TENDER TOUCH

Infant massage helps babies find the connections that help them grow

by Clare La Plante • photographs by Chip Williams
In 1984, when Teresa Kilpatrick Ramsey’s third and youngest child was five months old, a massage therapist friend who was visiting them had a great idea:

Had Ramsey ever considered giving her son a massage?

At the time, Ramsey, a nurse by training, was working as the Perinatal Education Coordinator at St. Elizabeth’s Medical Center in Dayton, Ohio. She knew a lot about infant care, but nothing about massage.

So she let her friend teach her the variety of stimulating and soothing strokes featured in the infant massage bible at the time—Frederick Leboyer’s Loving Hands—until she got the hang of it.

Soon, she began to massage her son, David, every day, on a sunny spot on the living room floor. “As we got into the rhythm of it, he would open his body,” she recalls. After years as a nurse, Ramsey knew about infant eating habits, bowel movements and blood sugars, but this was new. “I had never seen a baby in such a blissful state,” she says.

Inspired, Ramsey jumped to enroll when another friend opened a massage school around this time. She graduated in 1988 and brought her newfound expertise back to St. Elizabeth’s, where she started an infant massage program. Soon she saw that massage wasn’t just helping the babies bliss out—it was helping them to thrive.

She looked for cold, hard facts to back this observation, and found them. For example, the Touch Research Institute (TRI) at the University of Miami School of Medicine found that massaged preemies, on average, gained 23 to 47 percent more weight than those not massaged. Massage also contributed to five to six days less of hospitalization, and $10,000 less hospital costs for preemies.

“If you stimulate pressure receptors under the skin, you slow down the heart,” says Tiffany Field, PhD, the TRI director. “You slow down blood pressure, you slow down the release of stress hormones, and you facilitate growth hormones and gastric mobility. [Infant] massage is not just something that calms you down and makes you feel good. It also has significant impact on health.”

It also helps to foster the bond between child and parent. “At birth, things mostly are done to the baby without any asking of permission,” says chiropractor and massage therapist Debby Takikawa, producer and director of the film What Babies Want. This includes the nurses and doctors shining bright lights in the babies’ eyes, suctioning their mouths, and rubbing them vigorously.

This abrupt transition from womb to world hinders the bonding process, says Takikawa. Instead, in the first few hours of life, the mother and baby should be making eye contact, smelling each other and listening to each other’s voices. Massage can help repair this rift, most effectively by including the parents. “The child-parent bond is paramount,” says Suzanne P. Reese, an educator and trainer in infant massage. “This is why the bond needs to happen between the baby and his or her family caregiver.”

**BENEFITS FOR BABY**

Although there are times when a professional will do the massage—on newly medically stable preemies in the ICU, for example, or infants with neurological damage, or going through withdrawal from illicit drugs, or when therapists are using specific modalities such as craniosacral work—most infant massage involves teaching the parents how to take over. “We are, in a way, midwiving this,” says Ramsey, who eventually went on to establish Baby’s First Massage, which trains and educates infant massage practitioners.

Typically, teaching a parent to massage his or her child involves several sessions with infant and parent (or parent and primary caregiver). “We are, in a way, midwiving this,” says Ramsey, who eventually went on to establish Baby’s First Massage, which trains and educates infant massage practitioners.

**Benefits**

- For the baby:
  - Increases vitamin A levels
  - Lowers heart rate
  - Lowers blood pressure
  - Reduces stress hormones
  - Increases brain growth hormone
  - Eases acid reflux
  - Promotes bowel movements
  - Calms crying

- For the parents:
  - Promotes bonding
  - Encourages eye contact
  - Facilitates communication
  - Helps regulate moods
  - Encourages a routine

- For the hospital:
  - Reduces NICU stays
  - Reduces medication costs

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**Benefits for Baby**

- **Increased growth and weight gain.**
- **Reduced stress and anxiety.**
- **Improved heart and blood pressure.**
- **Enhanced respiratory function.**
- **Improved blood oxygenation.**
- **Enhanced immune system.**
- **Improved lung function.**
- **Reduced medical complications.**
- **Improved sleep patterns.**
- **Enhanced social development.**
- **Improved cognitive development.**
- **Reduced pain and discomfort.**
- **Enhanced parent-infant bonding.**

**Some benefits of massage may include helping restless infants organize erratic sleep patterns.**

**In conclusion, massage therapy has numerous benefits for both the baby and the parents.**
Infant Massage USA offers a four-day infant massage educator training that teaches participants (health care professionals, massage therapists and others interested in early childhood intervention) to teach parents and caregivers how to massage their infants and children. Classes are held around the country. Contact Infant Massage USA for more information at 703-455-3455 or info@infantmassageusa.org.

1. Infants who received massage therapy compared to those who were rocked experienced greater daily weight gain; more organized sleep/wake behaviors; less fussiness; improved sociability and soothability; improved interaction behaviors; and lower cortisol and norepinephrine and increased serotonin levels.


2. Cocaine-exposed newborns had fewer postnatal complications, increased weight gain, better performance on the Brazelton Neonatal Behavior Assessment Scale (particularly on the motor scale), and less stress behaviors following 30 days of massage.


3. Cocaine-exposed preterm neonates who were massaged averaged 28 percent greater weight gain per day, showed significantly fewer postnatal complications and stress behaviors, and demonstrated more mature motor behaviors on the Brazelton examination.


4. Depressed mothers increased their infant’s positive affect and attentiveness by providing touch stimulation.


5. Teenage mothers who received massage therapy compared to those who received relaxation therapy were less depressed and less anxious both by their own report and based on behavior observations. In addition, their urinary cortisol levels were lower and their serotonin levels were higher, indicating they were less stressed and less depressed.


6. Infants with Down Syndrome improved in muscle tone and in performance on motor tasks following massage therapy.


7. Fathers who gave their infants daily massage 15 minutes prior to bedtime for one month showed more optimal interaction behavior with their infant.


8. HIV-exposed newborns who were given massage showed increased weight gain and improved performance on the Brazelton Newborn Scale (motor and state scales).


9. Children with mild to moderate juvenile rheumatoid arthritis who were massaged by their parents 15 minutes a day for 30 days saw their anxiety and cortisol levels immediately decrease. Over the 30-day period their pain also decreased, based on self-reports, parent reports and physician’s reports.


10. Massage reduced spasticity, and increased muscle flexibility, motor function and positive social interaction in children with cerebral palsy.

The massage therapist must feel secure, too. “Start in a very slow, calm, settled core state of being,” Takikawa says. “If you approach the infant in any other place, it’s questionable—in my mind—how much good you do that baby.”

Follow your common sense. Stay away from tender spots, such as areas that have recently received shots or IVs. Since sounds in the uterus are muffled, except for the mother’s heartbeat, use music with great discretion, if at all.

For most infants, the human voice is best. “It’s really about the human interaction, and about the sensory development of the baby,” says Rosemary White-Traut, DNSc, RN, a professor at the University of Illinois at Chicago. “If you add a massage to an environment that is already chaotic, it overstimulates the baby.”

So keep things mellow. Place your face within 7 to 12 inches of the baby’s face, where they can see the best. Don’t use flavored or scented oils. “Infants have noses like bloodhounds,” Reese says. She says no mineral oil, either, which is “like wrapping a baby in cellophane.”

Instead, use edible, all-natural fruit or vegetable oil, unscented and unflavored. Taste is important since newborn’s skin. “You have to be very careful with the pressure amount,” agrees Griffith. “There are no broad strokes with a baby—it’s all very delicate and precise.”

The infant will give you feedback, typically through signals, such as putting an arm up when you reach for his or her face. This means “no,” says Takikawa. Eye contact, or lack thereof, is another signal. “If an infant doesn’t make eye contact with you, it means I’m not ready for direct connection,” she says.

Respect these signals. “If an adult turns his head away, you don’t rush around to the other side and put your face into his face,” Takikawa says. “You wait for them to come back and make eye contact.”

Simply slow down the massage, or your pace. The first time Takikawa worked with an infant, when she reached out and touched the infant’s head, the child threw up her arms and hit Takikawa’s hand away.

“I felt like a complete idiot,” she says. “I took my hand back and thought, ‘I’m a terrible therapist.’” Instead, she said to the child, “I’m so sorry, I think I put my hand up to your head too quickly and you weren’t ready for it.” The infant turned her head back and made eye contact.

Takikawa says. “Many babies have been really hurt at birth, and the idea of having a professional touch them can be terrifying. You don’t make it less terrifying by overriding their signals of fear. You get past it by acknowledging it in a respectful way.”

Instead, keep talking and see if the child can come back to you. Make sure that you introduce different stimulations one at a time. “Use a gradual progression, so the child can accommodate a new sensory stimulation,” says White-Traut. Make sure you also tend to the baby’s environment, and the idea of having a professional touch them can be terrifying. You don’t make it less terrifying by overriding their signals of fear. You get past it by acknowledging it in a respectful way.”

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The Next Step? Use the Right Touch. Studies show that moderate pressure is required for full benefits. “Light stroking is a tickle sensation and does not lead to [benefits],” Fields says.

### BABY KNOWS BEST

*Fields instructs massage practitioners to look for a slight color change when working with Caucasian children, and a slight indentation when working with non-Caucasians. And let the baby give you feedback. “If your touch is too light, the baby will give you signs that he is not comfortable,” she says.*

Don’t err on the side of too much pressure, though. Make good contact, Ramsey says, but don’t drag on a newborn’s skin. “You have to be very careful with the pressure amount,” agrees Griffith. “There are no broad strokes with a baby—it’s all very delicate and precise.”

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CranioSacral Work on Infants

“Birth is not an easy process,” says Rebecca Flowers, OTR, SCP, CST-D, a CranioSacral practitioner with the Upledger Institute in Palm Beach Gardens, Florida. “Whether it’s an ‘easy’ delivery or not. Often the types of problems that manifest later might have been minimized or possibly avoided if we could have worked on that child as an infant.”

These issues may include learning disabilities, attention deficit disorder, hyperactivity and some of the autism spectrum type of disorders, including sensory integration dysfunction. CranioSacral work is suited for infants, says Flowers, in part because the gentle, light touch is so noninvasive. “All of [a baby]’s senses are very acute,” she says. The work gives the body gentle help in correcting itself.

“When we do cranio work we’re facilitating the body to make corrections that it inherently tries to do all the time,” she says. The key, though, is early intervention. “The baby brain is thousands of nerve tracks waiting to get plugged in since the body, in what it does very best, is trying to correct itself all the time,” she says. “The younger the child, the more rapid the change.”

Flowers says cranio work helps with everything from motor skills to social skills to sensory processing issues. And nearly every baby can benefit, says Flowers, simply because birth—and pregnancy—can be so difficult. “Often problems might have started with the position in utero, or through genetics, or the mother’s exposure to toxins in environment, or in her biochemistry, such as toxemia or diabetes.”

Flowers says that cranio work also works with tissue memory. “The body retains memory, not only in the cortex of the brain, but in every cell of the body which can manifest as memory. “The body retains memory, not only in the cortex of the brain, but in every cell of the body which can manifest as memory. As the child gets older, the symptoms begin, which can show up in the common cold or ear infections. In fact, says Flowers, CranioSacral work is especially effective for ear infections.

“When we see a child with an ear infection, you can usually trace it back to the birth,” she says.

Flowers says that John Upledger, who founded the form of CranioSacral work that she practices, maintains that immediate CranioSacral work on newborns would prevent or minimize 80 percent of common childhood ailments, including ear infections, allergies, reflux, colic and hyperactivity.

Although many massage therapists practice CranioSacral work, it’s actually a gentle, osteopathic manipulation of the head, spine and body that deals directly with the central nervous system. It works well, however, with massage therapy. “CranioSacral Therapy can be a stand-alone modality, or it can be woven into almost any other alternative practice,” Flowers says.

“CranioSacral Therapy can be a foundational way of facilitating change in the central nervous system, which controls all the other systems, including respiratory, cardiac, and digestive,” Flowers says.

Parents’ needs, especially since babies pattern their nervous systems on the mother’s and those directly affecting the mother.

“It’s better for human development if infants are surrounded by a state of peace,” Takikawa says. The greatest service you can do for a baby, she says, is to help the mother settle in her body. “Just having the mother sit there and breathe with you. Or look at her every five minutes and make eye contact, or ask her how she’s doing, or touch the mother’s foot with yours and ask her to take a breath,” Takikawa says. “She may not get it the first session, but by the third or fourth, she’ll be releasing with the baby.”

You’ll benefit as well. For one thing, the skills you learn can be transferred to nearly any of your clients. “Everything in infant massage is transferable to an adult,” says Ramsey. For example, she used the same techniques on a man going through job stress. “It’s a very protective form of massage,” she says. “He was too tense to be able to take in all the variety of massage strokes that are stimulating to muscles and the nervous system.” She even “swaddled” him, tucking him in a sheet. And elder massage is simply a spin-off of infant massage, she says.

Perhaps most profound, however, is this: Infant massage becomes a spiritual experience for everyone involved. “I teach listening touch as part of my [infant massage] workshop,” says Ramsey. “It’s about using your hands like ears to pick up all kinds of information.”

First, you’ll feel the temperature, she says, the softness, the moistness—simple data collection. Then it happens. “Babies listen with their skin—they listen to your listening. They begin to give back,” she says.

“Try it for 10 seconds—really listening with your hands. It’s a blissful experience.”