PAIN MANAGEMENT DURING LABOR

Pain Management During Labor: Opening

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With the increase in the number of painless deliveries, the number of various monitoring changes, secondary weak labor, abnormal rotation, and instrumental deliveries has increased significantly, and a high level of difficulty is required for delivery management skills including fetal heart rate monitoring analysis and instrumental delivery techniques. In our retrospective study of 200 first-time mothers who underwent combined spinal-arachnoid epidural anesthesia (CSE) and 200 vaginal deliveries without painless delivery, the delivery progress curve during induction of painless delivery and the delivery progress curve of pregnant women who did not undergo painless delivery showed slower delivery progression in the active phase, although early cervical canal opening and head lowering occurred and delivery progressed more rapidly in the latent phase. In other words, painless delivery resulted in early cervical canal opening and head descent, and slower cervical canal opening in the active stage. This calls for technical changes in forces and suction delivery. On the other hand, the soft birth canal is relaxed by anesthesia, and although obstetric lacerations are becoming milder, the difficulty of forceps attachment and traction due to abnormal rotation and malpositioning has increased. In forceps delivery, strong traction in the presence of abnormal rotation or malrotation can lead to risks such as facial injury to the infant, so more accurate internal examination evaluation is essential. If the intensity and frequency of uterine contractions are judged to be insufficient during painless delivery, labor should be accelerated with uterine contractions. However, according to a 2013 Cochrane Database Systematic Review, when oxytocin was compared to placebo for labor induction during prolonged labor with epidural anesthesia, there was no change in either cesarean section or instrumental delivery rate. Thus, it is possible that induction of labor with prostaglandins may be more effective than the use of oxytocin in painless labor. In addition, for the management of the second stage of labor, ACOG recommends that instrumental delivery for the second stage of prolonged labor in first-time mothers should be performed for a period of 3 h. This is because complications to mother and infant such as urinary retention and NRFS may increase with a longer second stage of labor. However, there is a lack of evidence regarding the definition of a 3-hour prolonged second stage of labor, and since this is a decision based on expert opinion, further evidence building is desirable. Regarding the responsibility of the mother for her own efforts, studies have been conducted on the use of wait-and-see management versus early efforts, and a 2015 Cochrane Database Systematic Review found that wait-and-see management in the second stage of labor in painless labor prolonged the second stage of labor, but increased the rate of vaginal delivery completion. These results suggest that adequate fluid infusions and early maternal effort after full opening of the uterus are important in prolonged labor, but the effectiveness of uterine contractions during painless labor remains controversial.

Keywords: management, painless deliveries, parturition

Pain Management During Labor: Basic Knowledge of Pain Management During Labor – Part 2

Optimal use of opioid in labor

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Opioids are the most widely used systemic analgesia in labor, the variable efficacy of these drugs combined with a broad range of maternal side effects and concerns over neonatal depression have limited their use. Opioid drugs act by binding to opioid receptors, which are found principally in the central and peripheral nervous system and the gastrointestinal tract. Adverse effects of opioids are predominantly dose dependent rather than drug dependent. Opioids may affect the fetus directly by placental transfer or indirectly though effects on the mother, for example, by altered minute ventilation or uterine tone. Opioid analgesia may be administered by any number of different routes. For the purposes of labor analgesia the intramuscular (IM), Intravenous (IV), and neuraxial routes are most common. Intermittent intramuscular injections have the advantage of being midwife delivered and thus readily available but may be painful. The quality and duration of intramuscular analgesia is inconsistent. By contrast, opioids given via IV injection have the advantage of quicker onset, the ability to titrate to effect, and more predictable quality and duration of
analgesia. In many institutions, however, intravenous administration of opioids requires the presence of a physician, so limiting ready availability. The use of intermittent bolus or continuous intravenous infusion of opioids for postoperative pain has largely given way to patient-controlled (IV) analgesia (PCA). Good analgesia has been shown to be achievable with lower drug doses, thus reducing side effects and improving patient satisfaction. Patient satisfaction in childbirth is important and though the use of PCA does not lead to the complete absence of pain the benefit of a perceived sense of control during labor. Due to the changing nature, frequency, and intensity of labor pain, rapid-onset and short-acting agents such as remifentanil are most suitable. An ideal IV opioid should have an onset and offset that can match the time course of uterine contractions, so that the parturient experiences worthwhile analgesia. Uterine contractility and fetal heart rate variability should be preserved and there should be minimal respiratory depressive maternal and neonatal side effects so that administration can be continued up to and during delivery.

Pain Management During Labor: Basic Knowledge of Pain Management During Labor – Part 2

How to arrange good companion during labor

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Background: Efforts to reduce maternal mortality and morbidity have focused on improving provision of and access to facility-based childbirth and, as a result, institutional births are increasing throughout many low- and middle-income countries. With this increase, emphasis is shifting to improving the quality of care provided during facility-based childbirth, which is an integral component of improving maternal and newborn health. Allowing and supporting the presence of a woman’s companion of choice during labor and childbirth is an effective intervention that is respectful of women’s autonomy and agency and which can, therefore, be an important aspect of improving quality of care during labor and childbirth. Having her chosen companion with her during labor can improve a woman’s experience of childbirth by facilitating her access to emotional and practical support from someone she trusts.

Why is a Companion of Choice During Labor and Childbirth Important? Research has consistently demonstrated that women greatly value and benefit from the presence of someone they trust during labor and childbirth to provide emotional, psychological and practical support and advice. The supportive care may include having someone who is continuously present and who reassures and praises her, assists with measures for physical comfort (e.g., providing comforting touch, massage, warm baths or showers, and promoting adequate fluid intake and output) and undertakes any necessary advocacy on her behalf (e.g., helping the woman articulate her wishes to health workers and others). Supportive care during labor and childbirth also includes the presence of a health worker who can advise the woman about the progress of labor and coping techniques, and support her in making decisions and expressing her wishes regarding procedures that may need to be undertaken. There is evidence that continuous support during labor improves childbirth outcomes, including enhancing the physiological process of labor. Research has demonstrated that such continuous support has clinically meaningful benefits, including shorter labor with increased rates of spontaneous vaginal birth, decreased usage of intrapartum analgesia and cesarean section, and increased satisfaction with her childbirth experience. Women supported in this way have reported less fear and distress during labor, which also appeared to act as a buffer against adverse aspects of medical interventions. Finally, the babies of these women are less likely to have low five-minute Apgar scores.

What Do Birth Companions Do?

1. Before you give birth, Birth Companions will visit you to talk about your birth plan and answer any of your questions.
2. When you give birth, your Birth Companions will stay with you, and comfort you with massages, back rubs, and soothing compresses.
3. A few days after you give birth, Birth Companions visit you and your baby. They can talk with you about feeding and caring for your baby.

What Skills Do Birth Companions Have?

1. DONA International Doula Training to provide support to women giving birth.
2. Nursing experience as currently enrolled students at Johns Hopkins University School of Nursing.
3. Spanish and other language skills.

Mothers who are supported by doulas show more affectionate interaction with their infants. This involves significantly more smiling, talking, and stroking. Six weeks after childbirth, women who use doulas are more 51% more likely to breastfeed compared to 29%, are significantly less anxious, have lower scores on a test of depression, and have higher levels of self-esteem.

Birth Companions:

1. Provide their service free of charge.
2. Work only at the woman’s request. They are not employees of the medical staff or the hospital.
3. Will accompany the mother to the hospital of her choice, where she has planned to give birth.
4. Work only in the role of doula. Though they are nursing students, they do not perform any clinical care to the mothers they serve.

**Before Labor, Birth Companions Will:**

1. Meet with the woman (and her partner, friend or family member) to become acquainted, discuss priorities, explore any fears and concerns, and plan how they can work best as a team.
2. Help develop a personal birth plan, including preferences regarding pain management, coping with pain and fatigue, and interactions between the woman, partner and family members.

**During Labor, Birth Companions Will:**

1. Assist pregnant women in having a satisfying birth experience. Advocate for the mother and support her decisions throughout the childbirth process.
2. Provide emotional support, physical comfort, and information women often need during labor.
3. Help with comfort techniques such as relaxation, massage and positioning.
4. Work only at the woman’s request. They are not employees of the medical staff or the hospital.

**Birth Companions Will Not:**

1. Perform clinical tasks, such as blood pressure, fetal heart monitoring, vaginal exams, or administer medications.
2. Make decisions for the mother and her family. Instead, they discuss concerns, suggest options, and get information necessary for the family to make informed decisions.

**Keywords:** birth companions, labor

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**Pain Management During Labor: Basic Knowledge of Pain Management During Labor – Part 2**

**Introduction of sophrology in childbirth: Cope with labor pain**

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There have been many attempts to alleviate pain during childbirth. In particular, epidural anesthesia is becoming the global standard for pain relief. However, there are many adverse effects associated with the use of anesthetics. On the other hand, various measures for pain relief during childbirth without the use of anesthetics have been tried. The sophrology method, which was proposed in Spain in 1960 to achieve mental stability and harmony, was applied to childbirth in France in 1972, and was introduced and improved in Japan in 1987. It is an excellent method that is highly effective in relieving physical and mental tension during childbirth. It is based on the idea that during pregnancy, imagery training is done in the soporific stage of consciousness, just before going to sleep, in order to eliminate anxiety and fear of labor and delivery, and to make the woman more receptive. We would like to introduce this method by showing a video of an actual delivery using this method.

**Keywords:** childbirth, labor pain, sophrology