The Relationship Between Birthing Positions and Perineal Trauma

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The Relationship Between Birthing Positions and Perineal Trauma

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QUESTION:
Are women of childbearing age, during vaginal labor, who give birth in non-flexible positions compared with those who give birth in flexible positions at an increased risk for perineal trauma?

BACKGROUND:
• Approximately 53% to 79% of vaginal deliveries result in perineal trauma in the US.
• The prevalence varies significantly from study to study.
• Perineal trauma during childbirth is seen to be an issue throughout the world.
• Perineal trauma, for the purposes of this study, is defined as damage to the mother’s genitalia during childbirth.
• Perineal trauma is classified based on the size and location of the perineal laceration and are listed from least extensive to more extensive.
• Risk factors related to perineal trauma during childbirth include shoulder dystocia, long second stage of labor, first vaginal birth, large baby, induced labor, or assisted births.
• Women who experience perineal trauma are at an increased risk for postpartum complications. These complications included: pain, bleeding, difficult posture, difficulty handling the baby, difficulty breastfeeding, urinary problems, elimination difficulties, and flatus.

NURSE IMPLEMENTATION:
• Nurses can use the information provided in this systematic review for education and to advocate for patient care.
• Giving patients birthing position options helps them to achieve autonomy.

STUDY

<table>
<thead>
<tr>
<th>Article</th>
<th>Study Title and Reference</th>
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<tr>
<td>Article II</td>
<td>“Maternal Position at Midwife-Attended Birth and Perineal Trauma: Is There an Association” (Barnes &amp; Soong, 2015)</td>
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<tr>
<td>Article III</td>
<td>“Perineal injuries and birth positions among 2992 women with a low risk pregnancy who opted for a homebirth” (Edqvist et al., 2016)</td>
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<tr>
<td>Article IV</td>
<td>“Maternal Position and Other Variables: Effects on Perineal Outcomes in 557 Births” (Meyvis et al., 2015)</td>
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DESCRIPTION

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Article I</td>
<td>This study analyzed 2,891 vaginal births and the relationships among birth position, type of provider, and perineal outcomes.</td>
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<tr>
<td>Article II</td>
<td>This study analyzed 3,756 births to address the relationship between maternal position and sustained perineal trauma in women who had spontaneous vaginal births and uncomplicated pregnancies.</td>
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<td>Article III</td>
<td>This study analyzed many factors related to planned home births, including birth positions, in 2,992 cases between 2008 and 2013.</td>
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<tr>
<td>Article IV</td>
<td>This study compares the lateral position to the lithotomy position with a focus on perineal trauma in 557 vaginal deliveries.</td>
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RESULTS

<table>
<thead>
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<tr>
<td>Article I</td>
<td>There appeared to be more incidence of perineal trauma in those who had given birth in the squatting position. However, there was not enough data to be statistically significant. The semi-recumbent position was the position that resulted in the most episiotomies performed.</td>
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<tr>
<td>Article II</td>
<td>The birthing position most correlated with perineal trauma was the semi-recumbent position. This study found that delivery on all fours resulted in significantly less perineal trauma.</td>
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<tr>
<td>Article III</td>
<td>The results of this study, in relation to birthing positions and perineal trauma, were primarily inconclusive.</td>
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<tr>
<td>Article IV</td>
<td>This study suggests that lateral position have a decreased likelihood of perineal trauma compared to the lithotomy position with a decline in perineal trauma by 47 percent.</td>
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FLEXIBLE BIRTHING POSITIONS

- Birth Seat
- Kneeling
- Standing
- All Fours
- Squatting

“Positions that take the weight off the sacrum” (Edqvist et al., 2016)

RESULTS:

- More research is needed.
- Article I & Article II both found the semi-recumbent (non-flexible) position to result in the most perineal trauma.
- Article I found the squatting (flexible) position to have potential increased risk for perineal trauma (not statistically significant).
- Article I and Article IV found the lateral (flexible) position to have a potential decreased risk for perineal trauma.

NON-FLEXIBLE BIRTHING POSITIONS

- Semi-recumbent
- Lithotomy
- Supine

Positions that apply weight to the sacrum (Edqvist et al., 2016)