LEADING ARTICLE

BREECH PRESENTATION AND DELIVERY

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Infants presenting by the breech are well-known to have a higher incidence of congenital defects compared with their peers presenting by the vertex, some estimates being as high as 3-5 times[1-3]. Coupled with this is the increased frequency of prematurity in such infants[1,4] thus compromising their well-being, especially in earlier times when management of such premature infants was relatively inadequate. Moreover, such infants encounter greater hazards during the process of delivery, with greater incidence of birth trauma, asphyxia and intrapartum death than their cephalic peers[1,2,5]. This was especially marked in the early days when vaginal delivery was almost always the route of delivery practised as Caesarean section was accompanied by high rates of morbidity and indeed mortality.

With improvements in the 1960s and 1970s resulting in increasing safety of operative delivery, Caesarean sections were liberalised resulting in increased numbers of foetuses presenting by the breech being delivered by this route; this was exemplified by the study of Hall and Kohl[6] that concluded that Caesarean section resulted in the lowest perinatal mortality, and led to the policy in many centres of Caesarean section being the route of choice for the delivery of any foetus of more than 35 weeks' gestation presenting by the breech[7]. Indeed the use of Caesarean section up till a frequency of 30% has been demonstrated to result in a proportionate decline in morbidity and mortality rates in such cases[8]. Beyond this point, no further decline in these rates was observed with a further increase in section rates. Indeed another study demonstrated no improvement in results even when section rates increased to 94%[9].

Caesarean section, though much safer now, is however still not without morbidity or even mortality in the mother[5]; hospital stay is also prolonged with greater inconvenience and increase in costs. Where congenital malformations of a lethal nature occur, such a procedure would not only appear to be wasteful as well as futile but also to cause unnecessary expenditure, frustration and pain. Besides, delivery of the infant during section can also be equally traumatic[5] especially if poorly or hurriedly performed. The infant has to be delivered by breech extraction through the incision which if made too tight, can compromise the well-being of the infant; the situation is further aggravated in an emergency with the foetus already in distress. Our own observation regarding such infants has also confirmed such a finding.

The risks to the baby are quite considerable in a breech presentation, with placenta praevia, abruptio placentae, cord prolapse and prematurity being markedly more frequent when compared with vertex presentation. Hence increased risks occur during labour and delivery; they range from birth asphyxia especially when cord prolapse occurs to severe birth trauma and perinatal death[1]. Trauma can range from brachial palsy which in our series was 175 times more frequent in the vaginally delivered breech compared with the vertex delivered infants[10], cephalhaematoma[11] especially over the occipital region, contusions and abrasions to the genitalia especially in males[12], to bone fractures, lacerations and even intracranial haemorrhages; this is particularly important with premature infants since the effects of such complications (which tend to be more frequent) would be much more severe and life threatening. Indeed the morbidity and mortality rates are markedly higher in such premature infants delivered vaginally[13] when compared with similar infants delivered by Caesarean section. Hence great care and circumspection are necessary to ensure a favourable outcome during delivery.

In spite of the many approaches in the management of breech presentation, morbidity and mortality rates are still higher compared with vertex presentation, indicating that no clear solution to this problem has as yet been found. With improvements in antenatal diagnosis, foetal malformations especially the major forms can be detected fairly accurately, though the minor forms might still be problematic; the latter should, however, not influence the overall management of the labour. Careful evaluation in such a situation is mandatory; a structured regime with guidelines indicating favourable conditions for vaginal delivery as well as situations where Caesarean section is required should be clearly spelled out. While vaginal delivery in breech presentation still has a place in the obstetric management of patients, safe and practical criteria for this mode of delivery should be established. The criteria should include pelvic adequacy (confirmed by radiologic examination), coupled with facilities for close and careful assessment of the labour in conjunction with continuous electronic foetal monitoring to constantly determine foetal status. The availability of facilities for immediate Caesarean section has an important bearing on the regime practised. Presence of such facilities would justify a more liberal and adventurous attitude with even a trial of labour allowed with close monitoring if the majority of parameters are favourable[14], a more restrictive, circumspect and cautious approach should be adhered to if such alternative treatment is not immediately available[15]. Such an approach can result in a neonatal outcome comparable to that of Caesarean section[14,16].

Where the indications for Caesarean section are obvious, then section should be performed at the appropriate moment with minimal delay. Careful obstetric monitoring of mother and foetus coupled with appropriate expertise without heroics, and backed up by facilities for efficient immediate Caesarean section can usually result in a happy outcome. Efficient and effective neonatal service including resuscitation of the neonate, on standby during delivery is a prerequisite for effective and successful management of the infant after breech delivery or extraction. The presence of all these vital pre-conditions will go a long way towards ensuring a happy and satisfying outcome.

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