

Bio-Touch for Pregnancy, Labor and Postpartum

Physiological impact of touch/Bio-Touch.

Touch activates oxytocin and endorphins, two important components that the body
produces for labor to progress. Touch as a way of communicating. Touch as a way of
offering your undivided attention to your client/partner/family member. Touch initiates
physiological and psychological responses. There is an intimate relationship between
the brain and the skin due to the fact that they are both derived from the ectoderm in
the embryo: the skin is the outer surface of the brain and the brain as the deepest
layer of the skin though this embryological connection. That's why touch directly effects
the emotions. Tiffany Field's research at the Touch Research Institute in Florida "Pain
reduction during Pain Procedures and Chronic Pain Syndromes", the results suggest
that touch reduces stress and pain during labor.

Sympathetic and Parasympathetic Arousal

- Labor pain can lead to sympathetic arousal, which produces tension in the circular fibers of the uterus and rigidity at the opening of the cervix.
- Touch can lead to parasympathetic arousal, which relaxes the circular fibers of the uterus and stimulates the vertical fibers thereby allowing effacement and dilation to proceed.

The Gate Control Theory

The reduction in labor pain through touch can be explained by the Gate Control Theory of Pain.

- Sensory perception begins in the spinal cord via sensory neurons, which are transmitted to the brain for interpretation and response.
- Pleasurable, painful and neutral signals travel at different speeds, with pain being the slowest.
- Pleasurable signals travel fast along large myelinated nerve fibers; pain signals travel slowly along small diameter unmyelinated fibers.
- If the brain is flooded with Bio-Touch and other forms of massage, the perception of the slow-moving pain signals is overridden by these other signals.
- Sending pleasant messages to the brain can substantially reduce the perception of pain and make it more manageable.

Changes in Brain Activity during Labor

During labor, the brain gradually switches from a logical, rational left hemisphere orientation to an instinctive and instinctual right hemisphere orientation.

- As this happens, the laboring person becomes less able to think rationally and respond to complicated verbal communications.
- At the same time, they become more responsive to mental suggestion such as visualization and imagery and to physical input such as Bio-Touch.

Safety and Trust

- For touch to be effective, the laboring person needs to feel safe and to have trust in their support team.
- For some, touch or stimulation of any kind can be distracting.
- For some, touch or stimulation of any kind can be threatening and unpleasant.

Benefits of Bio-Touch during the perinatal period

- Bio-Touch does not overstimulate; it is a way of inviting the body to self-regulate. Therefore, this simple form of touch is highly appropriate for situations where the person is feeling overwhelmed.
- Bio-Touch works when words fail!
- Bio-Touch can be implemented by everyone!
- It's easy and quick for the doula to show Bio-Touch techniques to partners and family members
- Bio-Touch helps partners to participate and engage

Specific Considerations:

Pregnancy	nausea, anxiety, depression, backache, exhaustion
Labor	early labor – anxiety, staying calm, resting Active labor – back pain, Transition – feeling overwhelmed, loss of control, exhaustion Epidural – immobility Cesarean – only the head is accessible for Bio-Touch
Postpartum	post cesarean discomfort Breastfeeding – neck and shoulder strain Depression Anxiety Exhaustion