# Comfort Measures During Labor and Delivery: Non-Pharmacologic Methods

Comfort measures that provide natural pain relief can be very effective during labor and childbirth. Birthing techniques such as hydrotherapy, hypnobirthing, patterned breathing, relaxation, and visualization can increase the production of endogenous endorphins that bind to receptors in the brain for pain relief. Other methods of comfort therapy such as effleurage (light rhythmic stroking of the abdomen), massage, emptying the bladder, and hydrotherapy can provide pain relief and reduce the need for narcotic analgesia or anesthesia by naturally creating competing impulses in the central nervous system that can prevent the painful stimuli of labor contractions from reaching the brain.

#### Birthing ball

Few labor tools are as simple, beneficial, and versatile as the birthing ball. Birthing balls are professionally made for use in physical therapy and have been used for years to properly exercise and rehabilitate patients. The birthing ball has now found a new home in birthing centers and hospital obstetric departments across the country. The ball easily withstands the pressure applied by the weight of the laboring woman. It is safe to use the birthing ball with both the external and internal electronic fetal heart monitor.

If your amniotic membranes are ruptured, and the baby is still quite high (meaning how high the baby is in the pelvis, or pelvic station), depend on your nurse or care provider (physician or midwife) to tell you if it is safe to use the ball. If the baby remains "high," active labor and use of the birthing ball may help to bring the baby down into the pelvis. If you are allowed to sit in a chair or walk in the hallways, it is safe to use the birthing ball.

When using the birthing ball, it is important to have your birth partner "spot" you at all times. The safest way for your birth partner to spot you is to have him/her sit in a chair with legs apart, while you sit on the birthing ball positioned in between them. Other positions are discussed below.

Use of the birthing ball is becoming more common. Because it is one of the newest pieces of "birthing equipment," substantial formal research has not been completed which will confirm the advantages of using it as a labor aid. Still, it is undeniable that many laboring women find the birthing ball effective as a comfort measure during labor.

Here are just a few reasons for using the birthing ball during labor:

- Sitting on the birthing ball keeps the baby properly aligned in the pelvis.
- The ball encourages pelvic mobility.
- Pregnant women find it easier to get up and down from the ball than a standard chair or sofa during labor.
- The ball encourages the baby to drop down further (descend) into the pelvis by allowing gravity to work with the laboring mother
- The ball allows the laboring woman to shift her weight, rock her pelvis, and find comfortable positions to labor in more easily.
- The ball can be used when in the hands and knees position. This decreases the pressure and stress on the hands and wrists that traditionally affect the length of time the position can be used.

### **Patterned Breathing**

These breathing techniques provide comfort and focus while enhancing labor progress. Patterned breathing enhances oxygen flow to your baby and is also vital to the contracting uterus.

#### **Beverages**

You should stay well hydrated while laboring. Laboring women may have clear liquids such as water, juice, broth, ice, and Popsicles.

#### **Movement and Position Changes**

You may experience less pain in some positions than in others during labor. Laboring women tend to find upright positions most comfortable such as sitting, standing, and walking. Many choose a lying down position as labor advances. Moving about during labor is usually more comfortable than staying still and can help labor progress by the simple effects of gravity and the changing shape of the pelvis. It may also relieve pain by shifting pressure and allowing the baby to move. You may try sitting, kneeling, standing, lying down, getting on your hands and knees, and walking.

#### Superficial Heat and Cold

Heat can be effective when applied by using a hot water bottle, hot moist towels, or warm blankets. Superficial cold can come from an ice bag, washcloths soaked in ice water, or a bag of frozen peas. Hot compresses applied to the lower abdomen, groin or perineum, a warm blanket over the entire body and ice packs to the lower back or perineum can help alleviate labor pain. Using heat or cold on separate parts of the body at the same time can provide particularly effective pain relief. For example, apply a cool cloth to the forehead with warmth on the lower back. For maximum effect, change the heat and cold locations frequently, about every twenty minutes.

#### Counter-pressure

Counter-pressure consists of steady, strong force applied to one spot on the lower back during contractions using the heel of the hand, or pressure on the side of each hip using both hands. Counter-pressure helps alleviate back pain during labor, especially in those women experiencing "back labor."

## **Touch and Massage**

Touch can convey pain-reducing messages. A hand placed on a painful spot, a pat of reassurance, stroking the cheek in an affectionate gesture, or a tight embrace can communicate a message of caring to the laboring woman.

Purposeful massage of the hand or other parts of the body also communicates caring. Massage takes the form of light or firm stroking, vibration, kneading, deep circular pressure, and continual steady pressure. Stroking or rubbing the neck, shoulders, back, thighs, feet or hands is an effective pain-reliever. No fancy techniques are required. Receptors in the brain receive the sensations of pleasure from the massage blocking reception of the painful stimuli of labor. Bare skin receives the signal best and unscented powders and lotions are helpful for massage.

#### **Aromatherapy**

Aromatherapy is the use of essential oils such as lavender, rose, chamomile, and clary sage. These can be administered in a variety of ways including in oil during a massage, in hot water as a bath or footbath, a drop in the palm or on the forehead of the laboring woman or a drop on a warm face cloth. Aromatherapy reduces stress and tension during labor. Beware, however, that pregnant and laboring women are highly sensitive to smell. Be sure that you use a scent that you enjoy. Stop any comfort measure if and when it is no longer working for you.

Hydrotherapy

Hydrotherapy during labor (techniques using water) can be emotionally soothing and can also help with pain relief.

Many of the private bathrooms in our labor suites include a Jacuzzi tub. The Jacuzzi can be used to recline in the bubbling water or by sitting on a shower stool to use the hand-held shower massage during active labor. Many women are comforted by the combination of warmth, water pressure, and the sound of the water. Advocates of hydrotherapy even suggest that immersion in water may accelerate labor, decrease blood pressure, and increase a

laboring woman's feeling of control over her birth.

**Focus and Distraction** 

Many methods of coping with pain rely on the laboring woman's ability to focus and use mind-diverting activities. Fear

and anxiety cause the release of stress hormones. You can ease these feelings by envisioning a pleasant scene or, at times, visualizing what is actually happening such as the cervix opening or the baby moving down. Focusing one's attention is a deliberate activity and is aided by verbal coaching, visualization, self-hypnosis, and concentration on a

visual, auditory, or tactile stimulus.

Distraction is a more passive form of focusing attention by using stimuli from the environment that will draw attention

away from your pain. Attention focusing and distraction are usually used with other strategies and may not be useful

for severe pain.

These techniques are meant to help you reduce fear, anxiety, and pain, and can also be helpful with any discomfort

you may experience after the birth of your baby.

Audio-analgesia

Audio-analgesia (music, talk) are used to control pain in numerous situations including dental work, post-operative

pain, burn treatment, and childbirth. Many childbirth educators use music in their classes to create a peaceful and relaxing environment and they advocate for its use during labor as an aid to relaxation. Audio-analgesia for pain relief

consists of soothing music between and during contractions.

Music creates a pleasant and relaxing environment and music transmitted through earphones can block out

disturbing, distracting, or unpleasant sounds. Carefully chosen music can also reinforce rhythmic breathing patterns,

massage strokes or facilitate focusing one's attention. Music preferences vary widely. Feel free to choose your own music and bring your phone or iPod with you.

Credit: Newton-Wellesley Hospital