# Effects of Birthing Positions on Perineal Injury

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#### BACKGROUND/SIGNIFICANCE

- Obstetric perineal trauma commonly occurs in vaginal births and has been related to a variety of complications. These include difficulty breast feeding, urinary and fecal incontinence, and pain. (H. Al-Zein et al., 2013)
- Trauma or significant 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 35.2% of all vaginal deliveries in the United States and is currently the most freuquent 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, Caesarian births



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### SYNTHESIS OF THE EVIDENCE

Question:		Picot Question					
Article #	Author and Date	Evidence Type	Sample Size	Study findings		Evidence Rating  Level/Quality	
1	Gupta, J., 2017	Systematic Review with meta-analysis	7,280	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 tears	_		B
2	Silva, F., 2012	Pre-posttest Quasi- Experimental	1,079	The use of semi-sitting positions are often associated with second-degree lacerations and episiotomy. The use of lying down positions could reduce the risk of perineal trauma.	One birthing center, second stage of labor only		B
3	Dorgu, F.,	Non-Experimental Study	8	Adopting an upright birthing position takes advantage of gravity and results in fewer episiotomies.	Recorded interviews influence communication, small sample size from similar region		C
4	De Jonge, A., 2012	Pre-Posttest Quasi Experimental	1,646	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.	Spontaneous vaginal delivery only		B

#### **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.

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