.

Case II.—Primipara, age fifteen, term labor. When the os had reached the size of a quarter of a dollar, the presentation and position were found to be face, with brow anterior and to mother's left side, the chin being situated to the right, posteriorly. The os having dilated, the patient was anesthetized and I succeeded in converting, with my hand, the face presentation into one of the first position of the vertex. The membranes ruptured when the hand was passed into the vagina. The case was now normal with respect to the presentation and position. Excellent labor pains followed and the head descended to the pelvic outlet. The escape of the head from the pelvis was opposed by an abrupt projection forward of the coccyx at the sacro-coccygeal articulation. No progress was made for some time during which, the patient being anesthetized, attempts were made to overcome the deformity by the use of all the strength that could be brought to bear by the fingers. The forceps were finally applied, and threequarters of an hour was occupied in delivery by this instrument. The child was still-born, weighing eight pounds. Examinations made immediately after labor, and again three weeks later, revealed the fact that the deformity was not relieved by the pressure of the child's head during its extraction. Puerperal convalescence was normal.'

CASE III.—Multipara, seen in consultation when the os was fully dilated and membranes ruptured. The physician in attendance stated that a complete face presentation had existed during the entire labor. He had been able to convert it into a vertex presentation, but in less than half an hour it became again one of the face. The head was still in the uterus and movable. Again giving chloroform, I also was able, without difficulty, to flex the head, by the manipulation described in the previous history, and in view of the tendency already shown, to a return to face presentation, the forceps were at once applied. While the instrument was applied, notwithstanding the reasonable use of traction,

¹ These cases were reported in the New York Medical Journal, March, '77, and occurred at the New York Infant Asylum.

with manual supra-pubic efforts to steady the head, the presentation again became face. Operative measures having been already somewhat prolonged, internal podalic version was performed with success. Convalescence was normal.

Case IV.—Second pregnancy, age twenty-three, term labor. In the first labor, a large child was delivered by the forceps by a well-known physician, the presentation being vertex, first position. When in this, the second labor, the os was half dilated, the presentation was found to be face, the chin being posterior and to the mother's left, the brow anterior and to the right. When the cervix was dilated, chloroform having been given, with the hand in the vagina, and fingers within the cervix, I succeeded in altering the presentation to that of vertex, second position, the membranes remaining unruptured after the operation. With the next pain, I ruptured them; the head promptly engaged, and descent took place. At the pelvic outlet, considerable delay took place, and the head was finally lifted past the ischial tuberosities with the forceps. Mother and child did well, the latter weighing ten and a quarter pounds.

Case V.—Primipara, age twenty-two, confined during my service at the Nursery and Child's Hospital, Dr. Nelson H. Henry, then resident physician, having charge of the case. The diagnosis of face presentation, chin posterior, was made early in labor. When the os was nearly dilated, chloroform was given, and Dr. Henry converted the presentation into that of vertex. This was accomplished by the introduction of the hand into the vagina, and the fingers in the uterus. The hand on the abdomen was unnecessary, and the membranes were not ruptured during the manipulation. The head commenced descent, and, twenty minutes later, the membranes were ruptured. Labor terminated

successfully, the child weighing eight pounds.

It will be apparent from these histories that the feature in the treatment, to which I would call especial attention, is the change of an unnatural presentation to a normal one; and two questions arise in this connection. First, in view of the circumstances which commonly attend labor complicated by presentation of the child's face, is it desirable to effect a change from face to vertex presentation? Second, is the operation itself easy of performance and free from near or remote danger to the mother or child?

The prognosis in face presentation, as agreed upon by all obstetric writers, is that labor may be expected to be prolonged, with the usual risks attending delay, though, in the great majority of cases, the result is favorable. Lusk says: "Though spontaneous delivery is the rule in face presentations, the dangers to both mother and child are considerably greater

than in vertex presentations. The causes of the less favorable prognosis are to be looked for in the increased peripheral head measurements, which engage successively in the different planes of the obstetric canal, and consequently, from the increased reciprocal pressure exerted between the head and the soft parts, and partly from the compression of the veins of the neck by the anterior wall of the pelvis. Though the average length of labor does not much exceed that with normal presentations, the duration is more readily affected by minor disturbances, such as weak pains, moderately contracted pelves, and rigidity of the obstetric canal. At the same time, the prolongation of labor in these cases is attended by more disastrous consequences, and calls more frequently for the resources of art to complete the delivery." One child in every nine or ten is still born, and Winckel states that the mortality to the mother is six per cent. If the chin remains persistently posterior, death of the child is almost certain and delivery usually impossible, unless there is reduction in the size of the head by cephalotripsy. These are the opinions generally accepted. Remembering these statements, it may be noted that change in the presentation from face to vertex removes at once all the elements of danger enumerated, and if labor progresses without other complications, we have to deal with a normal condition of affairs. What need can there be for farther argument upon the propriety of the operation if it can be shown to be reasonably easy and safe?

Returning to a consideration of our five cases, we observe that seven attempts were made, by three different operators, to effect the desired alteration of presentation, and all were successful. Four times the operation was performed in primiparæ, and four times when the liquor amnii had previously drained away, yet no increased difficulty was thereby encountered.

The conditions especially favorable to the operation may be stated as follows: An os nearly or quite dilated; a face not engaged in or at least capable of being readily lifted from the pelvic brim; an unruptured bag of waters; a capacious vagina. In the majority of labors, a stage is reached when there are present these conditions. Chloroform to relax the structures of the parturient canal, to quiet the movements of the patient,

and to obviate pain which would attend the introduction of the hand into the vagina, is of primary importance. The manipulation requires the presence of the fingers only in the uterus, and does not involve any laceration of the cervix. Passing the palms of the fingers over the occipital bone, and pressing them firmly against it, traction downward should be made. In our endeavors, flexion of the head almost immediately commenced and quickly became complete. The other hand aided greatly by external manipulation. In two of the three instances in which the membranes were unruptured at the beginning of the operation, they remained unbroken at its completion, showing how simple the operation can be. It will be observed, however, that in two instances there was subsequent return to face presentation, after a change to vertex had been effected.

This is probably owing to a lack of tone in the muscles which should flex the head on the thorax, consequent upon the previous state of extreme extension of the head which had continued for some time, there being still in force, to a considerable extent, the factors which originally created the face presentation.

I would recommend, therefore, that watchful attention be given to every case until after engagement of the vertex in the pelvis takes place, and, if a tendency to a return of the original face presentation be observed, the forceps be employed simply for the purpose of engaging the head.

We met with but one instance in which it was impossible to maintain the normal, vertex presentation, after its substitution for the face.

I think the method of operating which I have described has decided advantages over those of Baudelocque, Clark, Hodge, and Schatz, all of whom aimed to alter, by various manipulations, face presentation to that of vertex.

Baudelocque advised an attempt to make such change as soon as two fingers could be introduced into the os. Such an attempt must be attended with great difficulty, and by much unnecessary, and perhaps dangerous, stretching and laceration of the cervix. Moreover we would be somewhat prone to meet with a return of the face presentation—if a change had been accomplished, because the factors originally causing the presentation of the face would still have their influence. If flexion was secured by his operation, a considerable time would elapse before

the completion of the first stage of labor, and engagement of the head in the pelvic brim. This period would afford sufficient time for catching of the occiput upon the structures superjacent to the inlet of the pelvis, and reproduction of face presentation if there was uterine obliquity or the dolicho-cephalic form of cranium.

Clark and Hodge hoped to change the face to the vertex by upward pressure on the malar bones, after the head, presenting by the face, had descended into the pelvis. No great success has attended such efforts in the hands of others, while the possible danger of establishing a brow presentation has deterred many from undertaking the procedure.

Schatz attempts to correct face presentation by external manipulation only. He recommends grasping the child through the uterine and abdominal walls. The fetus is to be lifted upward until the presenting part is liberated from contact with the pelvic brim, and the uterus straightened until its axis is in the median line of the woman's body. The child's breech is then pressed forward with one hand, while the other hand, placed against the upper and anterior part of the child's thorax, pushes this part of the body backward.

When semi-flexion of the head is believed to be gained by these maneuvres, downward pressure upon the child will, he claims, completely restore the presentation to that of vertex. Theoretically viewed, this plan is ingenious and attractive, but I think there can be extremely few cases in which the fetus, surrounded by liquor amuii, can be thus manipulated through resisting uterine and abdominal parietes.

In conclusion then, I should say that the method employed in my cases is easy, is reasonably sure of success, and free from danger. It requires the introduction of the fingers only into the uterus—little more of a procedure than that often required in a thorough examination of a presenting part. If the manipulation is successful, there will be no occasion for tedious and uncertain endeavors recommended to assist in rotation of the chin forward, if it be directed posteriorly. We are spared the necessity, perhaps, for the use of the forceps, version, or even craniotomy. It must be remembered also that we cannot predetermine whether or not a chin, which enters the pelvis posteriorly, will rotate anteriorly during descent. If failure

600 RICHMOND: Operation for Atresia Vaginæ.

attends our efforts, the case cannot have been complicated by them, for we have simply the original condition with which to deal.