The Libyan International Medical University

Faculty of Basic Medical Science

Effect Of Labor Epidural Anesthesia On Breast Feeding Mother

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Abstract:

Mothers who receive an epidural for labor pain should still be able to breastfeed, especially if you have experience of breastfeeding problems a baby previously. In recent years there was an increase of epidural analgesia for pain management during labor. Several studies tried to find an association between epidural analgesia and breastfeeding .Some studies have suggested that epidural anesthesia might inhibit breast-feeding and results are mixed. Studies may show that higher doses of the opioid medication fentanyl (most commonly used opioid in epidurals) may impact breastfeeding, but lower doses don't seem to make breastfeeding more difficult.

In addition, other aspects of epidural use for pain relief may impact breastfeeding success. The mother may receive fluids through her IV to help stabilize blood pressure, and this lead to swelling of breast tissue. Sometimes this makes it difficult for the baby to latch on and for the milk to "come in" over the next days. There may also be small changes in the levels of the hormone oxytocin and this may have effects on early breastfeeding right after birth.

Introduction:

Epidural anesthesia is *regional anesthesia* that blocks pain in a particular region of the body. The goal of an epidural is to provide *analgesia,* or pain *relief,* rather than *anesthesia,* which leads to a total lack of feeling. Epidurals block the nerve impulses from the lower spinal segments. This results in decreased sensation in the lower half of the body.

Epidural medications fall into a class of drugs called local anesthetics, such as *bupivacaine*, *chloroprocaine,* or *lidocaine*. They are often delivered in combination with opioids or narcotics such as *fentanyl* and *sufentanil* in order to decrease the required dose of local anesthetic.[1]

This produces pain relief with minimal effects. These medications may be used in combination with *epinephrine, fentanyl, morphine,* or *clonidine* to prolong the epidural's effect or to stabilize the mother's blood pressure.

Epidural anesthesia is commonly administered to laboring women. Some studies have suggested that epidural anesthesia might inhibit breast-feeding. I use those studys that will be explores the association between labor epidural anesthesia and early breast feeding success.[2]

Aim Of The Study:

The aim for this report is to highlight the relationship of epidural anesthesia in mothers who breastfeed after delivery.

Materials And Methods:

In this study conducted for a period of two years, 2840 healthy infants born at the General Hospital (Rome) with gestational age (GA) ≥37 weeks were eligible. They were delivered vaginally after uncomplicated pregnancies. Most of the mothers were middle-class and graduated.

Two different assistance models were considered to encourage and support breastfeeding by all eligible mothers: Partial Rooming-in (PR-I): newborns were in mother's room from 10 am to 8 pm, with the occasional presence of the nurse. At night newborns were transferred and assisted in the nursery to offer the necessary care by the caregivers.[1]

Full Rooming-in (FR-I): Newborns and mothers were together all day long, with continuous assistance of the nursing staff, to make the neonatal-care easier for the mother and to assess the appropriateness of breastfeeding. The access to full rooming-in was possible only if it was available an appropriate room, without planning in advance.[2]

Type of feeding was assessed from the 48th to the 72nd hour of hospitalization of the newborns involved in the study. Type of feeding was distinguished, according to WHO-guidelines in: Exclusive Breastfeeding (EB): infant received only breast milk from mother and no other liquids or solids, with the exception of drops or syrups containing vitamins, mineral supplements or medicines. Prevalent Breastfeeding (PB): Newborns were mostly breastfed, but they could also have received water or other water-based liquids, (sweetened and flavored water teas, infusions) Mixed Feeding (MF): Infants received formula as integration to maternal milk Artificial Feeding (AF): Newborns did not receive breast milk but only formula.[3]

Results:

As regards breastfeeding for considered the women who breastfed their children between 48th and 72nd hour of life. it was noted that, on the general population, there is a prevalence statistically significant of breastfeeding in the group of women who didn't undergo epidural analgesia. This result, however, is strongly due to the assistance model used.[1] It's important to analyze type of feeding in relation to the type of hospitalization model, total or partial Rooming-in. In the first case there was a prevalence of exclusively or predominantly breastfeeding in both groups. Instead, in case of partial Rooming-in, we see a prevalence of exclusively or predominantly breastfeeding in the group of mothers who didn't undergo epidural analgesia and this was statistically significant.[2]

Comparison	Odds ratio	95% confidence interval	P value
Partial rooming-in vs full rooming-in	10.99	8.76 – 13.79	0.0001
Epidural analgesia vs no analgesia	1.61	1.34 – 1.94	0.0001
Primiparous vs multiparous	0.99	0.78 – 1.08	Ns*
***Ns= not significant.**			

Multivariable analyses to evaluate risk of "mixed or artificial feeding in infants between 48 th and 72 nd hour of life" with regard to independent variables considered.

Discussion:

The results of many studies in recent years are largely conflicting. First of all, the problem was whether the reduction of pain with epidural analgesia could affect breastfeeding. Some studies suggested that this is associated with a delayed start of lactation and to an earlier suspension, others have found no association.[3]

In a study of 2010 Reynolds and co-workers concluded that while epidural analgesia in labor may be associated with some short-term side effects, its effects on the child, when compared with systemic analgesia, are better for Apgar scores, acid–base balance and breastfeeding .Beilin and colleagues performed the only randomized controlled trial to evaluate the dose-dependent effect of epidural fentanyl on breastfeeding success .They showed that epidural analgesia with fentanyl at high dosage(>150 μg) associated with local anesthetics, compared with epidural analgesia with lesser amounts of fentanyl, is more often associated with stopping breastfeeding before 6 weeks of life.[4]

This study believe that the difference in the type of feeding is not due to the influence of analgesia used but rather to the type of Rooming-in carried out, total or partial, and to the clinical monitoring necessary to neonatal well-being. It seems, essential to adopt a model of care that favors an early mother-infant relationship and ensure its continuation with total Rooming-in.[1]

Therefore, in *full rooming-in*, with an early and continuous mother-infant contact, there are no differences in the type of breastfeeding among the group of infants born to mothers who underwent epidural analgesia and the group of newborns born to mothers not subjected to analgesia. if consider only the group of infants born to mother that underwent epidural analgesia there is a high prevalence of exclusive or prevailing breastfeeding in *full rooming-in* model assistance compared with *partial rooming-in*, with a frequency of 92.8% vs. 44.1%.[2]

Conclusion:

As conclude that the good start of lactation and the success of breastfeeding seems to be guaranteed by the type of care offered to the couple mother-infant, that reverses any possible adverse effects of the use of epidural analgesia in labor.

References:

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