



# Keeping In The LLLoop

## Epidurals and Breastfeeding

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In Canada the rate of epidural anesthesia use during labour and delivery sits at >50% and continues to climb.<sup>1</sup> The rate ranges from a low of 30% in BC to a high of 69% in Quebec, which is still lower than the 90-100% rate reported in some American hospitals.<sup>2</sup> As breastfeeding rates also continue to increase, the lack of research of the effect of epidural

medications on breastfeeding is striking. The majority of research that has been done looked either at maternal satisfaction, maternal and infant homeostasis or Apgar scores, not infant feeding behaviours. Given what we know about the importance of breastfeeding to lifelong health, it is important to understand the impact that birth interventions such as epidurals have on both initiation and duration of breastfeeding.

Epidural anesthesia was introduced in the early 1970s and considered to be a major improvement over general anesthesia and IV narcotic analgesia during delivery.<sup>3</sup> Over 80% of Canadian mothers who received an epidural rated it as "very helpful" for pain relief.<sup>4</sup> However, as Linda Smith says in the *Womanly Art of Breastfeeding*, "If your friend tells you how much she 'loved her epidural', ask her how her first month of motherhood went."<sup>5</sup>

What does the research tell us about that first month?

- All medications cross the placenta. At one time it was believed that placing the anesthetic in the mother's spine or epidural space meant that the drug remained local and could not possibly affect the fetus/baby. We now know that not to be true. Many of the medications have been isolated from cord and/or baby's blood. Most are highly lipophilic and also cross into the baby's central nervous system.<sup>6</sup>
  - CNS effects can include sedation and difficulty organizing the suck-swallow-breath cycle required for effective breastfeeding.
  - These effects have been documented for up to 30 days post partum.<sup>7</sup>
- Epidurals increase the incidence of other birth interventions, from the need for IV fluids to avoid maternal hypotension through slower progression during both first and second stage of deliver, leading to augmentation (oxytocin), assisted (vacuum or forceps) delivery and/or surgical deliveries. All this adds to

<sup>1</sup> Canadian Institute for Health Information, 2010.

<sup>2</sup> Ibid

<sup>3</sup> Barrett and Pitman, 1999, p. 146

<sup>4</sup> Public Health Agency of Canada, 2009, p. 147

<sup>5</sup> Wiesinger, West and Pitman, 2010, p. 46

<sup>6</sup> Loftus et al, 1995

<sup>7</sup> Sepkowski et al, 1992



the trauma of the birth process. It also increases the fluid load in the mother's body which is transferred to the baby.<sup>8</sup>

- This may lead to engorgement of the breasts making it difficult for the baby to latch on correctly, and
  - may artificially increase the baby's birth weight, and subsequent weight loss,
  - resulting in a baby who is not feeding well and losing "too much" weight.<sup>9</sup>
- Epidurals decrease endogenous endorphins in mother, baby and milk.<sup>10</sup>
  - This means that there may be an increase in the perception of pain.
  - It also means that breastfeeding will not provide the infant with the same level of comfort if mother received an epidural.
- Epidurals affect temperature control.
  - Mothers and babies may spike fevers, which lead to sepsis work-ups and separations.
  - During breastfeeding and skin-to-skin contact researchers found less warming of the baby's skin if the mother received an epidural.<sup>11</sup>
- Epidurals do not decrease initiation (or attempts to bf), but do decrease duration.<sup>12</sup>

Any one of these effects can be detrimental to breastfeeding. The combination leads to a perceived need to supplement: a baby who is sleepy, unable to latch onto edematous breasts and losing "excessive" (fluid) weight. For an otherwise healthy full-term baby, that supplement will be formula, despite its known risks for decreasing maternal milk supply, increased infections for baby, and increased risks for chronic diseases later in life. There may also be separation of mother and baby because of sepsis work-ups. There is some evidence to suggest that lower doses and shorter exposures (*i.e.* waiting until a mother is in active labour) to epidural medications might reduce their impact.<sup>13</sup>

Two recent publications claim that the above evidence is not conclusive and that without double-blind randomized controlled studies we cannot draw conclusions.<sup>14</sup> But these studies would be unethical, as randomizing would take away patient choice in treatment. The research is further confounded by changing protocols and drug usage and the fact that many studies assessed breastfeeding as a side issue; very few are designed specifically to look at breastfeeding behaviours, initiation and duration and none look at the *process of initiation* of breastfeeding. "We measure what we value."<sup>15</sup>

A Canadian article describes how appropriate support can overcome many of the negative side-effects of epidurals, even those using opioids, at least for multiparae who have previously breastfed successfully.<sup>16</sup>

<sup>8</sup> Lieberman and O'Donoghue, 2002

<sup>9</sup> Newman and Pitman, 2006

<sup>10</sup> Abboud, 1982; Zando 2001a and 2001b

<sup>11</sup> Jonas et al, 2007

<sup>12</sup> Baumgardner, 2003, as quoted in Hale and Hartman, 2007, p. 357; Torvaldsen et al, 2006

<sup>13</sup> Beilin et al, 2005

<sup>14</sup> Reynolds, F. 2011; Loubert, C, 2011

<sup>15</sup> Smith, LJ, 2009

<sup>16</sup> Wieczorek et al, 2010



However, “success at breastfeeding” as defined as still breastfeeding at 6 weeks does not capture the barriers that these dyads may have had to overcome. Although the authors claim a >95% breastfeeding rate, this is *any* breastfeeding, not exclusive breastfeeding. By one week almost 10% of the infants had already received some formula and by six weeks less than 82% were exclusively breastfed. More telling still is that 67% of the mothers accessed lactation support, almost half of whom needed support daily or at every feed. These were experienced breastfeeding mothers (selection criteria included having successfully breastfed for over 6 weeks and an intention to breastfeed this baby)! Is removal of the pain associated with childbirth worth the uphill struggle to establish breastfeeding?

Labor, birth, and breastfeeding initiation comprise a normal, continuous process. Oxytocin, endorphins, and adrenaline produced in response to the normal pain of labor may play significant roles in maternal and neonatal response to birth and early breastfeeding.<sup>17</sup>

When we believe that removing that pain is the important goal, without considering the long-term consequences of interrupting the natural process of birth, we risk many unintended consequences, including breastfeeding difficulties.

***Disclosure:*** Nicola birthed two sons (9lb-5oz and 9lb-12oz) without any analgesia; the first was an induction which ended with a forceps delivery after 2.5 hours of pushing. Support from my La Leche League Leader, and pure “bloody mindedness” according to my father, made breastfeeding a reality.

<sup>17</sup> Montgomery and Hale, 2006

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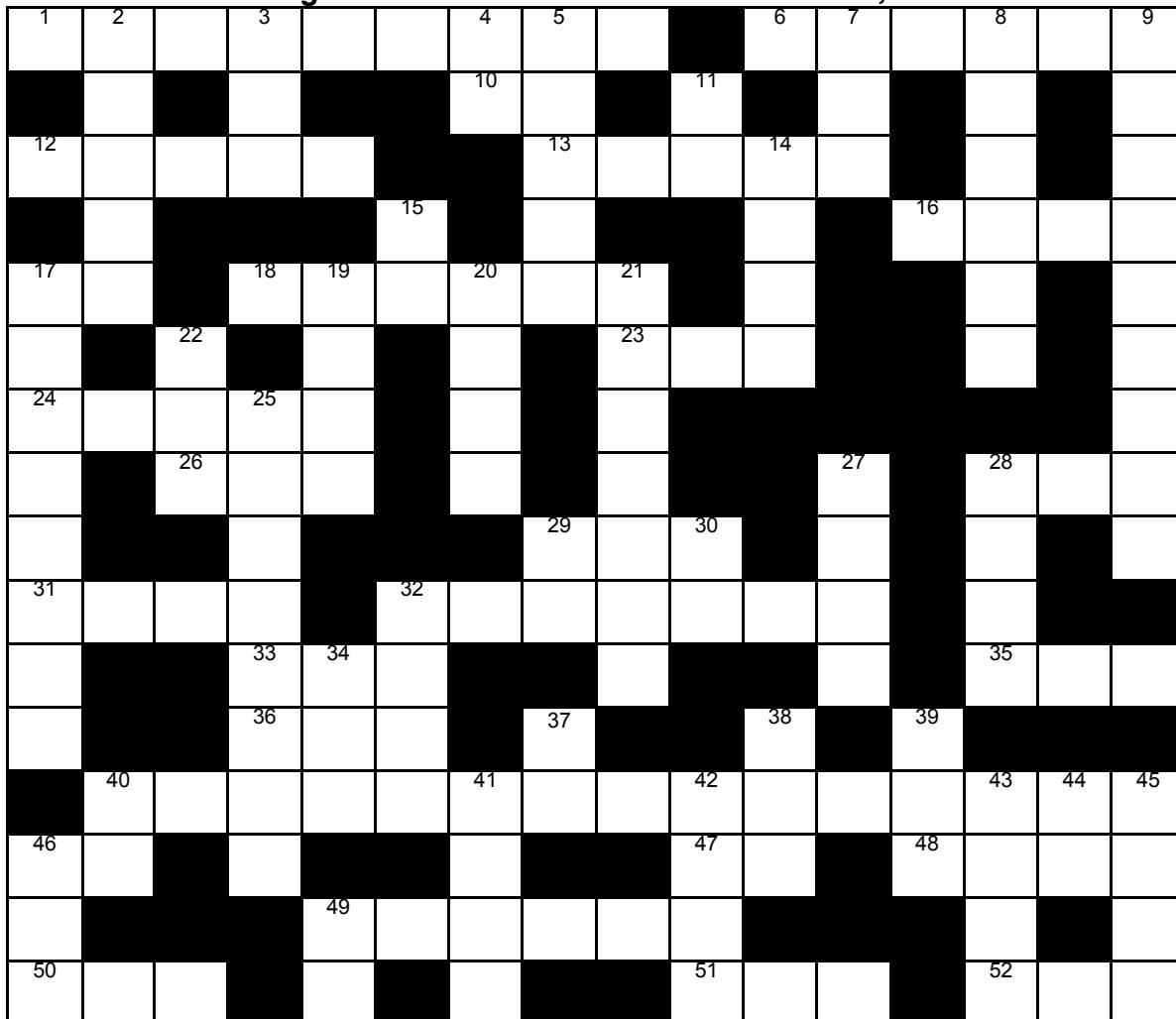




## Breastfeeding Quiz Crossword Puzzle

by Linda Wieser

La Leche League Canada Area Professional Liaison, Atlantic Area



### Across

1. A drop in progesterone and a rise in this hormone is needed to start milk production
6. Director of Toronto lactation clinic
10. Delivers babies
12. Birth or postpartum \_\_\_\_\_ (assistant)
13. For public nursing, it helps to wear a \_\_\_\_\_ -fitting top.
16. Gets larger when lactating
17. Feminist magazine
18. Nursing new and older baby together
23. Alternative to bottle feeding
24. \_\_\_\_\_, rattle and roll
26. Many parents receive a Canada Child \_\_\_\_\_ Benefit
28. Opposite of pro
29. Breastfeeding contraceptive method, for short
31. Math subject



32. An important influence for many mothers  
33. US medical organization  
35. Part of the breastfeeding dyad  
36. For latching we used to tell mothers to pull baby close quickly or \_\_\_\_\_ baby on.  
40. Compound in human milk that makes baby sleepy, CCK or \_\_\_\_\_  
46. Baby's first word for father  
47. Nipple needs to be totally \_\_\_\_\_ baby's mouth.  
48. European currency  
49. With 41 down: babies diagnosed as \_\_\_\_\_ - \_\_\_\_\_ (an anatomical variation of baby's mouth) can cause sore nipples.  
50. The "parent omega-3"  
51. In first 3 months, breastfed babies gain about 30g (1 oz) per \_\_\_\_\_.  
52. First breastfeeding mother?

## Down

2. Peter Hartmann's research team describes milk ducts like tree \_\_\_\_\_.  
3. Support group founded in 1956  
4. \_\_\_\_\_ and fro  
5. Initials for the organization founded by LLLI to create the lactation consultant profession  
7. Poetic for "before"  
8. \_\_\_\_\_ expression (of milk)  
9. Another name for laid-back breastfeeding: biological \_\_\_\_\_  
11. Common word used by toddlers  
14. For a cold, eat chicken \_\_\_\_\_.  
15. Nurse  
17. Inflammation or infection (of breast tissue)  
19. The highest point  
20. To transfer milk efficiently, baby needs to have a \_\_\_\_\_ latch.  
21. LLLC Board Member from Nova Scotia  
22. Digested by lipase  
25. Skin-to-skin or \_\_\_\_\_ mother care (KMC)  
27. Type of nipple  
28. Study for test at last minute  
29. The US home base for LLLC's public service announcement star, Sitara Hewitt  
30. Medical professional  
32. Hockey or Scrabble™  
34. "Bad" in French  
37. The *Womanly Art of Breastfeeding* was written \_\_\_\_\_ Diane Wiessinger, Diana West and Teresa Pitman.  
38. Male baby  
39. Motherhood and apple \_\_\_\_\_  
40. Symbol for element needed for strong bones.  
41. Human milk comes in breasts; formula in \_\_\_\_\_.  
42. With 48 across: babies diagnosed as \_\_\_\_\_ - \_\_\_\_\_ (an anatomical variation of baby's mouth) can cause sore nipples.  
43. For skin-to-skin baby is \_\_\_\_\_ except for diaper and hat.  
44. For emergencies, go to the \_\_\_\_\_.  
45. To latch, aim nipple to baby's \_\_\_\_\_.  
46. Long-chain fatty acid now added to infant formulas.  
49. Infectious disease which killed many First Nations children in the Residential Schools



## LLLC National Awareness Campaign 2010

### **Have you seen this happy breastfeeding couple?**

Sitara Hewitt – breastfeeding mother and star of the television show *Little Mosque on the Prairie* – is featured in LLLC's Public Service Announcement. Sitara assures mothers:

**"Because breastfeeding isn't always easy,  
La Leche League Canada is here to help."**

Our goal is to make sure that every pregnant woman and breastfeeding mother in Canada receives this important message during 2011.

Our PSA featuring Sitara Hewitt and her son, has been circulating on the Internet for a few months now. If you haven't watched it yet, [click here](#) to see the PSA and then share with your colleagues and clients via Facebook, Twitter or e-mail. At this link, you will also find the campaign poster. Please feel free to print copies for your clinic and hospital bulletin boards or anywhere that families will see them.

Major television stations have been approached but as yet, none have expressed interest in airing this important message. Many health professionals who work with families do understand the value of the visual appeal and effective message of our campaign. They understand that these materials can help promote breastfeeding, link families with information and support for breastfeeding and fulfill the requirements of the 10<sup>th</sup> step to BFI.



**"This is a wonderful ad, congratulations! I've forwarded the link to folks involved in public health policy and promotion for reproductive and child health. Thanks for sharing it with me, excellent work. (And, as I mentioned, I've personally benefitted from LLL support in my breastfeeding past!"**

~ e-mail message from an Ontario health professional

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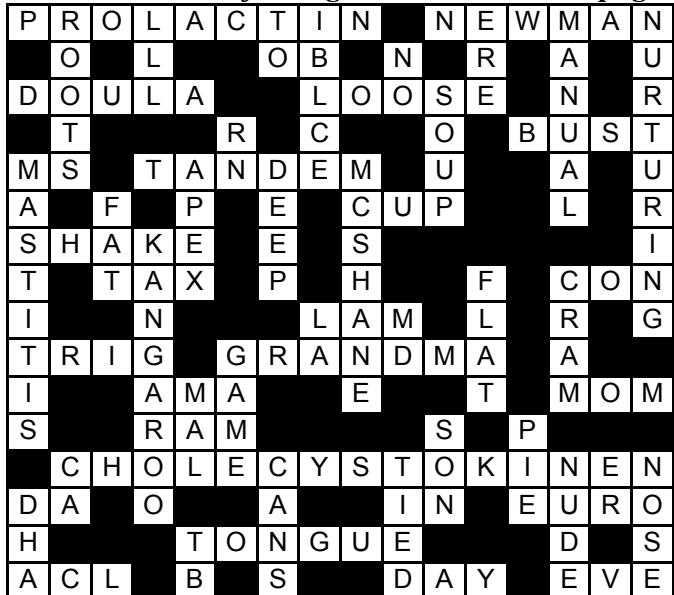
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- Yukon Territory Department of Health and Social Services
- Alberta Department of Health and Wellness
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## Solution to Breastfeeding Crossword Puzzle, page 7



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