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Erika Ellis

Pittsburg State University

Barbara McClaskey

Pittsburg State University

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SPONTANEOUS PUSHING VS DIRECTED VALSALVA PUSHING

Erika Ellis, Senior BSN Student

Barbara McClaskey, Faculty

Pittsburg State University

Abstract

The purpose of this literature review is to determine if spontaneous pushing during the second stage of labor produces better maternal outcomes than the more commonly used directed Valsalva pushing. To recommend that women go against their primal urges to push in the manner that their own bodies are directing them, indicates that there must be ample research-based evidence to suggest an intervention in the natural order of things and use Valsalva pushing instead. When in fact, there are several studies proving that women using spontaneous pushing experienced less pain, fatigue, and appreciated an overall more positive experience over directed Valsalva pushing. Another study revealed decreased bladder capacity and problems with the first urge to void three months postpartum after use of the Valsalva pushing technique. The only current evidence to support directed Valsalva pushing is due to a shorter second stage of labor, although, despite the shorter duration, the maternal and fetal outcomes were the same using both techniques. At this point in time there does not seem to be enough research-based evidence to recommend one pushing technique over the other, therefore the only recommendation should be to allow birthing mothers to push naturally, when their bodies instinctively tell them it is time to push.

PICOT

Population Affected: Expecting Mothers

Intervention: Spontaneous Pushing

Comparison: Directed Valsalva Pushing

Outcome expected: Improved Maternal Outcomes

Time frame for intervention: Second Phase of Labor

Background Information

An interesting fact shared by every study was that there is no record or knowledge of why the directed Valsalva pushing became such a common technique in labor and delivery.

Directed Valsalva Pushing

- Once the mother has reached 10 cm dilatation, she is instructed to hold her breath and push, as if she is straining to have a bowel movement. She is directed to push regardless of whether or not she feels the urge to push.
- This causes high abdominal pressure which is induced by the descent of the diaphragm, bringing with it the organs, putting pressure on not only the uterus, but also the perineum and pelvic floor. (Barasinski & Vendittelli, 2016, p. 2)
- May lead to the release of catecholamine, resulting in increased uterine blood vessel obstruction and decreased effectiveness of uterine contractions. (Chang et al., 2014, p. 826)

Spontaneous Pushing

- The mother is free to follow her own instincts in response to her physiological changes.
- She begins at a resting respiratory volume, pushes three to five times per contraction and takes several breaths between each bearing down effort. (Lemos et al., 2015, p. 2)
- Evokes increased release of oxytocin, which increases the effectiveness of contractions. (Lemos et al., 2015, p.2)



Study Limitations

- This study does not cover labor while under the influence of epidurals, as that can drastically change the mother's urge to push during contractions. Pushing methods along with epidural use is controversial and requires further exploration.
- This study does not directly involve fetal/neonatal outcomes, but the same experiments used here revealed no significant differences between techniques.
- As every study on this topic has many moving parts, it is difficult to narrow down improved outcomes to the method of pushing itself. The majority of Valsalva pushing takes place with the patient in the supine position, while spontaneous pushing tends to take place in the lateral or squatting positions. There is, also, less intervention with spontaneous pushing.

Comparison Studies

- A study published in 2016 comparing spontaneous pushing and directed Valsalva pushing, revealed a mean pain level of 7.8 versus one of 9.05, respectively, and an almost tripled level of fatigue when using the directed Valsalva method. (Vaziri, Arzhe, Asadi, Pourahmed, & Moshfeghy, p. 1)
- A study in 2010 found the women using spontaneous pushing “had a lower pain index (5.67 versus 7.15), lower feelings of fatigue post birth, a shorter duration of the second stage of labour (91 versus 146) and more positive labour experiences when compared to those using directed Valsalva pushing” (Chang et al, p. 825).
- A literature review performed in 2016 by Barasinski, Lemery, and Vendittelli did not find enough of a difference in outcomes to “justify recommendation of a particular pushing technique”; however they only considered physiologic injuries and did not cover pain, fatigue, or the woman's overall satisfaction.
- A study from 2011 reported significantly shorter second stage of labor in women using the Valsalva method, but these same women revealed that 3 months postpartum they experienced decreased bladder capacity and some incontinence related to their first urge to void. (Prins, Boxem, Lucas, & Hutton, p. 662)

Outcome

- Directed pushing requires the woman to ignore her bodily instincts and forces a transfer of control from herself to her caregivers. “The National Institute for Health and Care Excellence (2014) guidelines recommend that until further research is forthcoming, women should be encouraged to follow their own instinctive urge to push” (Hamilton, 2016, p. 90).
- The style of pushing during the second stage of labor should absolutely be evidence based, and unless there is a maternal or fetal complication, there is no evidence to prompt the use of directed Valsalva pushing. At this point in time, the evidence based research supports the use of spontaneous pushing to improve the experience of childbirth for the mother and her family.

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Contact

eellis@gus.pittstate.edu