Caesarean Section at Full Dilation (CSFD) occurs in 2% of all births and is the most common cause of difficult delivery of the fetal head, which leads to significantly higher morbidity for mother and baby (1,2,3,4). Fetal Pillow is a simple device that consistently elevates the fetal head and reduces morbidity (5).
Fetal Pillow® is intended to elevate the fetal head and facilitate delivery of the fetus in women requiring a Caesarean Section at full dilation or those requiring a Caesarean Section after a failed instrumental vaginal delivery. Fetal Pillow is indicated for use at a gestational age ≥37 weeks.

**Simple**
Fetal Pillow is very simple to use. It is inserted during patient preparation and inflated with 180mls of saline to elevate the fetal head.

**Safe**
Fetal Pillow enables a gentle, consistent and controlled elevation of a deeply engaged head. It is designed to ensure safe and easy delivery of the fetal head.

**Effective**
Fetal Pillow reduces intra-partum and post-partum complications for mother and baby (5,6,7).

Fetal Pillow is included in:
- The Royal College of Obstetricians and Gynaecologists Operative birth simulation training programme (8)
- The Royal Australian and New Zealand College of Obstetricians and Gynaecologists guidance (9)

A Randomised Controlled Trial of 240 patients shows significantly easier delivery of the fetal head and reduction in maternal morbidity when Fetal Pillow is used

**Reduction in Maternal Morbidity (5)**

<table>
<thead>
<tr>
<th></th>
<th>Fetal Pillow</th>
<th>No Fetal Pillow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urinary Retention</td>
<td>2.5%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Blood loss &gt;1000ml</td>
<td>4.2%</td>
<td>27.2%</td>
</tr>
<tr>
<td>Blood transfusions</td>
<td>4.2%</td>
<td>18.3%</td>
</tr>
</tbody>
</table>

- 77% reduction in urinary retention
- 71% reduction in blood loss >1L
- 72% reduction in blood transfusion

**Reduction in Fetal Morbidity (5)**

<table>
<thead>
<tr>
<th></th>
<th>Fetal Pillow</th>
<th>No Fetal Pillow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apgar score ≤3 at 5 mins</td>
<td>0.00%</td>
<td>6.70%</td>
</tr>
<tr>
<td>NICU admissions &gt;48hrs</td>
<td>6.70%</td>
<td>23.1%</td>
</tr>
</tbody>
</table>

- 77% reduction in Apgar score ≤3 at 5 mins
- 62% reduction in NICU stay >48hrs

**Reduction in hospital resources used (5)**

<table>
<thead>
<tr>
<th></th>
<th>Fetal Pillow</th>
<th>No Fetal Pillow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating time (min)</td>
<td>32.7</td>
<td>53.9</td>
</tr>
<tr>
<td>Length of stay (days)</td>
<td>3.0</td>
<td>5</td>
</tr>
</tbody>
</table>

- 20 MIN reduction in operating time
- 1 Day reduction in length of stay

**Author’s Conclusion**

When the Fetal Pillow is readily available in the labor ward and is used during CSFD, this has benefits for women in this emergency, for doctors who have to manage them, and for hospitals that have to cope with the emergency. (10)
Use of Fetal Pillow to manage the complications associated with CS at full dilation can deliver significant financial savings.

COST IMPACT ANALYSIS NEW ZEALAND. Full Dilation Caesarean Section with and without use of Fetal Pillow based on data from the randomised controlled trial\(^3\)

- Total Saving of $2075 per patient*
- 36 hours of operating time saved
- 108 Hospital bed days saved

**References**


* Disclaimer: The sample costings and impact model are for illustrative purposes only. The actual costs might be higher or lower depending upon local practices and costs.