Maternal and Fetal Complications Associated With Full Term Breech Delivery in Sandeman Provincial Hospital, Quetta

MARYAM SHOAIB1, UZMA AFRIDI2, ZILL-E-HUMA3, SOHAIL TAREEN4

ABSTRACT

Objective: To identify the complications and risk to the mother and fetus.

Patients and Methods: This study was comprised 137 pregnant women. It was carried in the Department of Gynae & Obstetrics, Sandeman Provincial Hospital, Quetta between January 2006 to December 2007. All booked and non-booked patients with breech presentation were meticulously evaluated. Patients who conformed to set criterion for vaginal delivery were carefully scrutinized during the course of labour. Caesarean section was performed in both booked and non-booked cases, depending upon the conditions with which the patient present itself.

Results: In this study, breech presentation was more common in multigravida. Incidence of breech presentation at term was high. Most of the cases were singleton breech deliveries. Out of 105 cases of breech presentation delivered vaginally, 75 (71.4%) were assisted breech deliveries. Twenty one (20%) of the patients had spontaneous delivery. The maternal complication of vaginal delivery were seen in 8 patients as extended episiotomy in 2 cases, cervical tear in 2 cases, vaginal laceration in 3 cases and post-partum haemorrhage due to retained placenta in only one case. A total of 38 perinatal deaths occurred in the study, of which 35 occurred among vaginally delivered infants and 3 among infants delivered by caesarean section.

Conclusion: The perinatal and maternal morbidity was high among emergency cases. There was high incidence of congenital anomalies associated with breech presentation.

Key Words: Breech presentation, Full term pregnancy, Complication, Incidence

INTRODUCTION

Despite the widespread acceptance that breech babies should be delivered by caesarean section, it has not been proven to be safer for the baby than natural active breech birth. An international multi-centre Term Breech Trial is currently being undertaken to look at the question of which is the better approach for management of the breech baby at term: planned caesarean section or planned vaginal birth. Breech presentation is a longitudinal lie and occurs when the fetal pelvis or lower extremities engage in the maternal pelvic inlet. Breech presentation is the most common of malpresentations, occurring in 3-4% of all term deliveries. The fetus may adopt breech presentation because of many factors. The management of term breech infant is a significant challenge to the obstetrician. Many centers have adopted the universal policy to delivery all women with breech presentation by caesarean section without any benefit to the mother and fetus. About 40% of breech presentation could be delivery vaginally without endangering the neonatal outcome, but also in term of maternal outcome vaginal delivery is the better option. There have been a lot of controversies over the best mode of delivery of breech fetuses. Breech presentation is associated with higher incidence of operative delivery. Use of external cephalic versions (transabdominal conversion of breech to cephalic presentation) is effective as: it reduces rate of breech delivery and caesarean section. Successful external cephalic version is the only effective way to avoid cesarean section in breech presentation. It is a procedure that externally rotates the fetus from breech presentation to vertex presentation. External version has made a resurgence in the past 15 years because strong safety record and success rate of about 65%. This may be good therapeutic approach for decreasing percentage of breech presentation at delivery. It has been seen in years that caesarean section does not eliminate the risks to the fetus which are associated with vaginal breech delivery. Whereas it puts the mother to the additional risks associated with caesarean section like risks of anaesthesia, haemorrhage and sepsis. Therefore, it is the need of the day, that patient with breech presentation should be given the chance to delivery vaginally, provided they are carefully assessed and managed by an experienced obstetrician in a fully equipped unit with all the facilities of intensive neonatal care.

PATIENTS AND METHODS

The study including 137 pregnant women, was carried in the Department of Gynae & Obstetrics, Sandeman Provincial Hospital, Quetta between January 2006 to December 2007. All booked and
non-booked patients with breech presentation were meticulously evaluated. Patients who conformed to set criterion for vaginal delivery were carefully scrutinized during the course of labour. All the booked patients were carefully assessed in outpatient department by the consultant for the determination of correct route of delivery. Non-booked cases were assessed in the manner as they were received in emergency and in labour. Caesarean section was performed in both booked and non-booked cases, depending upon the conditions with which the patient present itself. The route of delivery in these patients was decided clinically by fetal weight estimation and clinical pelvimetry.

RESULTS

Out of 105 cases of breech presentation delivered vaginally, 75 (71.4%) were assisted breech deliveries. Twenty one (20%) of the patients had spontaneous delivery. Breech extraction was performed in 9 patients of which, 6 breech extractions were performed for retained second twin and 3 for dead fetus. In 68 patients Mauricea-Smellie-Veit method was performed for the delivery after coming head, as most of the cases are received in emergency and forceps are not at hand (Table 1).

Table 2 showed that maternal complication of vaginal delivery were seen in 8 patients as extended episiotomy in 2 cases, cervical tear in 2 cases, vaginal laceration in 3 cases and post-partum hemorrhage due to retained placenta in only one case.

A total of 38 perinatal deaths occurred in the study, of which 35 (76.6%) occurred among vaginally delivered infants and 3 (23.4%) among infants delivered by caesarean section (Table 3).

Table 1: Mode of vaginal breech delivery (n=105)

<table>
<thead>
<tr>
<th>Mode of delivery</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assisted breech delivery</td>
<td>75</td>
<td>71.4</td>
</tr>
<tr>
<td>Spontaneous delivery</td>
<td>21</td>
<td>20.0</td>
</tr>
<tr>
<td>Breech extraction</td>
<td>9</td>
<td>8.6</td>
</tr>
</tbody>
</table>

Table 2: Maternal complications associated with breech vaginal deliveries (n=8)

<table>
<thead>
<tr>
<th>Complication</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extended episiotomy</td>
<td>2</td>
<td>25.0</td>
</tr>
<tr>
<td>Cervical tear</td>
<td>2</td>
<td>25.0</td>
</tr>
<tr>
<td>Vaginal laceration</td>
<td>3</td>
<td>37.5</td>
</tr>
<tr>
<td>Post-partum haemorrhage due to retained placenta</td>
<td>1</td>
<td>12.5</td>
</tr>
</tbody>
</table>

Table 3: Perinatal death in vaginal breech delivery versus caesarean section

<table>
<thead>
<tr>
<th>Mode delivery</th>
<th>No.</th>
<th>Perinatal death</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaginal breech delivery</td>
<td>105</td>
<td>35</td>
<td>76.6</td>
</tr>
<tr>
<td>Caesarean section</td>
<td>32</td>
<td>3</td>
<td>23.4</td>
</tr>
<tr>
<td>Total</td>
<td>137</td>
<td>38</td>
<td>100.0</td>
</tr>
</tbody>
</table>

DISCUSSION

Breech presentation is a clinical problem, the mode of delivery of which remains a controversial issue among obstetricians. In present study the incidence of breech presentation is 3.41 which is nearly equal to the incidence of 3%10. This incidence does not represent the general population because very few cases are able to reach the hospital as most of the patients are delivered at home by traditional birth attendants. In the present series, out of 137 patients presenting with breech, 105 were delivered vaginally (Table 1), 85 patients were booked and allowed to go through the trial of labour. These patients were followed throughout their labour and delivery. Those who did not meet the criteria underwent caesarean section. External cephalic version protocol affected a significant decrease in breech presentation at term, from 3.9-2-4%, with a decrease of 5.5% in the overall caesarean section rate. Identification of breech presentation after 36 weeks, and utilizing external cephalic version, can reduce the rate of breech delivery and improves perinatal outcome11-13.

In our study, 76.6% patients were delivery vaginally and 23.3% patients were delivery by caesarean section (Table 3). In breech presentation caesarean section rate is 63.6%. Fetal morbidity was not different with either mode delivery. Maternal morbidity and length of hospitalization were significantly higher in women who required caesarean section, compared with those delivered vaginally. No difference was found in terms of low Apgar score and neonatal care intensive unit admission14-16.

CONCLUSION

It was concluded that there is still a room for vaginal delivery in a properly assessed patients managed by an experienced obstetrician and mode of delivery of patients with breech presentation is debatable issue and varies from unit to unit. I feel that a fair chance of vaginal breech delivery should be given to appropriately selected patient especially primigravida.
REFERENCES