TECHNIQUE OF DELIVERY OF THE AFTER COMING HEAD IN BREECH PRESENTATION

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SUMMARY

Between January 1989 and December 1992, fifteen cases of difficult breech deliveries were done with the head arrested at the pelvic brim in anterior-posterior position. There was one perinatal mortality. Ten premature dead babies were also delivered with an average time of 6.2 ± 2 hours. Cervical dilatation at the time of the procedure ranged between 4 to 6cm. All the deliveries were done in Korle-Bu Teaching Hospital, Accra, Ghana. The technique of delivery is described.

INTRODUCTION

When the pelvic or podalic extremity of the fetus lies at the brim of the pelvis and the cephalic extremity at the fundus, the presentation is called a breech.[1] The management of this presentation remains controversial. It is generally agreed that higher rates of neonatal morbidity and mortality are associated with breech presentation than with cephalic presentation at all gestational ages and birth weights.[2] There is less agreement as to what can be done to eliminate the risk for the infant in breech presentation at the time of delivery. Cesarean section has been advocated for delivery of both the preterm[3] and term[4] breech presentations. Other Obstetricians perform cesarean section for all primigravidas with breech presentation. All these measures aim at reducing the increased perinatal mortality rate following vaginal breech delivery.[5]

Normal delivery of the after coming head in breech could be accomplished by Mauriceau-Smellie-Veit, Burns Marshall method or by the use of the Obstetric forceps when the head is in the pelvic cavity. The more challenging to the Obstetrician is when the head is arrested at the pelvic brim in an antero-posterior position with fully dilated cervix. Continuous traction on the head of the baby could lead to rupture of the uterus and two such cases have been reported in our hospital during the past four years.

We present management of the after coming head:

(a) arrested at the pelvic brim with a live and average baby.[6]
(b) delivery of the after coming head in dead premature baby with undilated cervix.

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PATIENTS AND METHODS

Between January 1989 and December 1992, there were 30,589 number of total deliveries with 946 number of breech deliveries. Hospital records show 2,378 still births from total deliveries. All deliveries were done in the Korle - Bu Teaching Hospital, Accra, Ghana.

TECHNIQUE OF DELIVERY

A. Delivery of the after coming head arrested at the pelvic brim in a live and average size baby

Position the patient in the dorsal lithotomy position and drape with sterile towels. Empty the bladder if it had not been previously emptied and give an episiotomy.

1. Introduce one hand into the uterus anterior to the fetus and fix the middle finger in the mouth. Place the forefingers over the upper jaw on each side of the nose. In this position of the fingers the head is maintained in an attitude of flexion.
2. Place the ring and little finger of the other hand over the child's right or left shoulder and the thumb over the other shoulder. Use the middle and forefingers to push up the occiput. By this arrangement of the hands the spinal column is splinted and traction and turning movements on it will be reduced to a great extent.
3. Gently turn the baby's body sideways as in Figures 1 and 2 so that the antero-posterior diameter of the baby's head lies parallel to the transverse diameter of the maternal pelvis.
4. Apply a suprapubic pressure to further flex the head and push it into the pelvis.

Figure 1

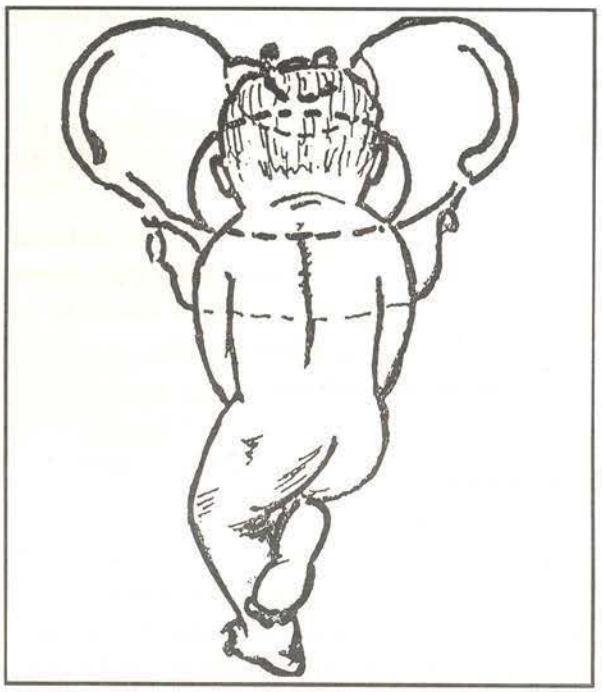
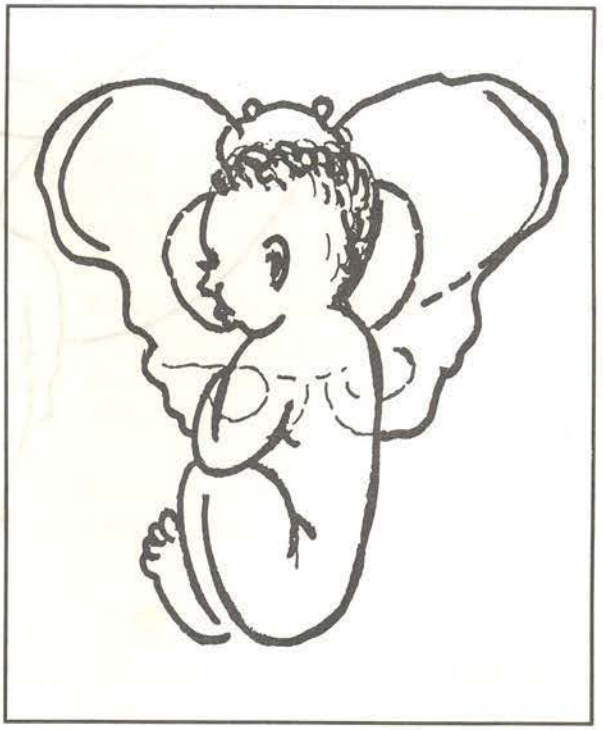


Figure 2



B. Delivery of the after coming head in dead pre-mature baby with undilated cervix.

1. Position the patient in the dorsal lithotomy position and pass a urinary catheter to empty the bladder.
2. Tie a bandage to the ankle of the fetus and hang 500ml of any bag of intravenous fluid on the leg of the baby (Fig. 3). There should be no further attempt to deliver the baby.
3. Give adequate sedation.

RESULTS

Fifteen (15) live breech deliveries were done with our method with one mortality. The average Apgar score was 6.0 ± 2.5 kg and an average birth weight of 3.0 ± 0.6 kg. The mothers and the babies were discharged after 24-48 hours in good health.

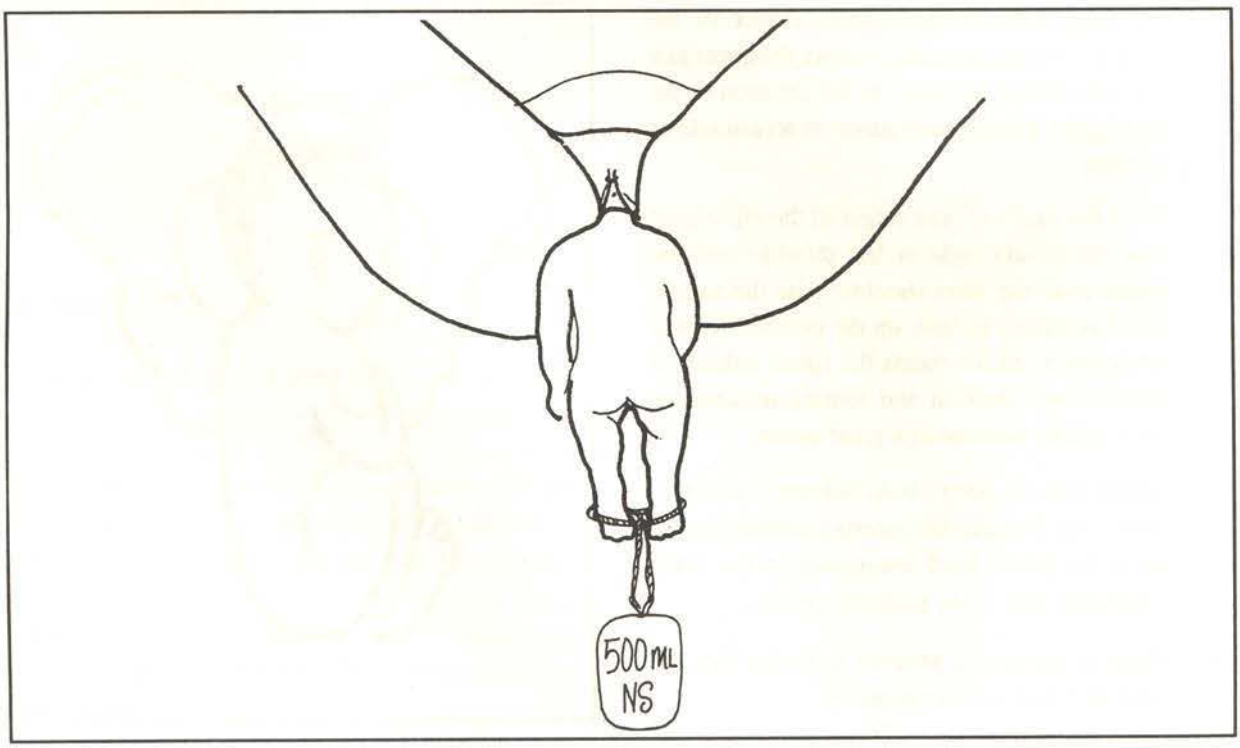
Ten (10) premature dead babies were delivered with an average time of 6.2 ± 2 hours. Cervical dilatation at the time of the procedure ranged between 4 to 6cm.

DISCUSSION

The problem of a vaginal delivery in breech is that the largest and the least compressible part of the baby comes out last. A delay in the delivery of the head could result in intra-partum asphyxia and death if steps are not taken quickly to remedy the situation. If the head fails to enter the pelvic brim in the antero-posterior position and continuous traction is applied, the occiput hooks around the pubic symphysis and stretches the uterus, and this might result in rupture of the uterus.

The inlet pelvic straight may be considered as an

Figure 3



oval hoop with the longest diameter lying transversely, 13.6cm, compared to the anteroposterior diameter of 11.5cm.[7] Turning the baby transversely would present a larger diameter to the fetal head and thus engagement becomes easier. As the head enters the pelvic cavity the Obstetric forceps, Burns Marshall or the Mauriceau-Smellie-Veit methods could be used to deliver the head.

Continued failure of the fetal head to engage might be an indication for symphysiotomy as described by Hartfield (1973), Philpott (1980) and Gebbe (1982). Others use such bizarre measures as replacing the body of the baby and proceeding to Caesarean section, as documented by Iffy,[11] but their case succeeded because the uterus was still distended by the second twin. To minimize the morbidity and mortality from asphyxia and birth trauma, the following criteria should be met before attempting vaginal breech delivery:[12]

1. Fetuses should present in the frank position and weigh less than 3800gm.
2. The fetus must not have a hyperextended head on abdominal radiography.
3. The maternal pelvic diameters should be adequate.

In cases of the dead premature baby with undilated cervix, some obstetricians perform multiple cervical incisions[13] and/or cervical digital dilatation. Both methods carry risks of damage to neighbouring structures through tears or incisions extending beyond the vaginal vault and these could cause severe haemorrhage. One must bear in mind that with the birth of each arm and with the fetus hanging by its neck, uterine contractions now have little or no effect on the further descent of the head but rather gravity and bearing down efforts cause the baby to descend.

Patience is, therefore, needed especially if the cervical Os is not fully dilated in the presence of a dead baby. Further attempt of traction on the baby and digital dilatation of the cervix might cause uterine rupture. These unfortunate situations could be avoided if the method we described is mastered and practised.

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