Effects of Birthing Positions on Perineal Injury

Emily Bailey, BSN Student & Crystal G. Bennett, PhD, RN
Dr. D.W. McMillan BSN Program, School of Nursing, Usha Kundu, MD College of Health, University of West Florida

BACKGROUND/SIGNIFICANCE

- Obstetric perineal trauma commonly occurs in vaginal births and is a variety of complications. These include difficulty maternal feeling, urinary and fecal incontinence, and pain. (H. Al-Zein et al., 2013)
- Trauma or severe pain that occurs during the birthing process has been related to interfering with the bonding process between the mother and baby. (H. Al-Zein et al., 2013)
- Episiotomies occur in an estimated 33% of all vaginal deliveries in the United States and is currently the most frequent type of surgery performed on women. (H. Al-Zein et al., 2013)
- The current positioning of women is greatly influenced by social and cultural norms regardless of the evidence presented related to numerous factors. (F. Dorgu et al, 2016)

CLINICAL QUESTION

Among laboring women delivering in the hospital, how do positions other than lithotomy position affect incidence of perineal injuries?

SEARCH STRATEGY

- The search strategy includes finding articles that are related to perineal injuries and birthing positions in vaginal births.
- Key Words: Perineal Injury, Labor Positions, Episiotomy
- Nursing & Allied Health Source, Cochrane Library, and Wiley Library databases were used.
- Exclusion criteria: articles prior to 2012, those not in hospital or birthing environment, Cesarean births

SYNTHESIS OF THE EVIDENCE

<table>
<thead>
<tr>
<th>Article #</th>
<th>Author and Date</th>
<th>Evidence Type</th>
<th>Sample Size</th>
<th>Study Findings</th>
<th>Limitations</th>
<th>Evidence Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gupta, J., 2017</td>
<td>Systematic Review with meta-analysis</td>
<td>7,280</td>
<td>Sitting in an upright position led to a reduction in the need for episiotomy compared to laying supine but resulted in an increase of second-degree perineal trauma</td>
<td>Bias within single study results</td>
<td>I B</td>
</tr>
<tr>
<td>2</td>
<td>Silva, F., 2012</td>
<td>Pre-posttest Quasi Experimental</td>
<td>1,079</td>
<td>The use of semi-sitting positions are often associated with second-degree lacerations and episiotomy. The use of laying down positions could reduce the risk of perineal trauma.</td>
<td>One birthing center, second stage of labor only</td>
<td>I B</td>
</tr>
<tr>
<td>3</td>
<td>Dorgu, F., 2012</td>
<td>Non-Experimental Study</td>
<td>8</td>
<td>Adopting an upright birthing position takes advantage of gravity and results in fewer episiotomies.</td>
<td>Recorded interviews influence communication, small sample size from similar region</td>
<td>II C</td>
</tr>
<tr>
<td>4</td>
<td>De Jonge, A., 2012</td>
<td>Pre-Posttest Quasi Experimental</td>
<td>1,646</td>
<td>Women in a sitting position were less likely to have an episiotomy but more likely to have a perineal tear compared to dorsal recumbent position.</td>
<td>Spontaneous vaginal delivery only</td>
<td>II B</td>
</tr>
</tbody>
</table>

FINDINGS

- 3 out of 4 found that women who gave birth in upright positions led to fewer episiotomies.
- 3 out of 4 articles concluded that birthing in an upright position increase the chance of second-degree perineal lacerations occurring.
- 2 out of 4 studies stated that using variation of positions laying down resulted in a reduction of perineal trauma, more specifically second-degree lacerations.

IMPLICATIONS FOR PRACTICE

- Placing a woman in an upright position puts her at decreased risk of needing an episiotomy.
- Placing a laboring mother in a supine position leads to a decrease in natural perineal lacerations.
- With more research and evidence a change in practice of deliveries may be needed.
- More studies are needed to explore the direct relationship of birthing positions to perineal injury.

SUMMARY

- Evidence on the association between birthing positions and perineal trauma is not conclusive. (A. De Jonge et al., 2012)
- In general, upright positions lead to a decrease use of episiotomies (F. Dorgu et al., 2012).
- Placing women in a position in which they must lay on their back, decreases their risk of perineal injury. (F. Silva et al., 2012)
- Evidence is inconclusive on the significance of harm that perineal lacerations compared to episiotomies have on the mother.
- Evidence on specific variations of upright or laying down positions have inconclusion relationship with perineal injury.

REFERENCES