

### ***Unhindered Steps***

#### *Prevention of Nerve Injuries during Childbirth*



“Unhindered steps” was born when I was four years old and my mother came home with a baby and a leg brace! She could not stand up unassisted after the birth, even though she had no previous issues. It was as if her left leg was paralyzed or something close to it. The happy event was marred by the significant issues my mother was facing in taking care of the newborn baby, me and even managing simple tasks for herself. We bore the added weight of having moved to a new state where we did not know anyone and family thousands of miles away. Panic set in as many of her care team had not treated anyone like her before. Physical therapy prescribed by her neurologist slowly helped her to get to 90% of her former strength. Later, as I grew up, I learned that she had suffered from nerve damage and foot drop, as a result of childbirth. Ob gyn related surgeries, including c-sections, can also cause nerve damage when the patient’s legs are placed in stirrups. But my mother’s condition as a result of a “non surgical” normal delivery does not happen very often. This condition may be rare but still has a lot of sufferers as a Facebook page dedicated to the condition has around 800 members, some of whom had suffered bilateral damage! As my interest in the medicine grew, so did my resolution to increase awareness of this debilitating condition and its prevention, if possible.

#### Prevention

##### For the Obstetrical team

- The majority of women in developed countries use regional anesthesia for pain control during labor and may not appreciate symptoms of an impending nerve injury due to sensory blockade. A peroneal nerve injury can be prevented in a laboring patient by employing frequent maternal position changes as well as releasing external pressure on the knees while not actively pushing.<sup>1</sup>
- Avoid prolonged hyperflexion and abduction of the hips during birth. This may be accomplished by allowing for passive descent of the fetal head into the pelvis before pushing begins. However, this technique may not be successful in preventing nerve injuries related to compression of nerves in the pelvis by the fetal head. <sup>2</sup>

---

<sup>1</sup> Kristen Bunch and Erica Hope, “An Uncommon Case of Bilateral Peroneal Nerve Palsy following Delivery: A Case Report and Review of the Literature,” Case Reports in Obstetrics and Gynecology, vol. 2014, Article ID 746480, 4 pages, 2014. doi:10.1155/2014/746480

<sup>2</sup> McDonald, Alison, “Obstetrical Nerve Injury”, Perinatal Outreach program of Southwestern Ontario, page 3, Spring 2008

For the patient<sup>3</sup>

**Know that, not all cases of nerve damage during childbirth are preventable. Further, just because you push for a long period of time, use forceps, have a large baby, etc, does not mean you will automatically have nerve damage. Many women deliver their babies under all or any of those circumstances without complication. However the following steps may help:**

- **Avoid spending long periods of time with legs bent in extreme positions (lithotomy, stirrups, deep squats etc. ) without taking breaks. Avoidance of these positions is not necessary, just take breaks every 15 minutes or so.**
- **Discuss with your medical practitioner prior to labor about how long s/he recommends you to push for, before moving on to other options (i.e. assisting devices, c-section).**

*Omar Farooq is a high school junior with a deep interest in medicine. His family's medical history has motivated him to create awareness of nerve injury during labor and delivery. His other interests include community service providing small first aid supplies and books to the underserved in the St Louis Metropolitan area.*

---

<sup>3</sup> <https://nervedamagefromchildbirth.wordpress.com/prevention/>