Reducing Perineal Tears: The Effect of Pushing Methods and Length of 2nd Stage of Labor

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Reducing Perineal Tears: The Effect of Pushing Methods and Length of 2nd Stage of Labor

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In women in the 2nd stage of labor (pushing stage), how does spontaneous pushing compared to instructed pushing affect perineal lacerations and length of 2nd stage labor?

1. Lacerations (tears) of the vagina and surrounding tissue commonly occur during delivery due to stretching forces from the baby passing through the birth canal.
2. 18% of obstetrical procedures are laceration repairs, even higher than the C-section rate. (CDC.gov)
3. Laceration effects: include pain, risk for infection, decreased mental/social well-being following delivery
4. 2 types of pushing methods:
   - Instructed (immediate): patient is advised to begin pushing methodically upon complete cervical dilation (10cm)
   - Spontaneous (delayed): the patient is encouraged to postpone pushing until she feels the urge (Prins et al, 2011)

This subject has not been adequately studied previously.

Evidence-Based Practice Question

Does spontaneous pushing decrease lacerations?

Does spontaneous pushing increase the length of 2nd stage of labor?

Registered Nurse Interview

The researchers interviewed an RN with about eight years of experience in a labor and delivery unit. The following questions were asked:

1. Is it better for mothers to push when they feel the urge?
   - When the woman feels the urge to push, she should be encouraged because it is difficult to suppress this urge.
2. Is it better for mothers to push only when directed in order to maintain steady pushing?
   - If the woman has an epidural and cannot sense the urge to push, maintaining slow, steady pushing is better because it more gradually stretches the birth canal.
3. Which type of pushing causes less severe perineal trauma?
   - There is no significant difference has been noticed.
4. Which method is typically practiced in this hospital?
   - Depends on the situation and preferences of medical personnel.

Synthesis of Evidence

Limited evidence was found concerning the direct influence of pushing methods on perineal lacerations.
- Only one study found a direct statistical difference between type of pushing and laceration rate. (Balogog et al, 2012)
- However, there is a relationship between lacerations and length of 2nd stage of labor:
  - Risk of laceration increases when the duration of 2nd stage of labor increases. (Aiken et al, 2015, Frey et al, 2012)
- Therefore, spontaneous pushing possibly increases the rate of lacerations.

Conclusion:

In women during the 2nd stage of labor, spontaneous pushing may decrease perineal lacerations, although it is unclear. However, spontaneous pushing does cause an increase in the length of the 2nd stage of labor, which increases laceration incidence. Therefore, spontaneous pushing may indirectly affect laceration rate.

Search Methods

Databases: PubMed, Cochrane Collection Plus, Cedarville University OneSearch, World Health Organization

Key words: perineal laceration, spontaneous pushing, instructed pushing, second stage labor, valsalva, labor and pushing

Inclusion criteria: childbearing age, scholarly articles, spontaneous vaginal delivery

Exclusion criteria: articles in languages other than English, articles published before 2010

References