



Mother's Massage

A Guide to Prenatal and Postpartum Massage & Wellness

The Massage
Mantra for Moms

10 Things About
Prenatal Massage

Positioning
& Alignment

Pregnancy and Auto-
Immune Diseases

Unraveling
the Myths

Chair Massage
4 Moms

Product Safety for
Pregnant Clients

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The Massage Mantra for Moms

BY KARRIE OSBORN



Even with today's medical advances in childbirth, one simple truth remains—a woman must eventually do most of the childbearing work herself. Understanding how to best utilize a woman's inner strength and harness her body's wisdom can make the childbearing process easier and healthier for both mother and child. Massage is one of the best ways to do so, giving a woman in labor natural tools to manage the pain of childbirth, as well as helping and nurturing the mom-to-be both before and after the baby arrives.

PRENATAL MASSAGE

Prenatal massage is something every pregnant woman should enjoy, and it is a highly popular niche within the bodywork profession that should be considered a vital component of maternity care for both mother and child. Prenatal massage presents challenges for the therapist (including a new level of contraindications and intake protocol), but offers incredible benefits to a client already structurally, muscularly, and emotionally stressed. Some of those benefits include relief from nausea, decreased muscle aches and pains, increased circulation, physical and emotional relaxation, and help with edema. Maternity massage requires proper training, as there are precautions and contraindications all therapists should be aware of. This client work has no room for error.

During labor, massage can help ease the excruciating pain of contractions and help pull a woman's focus away from the cyclical stress her body is undergoing. Midwives are sometimes trained in simple massage, and it's also beneficial to have a woman's partner be somewhat versed in the art of touch to help during the typically lengthy birthing process. Work on the face, neck, shoulders, hands, and feet can be of great comfort during this time, and attention to the back can greatly ease the discomfort of back labor (when the pain of contractions becomes concentrated in a woman's back).

POSTPARTUM MASSAGE

Postpartum massage can help a woman reconnect with her body after the fact. With all the demands of motherhood, it's important the new mother takes time to heal herself. Massage is one way to find that relief. As the new mother's body starts to revert to its pre-pregnancy status, or even undergoes additional changes brought on by surgical recoveries or breastfeeding needs, women often begin disassociating with their physical self. Massage can bring them back to their body, allowing them to begin appreciating it and the hard work it's just been through.

Massage during this time can also eliminate many of the aches and pains brought on by pregnancy and exacerbated by the traumas of childbirth. Roling and other forms of structural integration can greatly help "reorganize" the woman's body after birth.

FORGING AHEAD

Making inroads with the medical community will continue to be challenging until research proves the efficacy of complementary therapies during childbirth. Until then, however, massage therapists and others within this profession can forge relationships with medical professionals and continue to demonstrate the benefits of using massage and other alternatives during the birthing process. It's the right thing to do for mother and baby. ■

Karrie Osborn is senior editor for Associated Bodywork & Massage Professionals.

A birth assistant/doula is someone who offers massage and/or emotional and physical support during the birth, and also acts as a mediator between the parents and their medical caregivers.

Birth Assistants—Another Path for MTs

Becoming a birth assistant, or doula, is another way massage therapists and bodyworkers can assist their pregnant clients. Sandy Ventura Gordon, director and president of Bodyworkers Association for the Birthing Year (B.A.B.Y., Inc.), says her organization takes already-trained massage therapists and gives them another avenue to pursue.

"The amount of people requesting birth assistants has grown astronomically," Gordon says. Communication, visualization, massage, and other relaxation skills are what Gordon's graduates bring to a birth environment. "If a woman is completely relaxed, and you've removed her fears, then you've removed the resistance," she says. Gordon reminds us that the uterus is a muscle; if you can relax that muscle, it will be more fully oxygenated, it won't have to work as hard, and there will be less perceived pain.

"I train doulas on how to educate women before they get there," Gordon says. If women can be taught these skills during their pregnancy, then their bodies will be trained and ready for the big day, too. Gordon's continuing education programs begin with prenatal massage certification, but she sees many of those students move into the massage birth assistant program once she begins educating them about the significance of pregnancy massage and how it is much more than just a physical event.

"Our whole goal is to change what's happened to pregnancy, labor, and birth in the United States," Gordon says of the increased mechanization of childbirth, "and you do that through knowledge." She says by educating parents, and teaching them how to use their own voice in this important process of birth, caregivers will eventually listen.

And research suggests that trusting the natural process works. Continuous support from a midwife or doula during labor reduces a mother's chance of a Cesarean by 50 percent, reduces the likelihood of pain medication by 60 percent, reduces the length of labor by 25 percent, and reduces all other medical interventions by as much as 40 percent.¹

Note

1. Peggy O'Mara, *Having a Baby, Naturally* (New York: Atria Trade, 2003), 70.

10 Things to Know About Prenatal Massage

BY REBECCA JONES



1. THE POSITIVE RESULTS

The possible benefits of prenatal massage therapy include:

- Improved breathing.
- Increased flow of nutrients to the placenta.
- Postural support.
- Reduced anxiety and depression.
- Relief of muscle discomfort, nausea, and edema (swollen ankles and feet).

It's good for the fetus, too, says Claire Marie Miller, one of the nation's leading instructors in pregnancy and fertility massage. "When mother is relaxed, baby is relaxed."

2. IT'S A FAST-GROWING SPECIALTY

Because more health-care providers recognize the upside to prenatal massage, it's one of the fastest-growing types of bodywork found in hospitals. "Some hospitals offer massage in antepartum and postpartum units, and the number is growing quickly," says Carole Osborne, author of *Pre- and Perinatal Massage Therapy* (LWW, 2011). "It's a specialty that has good financial potential for knowledgeable massage therapists."

3. IT BENEFITS LOW-BACK AND PELVIC PAIN

A 2009 survey that Osborne conducted found that the number one reason pregnant women sought massage was for low-back and pelvic pain, followed by stress reduction, and upper-back, neck, and shoulder pain. Relief from edema was cited by only 6 percent of women. "That's interesting information when you're trying to fine-tune your marketing approach," Osborne says. "Yes, pregnant women have edema, but that's not why most come to a massage therapist." Make sure to have a thorough conversation with your pregnant client beforehand to determine what her needs are.

4. IT'S NOT JUST ABOUT SWEDISH MASSAGE

Thai yoga massage presents a nice option for pregnant clients. "It's done in loose, comfortable clothing, so they don't have to get out of their clothes or fumble with things," says Sukha Wong, owner/director of the Lotus Palm Thai Yoga Massage School in Montreal and Toronto. "It's done on a Thai mat, on the floor, which is very comfortable for pregnant women." With its emphasis on stretching, the technique is especially good for women in late pregnancy. Just make sure new clients understand what a Thai massage session looks like, and how you can assist them, before they arrive.

5. THERE ARE PREGNANCY-FOCUSED SPAS

In 2003, Stacy Denney launched Barefoot & Pregnant, one of the nation's first pregnancy spas to provide a variety of services—including massage, fitness classes, facials, and child care—for moms-to-be. In 2012, Denney launched Belly Friendly (www.bellyfriendly.com), an endorsement program for other spas seeking to serve this demographic. “In addition to teaching therapists how to perform prenatal massage, we're training the staff how to interact with the expecting mom,” Denney says. “Then we help these spas with their marketing efforts, too.”

6. THERE ARE RETAIL OPPORTUNITIES

Core Products International carries the Baby Hugger and Better Binder, both developed by a physical therapist with a special interest in helping soon-to-be moms. The products help relieve backaches and hip pain, plus provide belly support, and the Baby Hugger also addresses bladder issues.

Jjoba oil is also great for pregnant clients and newborns—it's nonallergenic, won't clog pores, and softens the skin. “We recommend using it for infant massage and after every diaper change,” says Bob Butler, president of The Jjoba Company, which makes Jjoba Baby, an organic jjoba baby oil. “It also eliminates cradle cap.” Remember—a client's sensitivities can change throughout the course of her pregnancy, so get her approval before using any new product or scent during the session.

7. DOULAS USE MASSAGE

Judith Koch, director of education at the Institute of Somatic Therapy in Conway, Missouri, has developed a range of methods to make labor easier, and she trains massage doulas to assist women through all stages of pregnancy and delivery. “Studies show that women who are supported by a doula during labor have significantly shorter labors, fewer interventions for pain and from complications, and shorter hospitalizations for mother and baby,” Koch says.

8. MASSAGE MAY ASSIST FERTILITY

Just as massage can be a boon for the pregnant or new mother, it might also assist those trying to get pregnant. Fertility massage is believed by some to improve circulation to the reproductive organs, loosen scar tissue from fallopian tubes, and help maintain a healthy hormonal balance. “Two preliminary medical studies have shown great promise,” Koch says. “Seventy-one percent of participants in one study and 53 percent in the other study became pregnant with the help of manual therapy.” The data is preliminary and the size of the test groups was small, but proponents are excited about the possibilities.

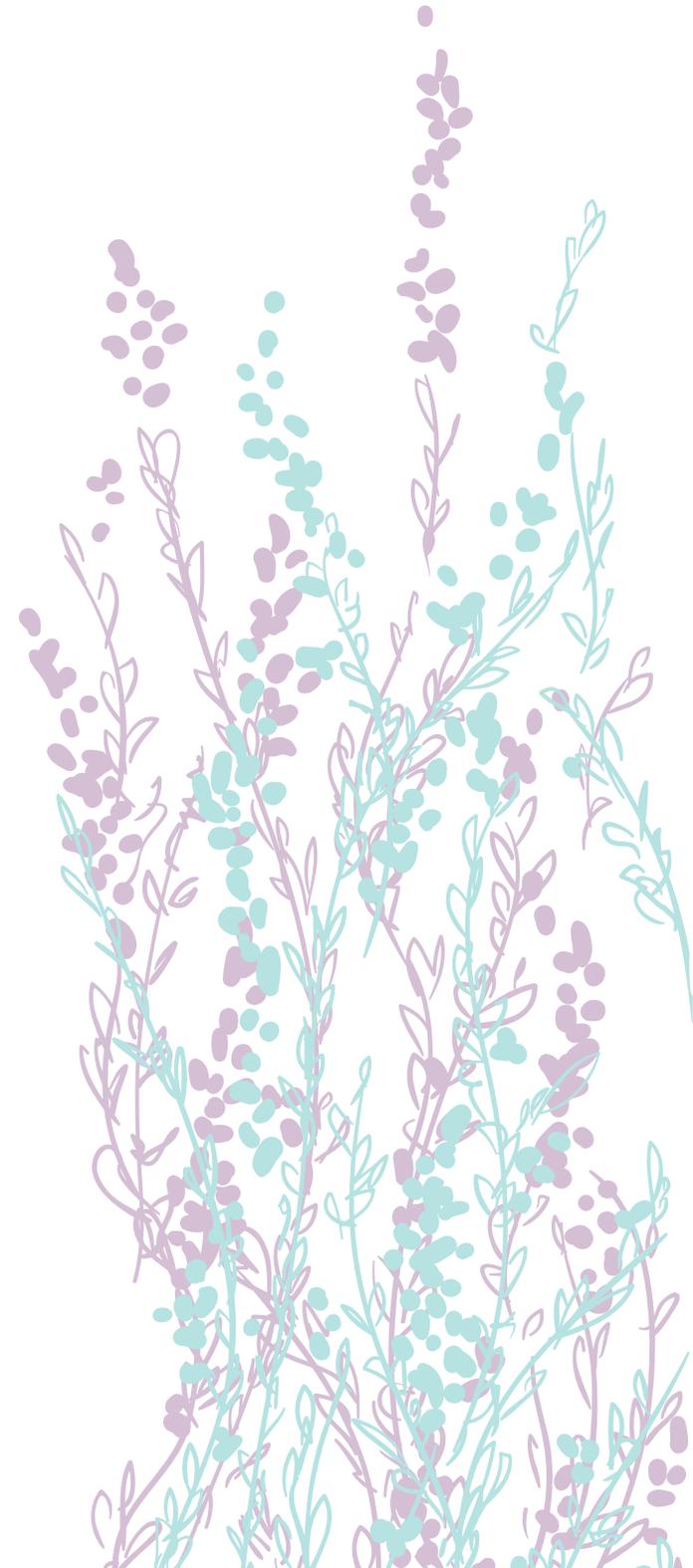
9. POSTPARTUM MASSAGE IS IN DEMAND

Massage for the new mom can go from “nice” to “essential” in the first few weeks after the baby arrives, says Kate Jordan, founder of Kate Jordan Seminars. “I like to think about my sessions with postpartum women as being my opportunities to give them a spa massage, to cosset them, to give them the support they might not be getting from family or friends,” says Jordan, who has been teaching postpartum massage for 30 years.

10. THERE ARE ABDOMINAL MASSAGE MODALITIES

Finally, massage may assist women struggling with cramps, pelvic pain, or a prolapsed, fallen, or tilted uterus before and after pregnancy. The Arvigo Techniques of Abdominal Therapy are based on the ancient Maya technique of abdominal massage. Rosita Arvigo, DN, learned these techniques from a Maya shaman in Belize. By bringing internal organs into better alignment, everything just works better, says Diane MacDonald, RN, MSN, the program administrator and advanced instructor at Arvigo. “It also allows emotional healing to happen.” ■

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Positioning & Alignment

BY ERIK DALTON



Image 1. Following conception, a woman and her unborn child unite in an oceanic blend of energy and identity. Where one ends and the other begins no one knows. Photo courtesy of the Freedom From Pain Institute. Dianna Pittman model. ©erikdalton.com

The miracle of motherhood is eloquently expressed when observing how perfectly the female body is designed to conceive, birth, and nurture a child. A woman and her unborn baby unite in an oceanic blend of energy and identity. It can be hard to define where one ends and the other begins. (Image 1).

During pregnancy, the nervous system directs all the body's systems to maintain mother and fetus in a state of homeostasis and balance. Since all of the mother's systems and organs are now providing for two, it is obvious that her optimal posture and functioning is critical for her baby's healthy development. Regrettably, mechanical pressure on the central nervous system from distorted cranial bones and spinal structures can interfere.

We begin our adventure into motherhood by introducing some very intriguing theories detailing how third trimester fetal positioning may, later in the child's life, create aberrant postural patterns. Basic hands-on pelvic balancing and trunk stabilization routines taken from my *Advanced Myoskeletal Techniques* textbook are also included so therapists can aid expectant mothers in their quest for a healthy, happy delivery. But before introducing the various postural theories and techniques, a brief overview of Mother Nature's remarkable art of birthing requires thoughtful consideration.

FETAL LIE AND POSTURE

The fetus rests within the mother's pelvis in what is medically termed a left occiput anterior (LOA), or left fetal lie, position. The baby usually remains in this "normal" primary fetal posture throughout labor and delivery, although a variety of movements are common throughout the birthing process. In the left fetal lie configuration, the baby's head is inferior, flexed, and rotated left with arms and legs curled. Image 2 (page 7) illustrates a typical vertex-positioned baby with head turned left. The small figure on the right shows the left occipital ridge resting comfortably on the mother's pubic bone. However, as the birth date approaches, the fetus gradually rotates so that the left side of the head will eventually face posteriorly.

The most compact profile for the fetus is for the arms and legs to curl in opposing directions with a resultant rotation along a longitudinal axis. Some authors, including Ida Rolf, PhD, J. Gordon Zink, DO, and Fred H. Previc, PhD,¹ have found this rotational fascial bias to be an important factor in determining the final shape of the fetus. It appears that as we grow from infancy into adulthood, we retain ingrained embryologic rotational fascial preferences (Image 3, page 7).



Image 2. In the left fetal lie configuration, the baby's head is inferior, flexed, and rotated left with arms and legs curled. Adapted from Bill Allen with permission.



Image 3. Fascial bias in the fetus and the adult. Illustrated by Laura Maaske/Medimagery LLC. Reprinted with permission.

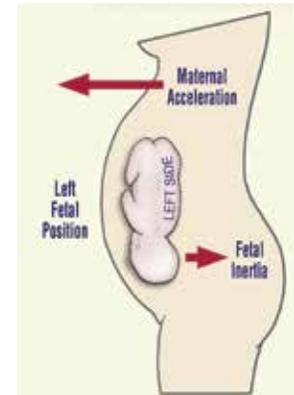


Image 4. During the normal act of walking, maternal acceleration repeatedly forces the baby's head to translate posteriorly through a process called fetal inertia. Adapted from *Psychological Review* by Fred Previc.

When testing for our adult clients' rotational fascial patterns, bodyworkers typically find the head rotates easiest to the left at the cervicocranial joint and right in the lumbosacral region. Due to fetal positioning, it is likely that fascial patterning does actually begin in the mother's womb during the final trimester of birth. Moreover, individual variations in fetal lie seem to become increasingly important as the embryo's body takes shape.

CEREBRAL LATERALIZATION

During the normal act of walking, maternal acceleration repeatedly forces the baby's head to translate posteriorly through a process called fetal inertia (Image 4). Repeated left-sided cerebral stimulation increases neurologic activity in the baby's vestibular (balance) apparatus.

Prolonged left-sided inertial pressure is thought to cause increased secretion of connective tissue fibers resulting in early maturity and development of the left side of the baby's vestibular system and subsequent right motor dominance.² Since vestibular information travels down the ipsilateral side of the body from the inner ear to the foot, when standing, most adults bear more weight on the left leg than the right. Conversely, early left-sided cranial development neurologically crosses to the opposite cerebral hemisphere (right brain) resulting in right motor dominance.

When observing vestibular and motor dominance working in harmony during a normal activity such as kicking a ball, the individual typically balances on the left leg and kicks with the right (Image 5, page 8). In support of the cerebral lateralization premise, scientists find that in the majority of the adult population, the left leg is larger and has greater muscle mass.³ Due to this early lateralization process, an interesting postural pattern begins to emerge. During prolonged standing, most people will sideshift body weight over the vestibularly dominant left leg, causing the trunk to sway to the left. Compensatory scoliotic patterns are seen in the pelvis and torso as the body's center of gravity shifts. Left-legged weight bearing not only flattens lumbar lordosis and posteriorly rotates the left ilium, but also causes the right ilium to drop in an anterior/inferior direction (Image 6, page 8). Ordinarily this would produce a long right leg, but as the center of gravity shifts left, the right knee moves medially, overstretching the medial collateral ligaments and twisting the limb into a valgus position. Prolonged pelvic sideshifting over the vestibularly dominant left leg creates fascial, muscular, ligamentous, and osseous alterations that distort the placement of the femur in the acetabulum, causing the right leg to functionally shorten.

Several researchers have confirmed that left vestibular dominance occurs in roughly two-thirds of the human population.⁴ Previc described a possible

prenatal mechanism for the origin of left vestibular dominance in this statement: "Because the right side of the body faces outward in the left fetal position, the acceleratory movements during maternal walk would, from the standpoint of the fetus, be registered rightward. The more substantial inertial force would consequently be leftward, providing for greater stimulation of the left utricle, thereby promoting early growth and development of the left vestibular system."⁵

STRUCTURAL ROLE OF PREGNANCY

The female pelvis supports the growing uterus with specialized ligaments. When pelvic bones are balanced and aligned properly, the uterus is able to enlarge symmetrically with the growing fetus. Regrettably, many women are unaware of the importance of maintaining proper structural alignment pre- and postpartum and often suffer needless and painful consequences (Image 7, page 9).

If the three bones of the pelvis are pulled out of alignment due to upper or lower quadrant imbalances, proper support of the uterus is placed in jeopardy. Unequal ligamentous support can torque the uterus, reducing the maximum amount of room for the developing fetus. The term used to describe this condition is intrauterine constraint. Pelvic and respiratory diaphragmatic restrictions also alter the baby's position and can adversely affect his/

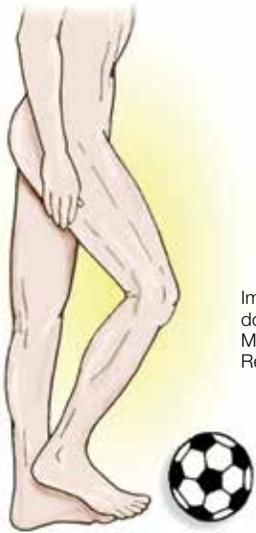


Image 5. Vestibular and motor dominance. Illustrated by Laura Maaske/Medimagery LLC. Reprinted with permission.

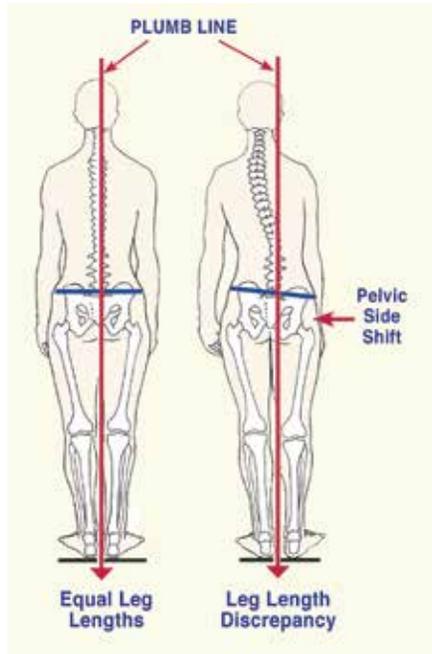


Image 6. Vestibular dominance produces left-legged weight bearing that not only flattens lumbar lordosis and posteriorly rotates the left ilium, but also causes the right ilium to drop in an anterior/inferior direction. ©erikdalton.com

her developing spine and cranium (Image 8, page 9). Movement limitations during pregnancy may prevent the baby from attaining the best possible position for delivery. Any birth position other than the ideal vertex, occiput anterior, left fetal lie position may produce the inhibiting effects of constraint. Such positions lead to longer, more painful labors with increased need for medical interventions. Often the mother and baby miss the many benefits of a natural vaginal birth as physicians may recommend a C-section delivery.

HEY, MOM ... IT'S TIGHT IN HERE

As space in the mother's womb becomes more compacted during the final trimester, the embryo's arms and legs sometimes curl in various positions and occasionally the head finds itself hyperextended or stuck between the legs rather than turned to one side. *Sunny-side-up* is the phrase assigned to babies whose heads have drifted from the normal flexed and rotated position into a backward-bent state of hyperextension. Today, more and more sunny-side-up presentations are showing up in hospitals around the world due to such things as:

- Poor posture. Mother prone to slouching in soft-cushioned furniture, causing loss or reversal of normal lumbar lordotic curve.
- Weakened trunk stabilizers. Inadequate support in transversus abdominis, multifidus, obliques, and rectus abdominis.
- Lack of proper manual therapy. Poor structural alignment before, during, and after delivery (i.e., presence of aberrant upper and lower crossed patterns, spread rectus abdominis muscles, pelvic obliquity, etc.).

RECTUS ABDOMINIS AND LOW-BACK PAIN

As the baby develops, the mother's rectus abdominis muscles and supporting ligaments develop a great deal of extensibility (stretch). The release of a hormone called relaxin is a fundamental part of Mother Nature's plan to assure a comfortable resting environment for the fetus and a safe, normal delivery. However, a common problem occurs as the belly grows and the recti muscles

begin to wander off laterally from the midline. This is usually due to excessive abdominal wall pressure overstretching (or tearing) the linea alba—a tendinous median line designed to separate the two rectus muscles. When working properly, the tendon effectively binds the recti muscles close to midline providing optimal abdominal support (Image 9, page 9). *Diastasis recti abdominis* is the term used to describe the separation of abdominal wall musculature during some pregnancies.

If mother and therapist allow this slow lateral recti migration as the abdomen expands, vital trunk stabilizers, including transversus abdominis, internal/external obliques, and multifidi, become stretch-weakened. Gravity begins pulling the belly forward, placing great strain on the low-back extensor muscles. In the absence of proper front/back muscle balance, the posterior lumbar erectors tighten in an effort to restrain gravitational pull from the heavy, unsupported belly. Regrettably, this only increases lumbar “bowing,” compressively loads the intervertebral discs and posterior facet joints, and creates greater low-back pain. Any alteration in the mother's abdominal support system not only adversely affects fetal positioning but also causes pregnant mothers to cry out for help as muscles, ligaments, joint capsules, and discs lose the battle with the unrelenting force of gravity.

Fortunately, mothers receiving manual therapy from trained practitioners usually experience little low-back pain through their pregnancies. Specially designed sidelying techniques performed weekly or bimonthly can really help take pressure off the low back (Images 10 and 11, page 10). Expectant mothers experience greater trunk and low-back stability as the therapist's soft, extended fingers gently hook the rectus abdominis fascia and move the tissue medially back toward the mid-line (Image 12, page 10). After a few sessions, the weakened abdominal support system “wakes up” as the recti regain muscle memory. With the recti muscles toned and back in the midline, the pubis and rib cage are pulled closer together, which posteriorly rotates the pelvis and reciprocally reduces lumbar lordosis.

LIGAMENTOUS SUPPORT OR COLLAPSE

Provided the pelvis is in a balanced state, the ligamentous web attaching to the uterus maintains an equalized, supportive, antigravity suspension system. Any type of pelvic imbalance that causes the ligaments to become torqued and twisted results in uterine constraint, which limits the space available for the developing baby. At the least, any compromised position the baby must endure during pregnancy can have some sort of detrimental affect on his or her optimal development. Conditions such as torticollis are not uncommon in babies suffering uterine constraint.

If the shape of the woman's uterus becomes distorted as birth approaches, the baby is prevented from getting into the best possible position for birthing. And even if the baby manages to place himself in the desirable head-down position, a tight uterine cavity can prevent the baby's head from moving into the ideal presentation for delivery. The head can become slightly tilted to one side or, even more traumatically, present in the posterior position. Any fetal position that alters the baby's correct habitus even slightly during birth will slow labor and add pain to both mother and baby. Women are often told that their babies were too big, or labor "just slowed down" when it was really the baby's presentation interfering with the normal process and progression.

Because excessive body weight tends to exaggerate ingrained aberrant postural patterns, therapists must address all soft tissues and osseous tissues (beginning with the feet) that may alter pelvic balance. Mothers with a tendency for foot pronation and valgus knees are particularly susceptible to ligamentous laxity when the relaxin hormone enters the system during the third trimester. As the woman's weight increases and medial ankle ligaments (spring and deltoid) become lax, the already pronated talus bone continues its medial glide off the calcaneus, causing the foot and arch to drop into hyperpronation. Image 13 (page 10) demonstrates a therapeutic myoskeletal technique for bringing balance to a misaligned talocalcanea joint due to weakened ankle ligaments. Recall that ligaments like stress but

do not like strain. Ankle, knee, and pelvic alignment should be assessed and corrected during each session.

HOMEWORK

Home retraining exercises that focus on restoration of proper tone in the trunk stabilizers, diaphragms, and pelvic floor muscles are essential therapeutic pieces of the pregnancy puzzle. Transversus abdominis, pelvic-clock, and TheraBand toning routines boost therapeutic outcomes when performed on a regular basis between sessions. Pilates, yoga, Rolf movement, and other trunk-stabilizing programs also seem effective in helping the body's innate self-regulatory mechanisms produce a healthy, happy baby.

BEST POSSIBLE SCENARIO

The mother's best chance for a normal left fetal lie delivery requires that:

- No pelvic bowl asymmetries exist (i.e., sacroiliac, iliosacral, or sideshifted dysfunctions).
- Proper tone be present in the deep trunk stabilizers and lumbar multifidus.
- No spreading (past three fingers' width) of the recti muscles at midline.
- Obstetrician—or midwife—directed therapeutic exercises be practiced regularly for adequate abdominal and trunk stabilization support.

These and other factors will not only help determine the habitus, presentation, and delivery of the child, but will also play a major role in proper development and shape of the adult vertebral column. As stated above, early embryologic positioning often forms aberrant fascial rotational preferences that can become exaggerated during one's lifetime. This compensatory process manifests as a loss of range of motion, tissue texture abnormalities (fascial contractures, fibrosis, etc.), and posturally initiated pain.

During the final trimester, fascial restrictions can encumber proper blood and lymph flow and create neurological interferences that travel throughout all

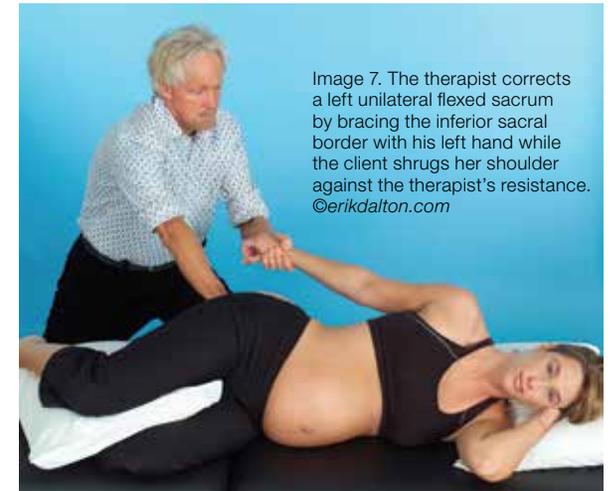


Image 7. The therapist corrects a left unilateral flexed sacrum by bracing the inferior sacral border with his left hand while the client shrugs her shoulder against the therapist's resistance. ©erikdalton.com



Image 8. Intrauterine constraint caused by pelvic misalignment can alter the baby's position and adversely affect the developing spine and cranium. Adapted from Bill Allen with permission.

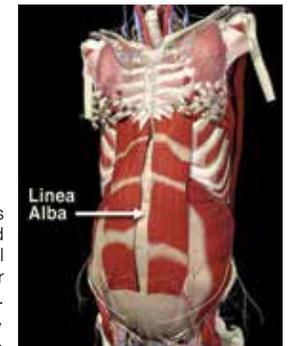


Image 9. Linea alba laxity allows the recti muscles to spread laterally. The resulting abdominal stretch weakness increases lumbar lordosis, resulting in low-back pain. Adapted from Primal Pictures, 2003. Reprinted with permission.



Image 10. The therapist hooks the lumbar fascia and holds while the client performs slow pelvic tilts. ©erikdalton.com



Image 11. The therapist's left forearm hooks the latissimus dorsi fascia and the left hand produces a counterforce by grasping the client's anterior superior iliac spine. The client inhales while gently pulling up on the top of the table to the count of six, then relaxes. The therapist's forearm creates space between the client's shoulder and pelvic girdles. ©erikdalton.com



Image 12. Soft extended fingers gently hook the rectus abdominis fascia and move the tissue medially back toward the midline. ©erikdalton.com



Image 13. The therapist's webbed hands and knees grip the talus as the client gently flexes her knee against resistance. The client relaxes and the therapist ligamentously balances the talus on calcaneus to correct foot hyperpronation. ©erikdalton.com

the body's soft tissues. Fascial distortions frequently generate pressure gradient alterations in the thoracic outlet, respiratory, and pelvic diaphragms and are major contributors to stagnation in the vascular, lymphatic, endocrine, and respiratory systems. Myoskeletal Zone Therapy incorporates special techniques for eliminating stagnation by restoring optimal diaphragmatic function. To help guarantee a successful and unremarkable delivery, the baby needs the maximum amount of space in the mother's uterus and pelvis at exactly the time it is needed. The baby will make a determined effort to achieve the correct position for birth, but can face resistance if a mother is unaware or unsure of her role in assisting the baby throughout the process. The third trimester of pregnancy, commencing at seven months gestational age, heralds the perinatal period. This critical stage is of greatest concern due to the propensity for adversity in the fetal presentation, position, and attitude. The biomechanical implications affecting fetal well-being during the third trimester, and for the preparatory phase for labor and delivery, embrace any fetal alignment other than the optimal longitudinal lie, vertex presentation, and flexion attitude. Fetal positioning during the third trimester is not only crucial to an uneventful delivery, but possibly to the final construction of the baby's posture from adolescence through adulthood. ■

Notes

1. R. Louis Schultz and Rosemary Feitis, *The Endless Web: Fascial Anatomy and Physical Reality* (Berkeley: North Atlantic Books, 1996); J. G. Zink, "Applications of the Osteopathic Holistic Approach to Homeostasis," *American Academy of Osteopathy Yearbook* (1973): 37-47; F. H. Previc, "General Theory Concerning the Prenatal Origins of Cerebral Lateralization in Humans," *Psychological Review* 98 (July 1991): 299-334.
2. F. H. Previc, "General Theory Concerning the Prenatal Origins of Cerebral Lateralization in Humans."
3. S. R. Chhibber and I. Singh, "Asymmetry in Muscle Weight and One-sided Dominance in the Human Lower Limbs," *Journal of Anatomy* 106 (1970): 553-6.
4. M. Lacour, et al. "Spinal Effects of Electrical Vestibular Stimulation in Humans," *Acta Otolaryngologica* 78 (1974): 399-409; B. Milojevic and J. Watson, "Vestibular Asymmetries in Right- and Left-Handed People," *Acta Otolaryngologica* 60 (1965): 322-30; R. J. von Baumgarten and R. Thumler, "A Model for Vestibular Function in Altered Gravitational States," *Life Sciences and Space Research* 17 (1979): 161-70.
5. Previc, *Psychological Review*.

Erik Dalton is the executive director of the Freedom from Pain Institute. Educated in massage, osteopathy, and Rolfing, Dalton has maintained a practice in Oklahoma City, Oklahoma, for more than three decades. For more information, visit www.erikdalton.com.

Pregnancy and Autoimmune Diseases

BY RUTH WERNER



Recently, a bodyworker who specializes in working with pregnant women pointed me in the direction of a largely unexplored topic: the relationship between pregnancy and autoimmune diseases. How does one affect the other, and how can we and our clients make the best possible choices in this context?

As I began to research this topic, I quickly realized there are no simple answers to these questions. Different autoimmune conditions have different implications for women who are pregnant, so no rubber stamping is appropriate here. What follows is a brief look at autoimmune diseases in general, with specific implications about pregnancy for some of the most common conditions on this list: type 1 diabetes, multiple sclerosis, rheumatoid arthritis, scleroderma, lupus, and Crohn's disease.

AUTOIMMUNE DISEASES

Autoimmune diseases are situations in which the immune system makes a mistake. Instead of attacking a bacterium, fungus, virus, or other foreign invader, immune system agents (antibodies, lymphocytes, and macrophages) launch an assault against our own tissues. In some cases, the confusion can be traced to exposure to certain pathogens that have membrane proteins resembling our own: years later, the immune system may be startled to recognize that cells in the lining of the metacarpal-phalangeal joints bear a striking resemblance to Coxsackie virus, for instance, and, with the right genetic prompting, they can mount an attack to quell this dangerous invader—even though there is nothing inherently threatening about healthy synovial membranes. This describes one possible sequence for the development of rheumatoid arthritis, an autoimmune disease that affects more than 3 million people in the United States.

Autoimmune diseases have a typical pattern of running in cycles of flare and remission. During flares, a person might have symptoms limited to one area or tissue type, but many people experience system-wide reactions. This period is usually followed by remission, when symptoms subside. After each flare, however, some function may be permanently lost. The goal with treating these conditions is to reduce the severity of flares (often with powerful anti-inflammatories and/or immune-suppressing drugs) and to reduce the frequency of flares, which can be accomplished by identifying and avoiding triggers; eating, exercising, and sleeping well; and managing stress.

Most autoimmune diseases seem to be related to a combination of genetic predisposition and environmental exposures. They tend to run in families, although they may take different forms among different people. While one person might have rheumatoid arthritis, her daughter might have multiple sclerosis, and her niece might have lupus. That said, if one family member has an autoimmune disease, the risk of another person in that family developing a problem is only slightly higher than the risk for someone with no family history of this kind of problem.

Autoimmune diseases affect women roughly three times more often than men. They are the fourth leading cause of disability among women, and the women most at risk are in their childbearing years. This raises questions about the role of fluctuating hormones in the disease process—questions that researchers have yet to answer.

The range of autoimmune diseases and the tissues they affect is immense. Some are equally distributed between men and women, and some (notably ankylosing spondylitis) are more common in men. But the large majority of these are much more common in women, and depending on the age group, women with certain conditions may outnumber men 10:1, or more.

PREGNANCY AND AUTOIMMUNE CONDITIONS

Pregnancy adds another complicated layer to the process of many autoimmune diseases. Pregnancy involves radically changing hormone levels, and some conditions that are exacerbated when estrogen levels are high tend to flare during this time. Conversely, pregnancy tends to suppress the immune system, so the mother's body won't reject the new fetus. Some autoimmune diseases move into remission during pregnancy, only to rebound with sometimes violent flares when the mother is postpartum.

In the recent past, a woman with a diagnosed autoimmune disease was often counseled not to get pregnant, as the risks to herself and her baby were difficult to manage. Nowadays, with better



Pregnancy tends to suppress the immune system, so the mother's body won't reject the new fetus.

treatment options and more understanding of how to control the disease process, many women with these conditions can look forward to successful, if somewhat complicated, pregnancies.

What follows is a brief discussion of how a few common autoimmune diseases impact pregnancy, and how pregnancy may likewise influence the course of some conditions.

Type 1 Diabetes

This condition involves the destruction of islet cells in the pancreas, leading to a lack of insulin. It is usually diagnosed during childhood. Adult women with type 1 diabetes may have successful pregnancies, but they tend to fare better if their disease is well controlled, with no heart, eye, or kidney problems. Diabetic women must be extremely vigilant about their blood sugar, especially for the first 11 weeks. This is more difficult than it sounds, because blood sugar fluctuates radically with hormonal secretion. Poor blood sugar regulation puts the mother at risk for pregnancy-induced hypertension and eclampsia; it puts the baby at risk for being overly large (requiring a Cesarean section), or having Down syndrome, spina bifida, or other congenital problems. Most pregnant diabetic women are encouraged to induce labor at 38 weeks (40 weeks is the normal length of a pregnancy), because high blood sugar causes the placenta to mature faster than normal.

Multiple Sclerosis

This disease affects myelin in the central nervous system. It has been diagnosed in about 350,000 Americans, and young women outnumber young men with the disease by about 2:1. Many women find their condition goes into remission while they are pregnant, although they are often hit with a significant flare 4–6 weeks after delivery. One special caution for pregnant women with multiple sclerosis

(MS) is that they may lack the muscular strength to deliver the baby without surgical intervention. Massage for a woman with MS is fine as long as sensation is present and the therapist avoids rapid and extreme changes in the ambient temperature; people with this condition often don't tolerate extreme hot or cold temperatures well.

Rheumatoid Arthritis

This condition targets synovial membranes. The metacarpal-phalangeal joints are especially vulnerable, but toes and ankles may be involved as well. During a flare, a person with rheumatoid arthritis (RA) may also have inflammation in the lungs, heart, liver, and blood vessels. However, like MS, RA tends to go into remission during pregnancy.

Scleroderma

Scleroderma is an autoimmune disease that attacks the lining of small blood vessels, causing scar tissue to accumulate close to the skin. Systemic versions of the disease can cause a similar problem in internal organs. A combination of pregnancy and scleroderma isn't common, because this disease is typically diagnosed between age 40 and 59—a time when most women have completed their childbearing. About 300,000 people have been diagnosed with scleroderma in the United States.

When a woman with scleroderma does get pregnant, the possible complications are serious. About 18 percent of these pregnancies end in miscarriage; 26 percent end in preterm birth. The joint pain and gastroesophageal reflux disorder associated with scleroderma tend to get worse during pregnancy. On the other hand, episodes of Raynaud's phenomenon (when the hands or feet go through temporary but extreme bouts of vasoconstriction followed by vasodilation) tend to subside. One risk unique to

scleroderma is that the uterus and cervix may lose flexibility, requiring a C-section. Many women with scleroderma experience a flare a few weeks after delivery.

Lupus

Systemic lupus erythematosus (SLE) involves an autoimmune attack against a variety of tissues, but it especially focuses on connective tissues. People with SLE are likely to develop severe arthritis, and many are at risk for renal failure as inflammatory chemicals accumulate in the kidneys. One form called discoid lupus only affects the skin, but many people who start with discoid lupus go on to develop the systemic form. About 1 million people in the United States have been diagnosed with some form of lupus, and depending on the age group, women outnumber men by about 9:1.

Lupus is usually controlled with steroidal hormones. These drugs carry some risks to a developing fetus, but if the doses can be kept low, the risks are considered to be reasonable. Lupus carries a high risk of miscarriage, as it can promote blood clots that may interfere with placenta function. Babies born to women with lupus have congenital heart problems more often than the general population, and they sometimes develop a neonatal form of the disease, but this typically clears up within about six months.

Crohn's Disease

Crohn's disease is an autoimmune attack on disconnected patches in the digestive tract. It usually begins at the ileum—the last segment of the small intestine. It involves abscesses, fistulae, inflammation, ulcerations, and the chance of perforations and peritonitis. Some people with Crohn's disease develop large ulcerations on their legs during flares. Many people with Crohn's disease have repeated surgeries to remove sections of the GI tract that have become obstructed with



scar tissue or are otherwise seriously damaged. Women are usually counseled to wait for a year after abdominal surgery before starting a pregnancy.

Some women with Crohn's disease have problems getting pregnant, but once the process has begun, and as long as the mother doesn't have a flare early in the process, the risk of miscarriage is fairly low. C-sections are common for women with Crohn's disease, especially if they have a history of abscesses or fistulae at the rectum near the vagina. Like most other autoimmune diseases, many women with Crohn's disease experience a flare in the weeks following giving birth.

HIGH-RISK PREGNANCY AND MASSAGE

Pregnancy puts an unusual demand on a woman's ability to adapt to changing environments. Autoimmune diseases, some of which may be more active during this time, place additional stresses on the system. To make things even more challenging, the stress of knowing she has a high-risk pregnancy can also increase a woman's risk of miscarriage.

Bodywork or massage in these contexts can be a wonderful gift, but the goals of the bodyworker must be realigned away from challenging homeostatic processes to simply supporting them. This can involve adjustments in the frequency or duration of sessions, the positioning of the woman (sidelying is generally considered to be the safest option), and certainly in the depth and intrusiveness of the modalities used. Abdominal work that might be safe for a woman with an uncomplicated pregnancy may be threatening for a woman with a more precarious situation, and outside of gentle stroking, it should be avoided.

Abdominal work that might be safe for a woman with an uncomplicated pregnancy may be threatening for a woman with a more precarious situation.

Massage therapists working with this population should be in communication with the rest of the client's health-care team, specifically to gather information about circulatory health, the risk of blood clots, and any changes in sensation or other function that may influence choices about the best modalities. In this way, the worst risks of prenatal massage can be avoided, while the best benefits (reduced stress, reduced stress-related hormones, improved sleep, less pain and fatigue, and the list goes on and on ...) can be enjoyed by mother and baby alike. ■

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Unraveling the Myths

Foot and Ankle Massage for Pregnant Clients

BY LESLIE STAGER



Most massage students have heard the warning, “Don’t touch a pregnant woman’s ankles,” yet few can articulate reasons for this contraindication apart from a generic fear that it will trigger contractions.

Considering the high percentage of miscarriages, perhaps there is good reason for caution, yet the warning does not appear to be based on research or even much anecdotal evidence. It does raise questions, however: How did this concern about touching the ankles develop, and is it valid? Is gentle touch during pregnancy powerful enough to cause harm?

As a pregnancy massage specialist and author of the textbook *Nurturing Massage for Pregnancy: A Practical Guide to Bodywork for the Perinatal Cycle* (Lippincott Williams & Wilkins, 2009), I researched further with the intent of either alleviating unnecessary fears or clarifying what precautions are truly necessary. This article is based on journal research, interviews with bodywork and obstetrical specialists, and personal experience. It explores the ankle contraindication, reasons why it developed, and presents the information and conclusions gathered from this investigation.

HISTORY OF TOUCH DURING PREGNANCY

For thousands of years, midwives and traditional birth attendants have used touch as an integral part of perinatal care to maintain optimal fetal positioning, to assess a mother’s and baby’s well-being, to support or stimulate contractions, to relieve pain during labor, and to release a retained placenta or prevent hemorrhage after delivery. Birth was considered a natural event that was not without its inherent risks, but often a skilled attendant—who used her hands to palpate and sense the condition of those seeking her care—helped mitigate those risks.

With the development and expansion of the medical establishment in the early 1900s, doctors became the overseers of the birth process. Birth became a medical event and the use of touch as a means of evaluating and supporting pregnancy was eventually replaced by other technologies. Pregnancy was identified as a dangerous and fragile condition with many forms of activity viewed as potential adversaries to a healthy outcome.

In the 1970s, natural birth pioneers, such as Frederick Leboyer, began to promote the idea of a less medical birth. By the late 1980s, birthing centers that focused on creating a home-like environment became popular. This movement coincided with the mainstream expansion of natural and complementary healing modalities, such as massage. While some anxieties

about the risk of pregnancy were diminishing, massage therapists were taught that it was potentially dangerous to massage pregnant women.

The 1990s brought increased research about pregnancy health, and prenatal massage finally began to be recognized as beneficial. Research indicated that massage could help decrease stress and the production of catecholamines (stress-related hormones), improve hormonal functions, speed labor, reduce pain from contractions, and increase the frequency and ease with which a mother touched her new infant, benefits known to traditional birth attendants long ago.

Even with a growing body of research, some myths and fears still linger today regarding the safety of perinatal massage. Some students are taught not to massage in the first or second trimester. Others learn not to touch the pregnant abdomen. One of the most common myths still propagated is that massaging a pregnant woman's ankles can be dangerous, possibly stimulating miscarriage or labor. Despite the prevalence of this belief, there is no evidence that ankle massage is dangerous. The concern may have developed from specific information that was gradually altered through oral transmission, eventually becoming generic and essentially useless.

THE CONTRAINDICATION

Understanding the rationale behind a contraindication empowers practitioners with knowledge and the ability to practice more safely. As we examine the warning against ankle massage—which has permeated not only massage schools, but the general public as well—we must seek clarification. What is really meant by the ankles? Is it the bony malleolus or does it include the inner calf and foot? What type of massage it is referring to—all touch, or specifically to acupressure, deep tissue, effleurage, reflexology, or shiatsu? The term massage is not clearly defined, but to be relevant to massage therapists, one might assume it refers to effleurage or other Swedish massage manipulations. It does not seem

to specify acupressure, which is the only technique that actually may have a relevant contraindication.

The following quotes demonstrate the abounding misinformation and various interpretations of this contraindication, as well as the ease with which myths can be perpetuated:

- “Don’t undergo reflexology from a therapist who is not trained to work with pregnant women. Certain reflex points on the lower legs, around the ankles, and in other areas may cause contractions.”¹
- “My doctor told me no foot massage. She said that if foot massage is done incorrectly, it can induce preterm labor.”²
- “... [ankle massage] is safe, but there are two points you should avoid. One is in the arch of the foot and the other is on the inside of the ankle about 2 inches up from that ankle bone that sticks out. You can rub gently over those areas but nothing vigorous or constant.”³
- “My friend is a certified pregnancy massage therapist and he won’t massage a woman’s feet because he doesn’t want to be sued if something goes wrong. They taught him not to in school.”⁴

These quotes represent a generalized fear about causing harm during pregnancy. In these examples, the clients of one therapist miss out entirely on foot massage, reflexology gets a bad rap as potentially dangerous in pregnancy, a doctor warns against foot massage, and the location of potent acupoints are described with total inaccuracy.

This demonstrates four common reasons why the prohibition of ankle massage during pregnancy seems to have developed:

1. There is still a common belief that pregnancy is a delicate or dangerous condition.
2. There is misinformation about uterine and ovarian reflexology zones located around the ankles.

Ultimately, It’s Her Call

Some clients will have heard that touch to the ankles must be avoided during pregnancy. If they are hesitant or concerned, despite your reassurances, abide by their wishes. The ankles will not miss a little touch, and the mother will feel more relaxed knowing you are respectful of her concerns.

3. There is misinformation about acupressure points near the ankles that may be used to support labor.
4. There is an underlying fear of being sued if a woman miscarries after a massage.

A FRAGILE CONDITION?

The perception of pregnancy as a vulnerable and fragile state, and the fear that miscarriage or contractions can easily be triggered, has developed in part due to unfamiliarity with the birthing process, and in part due to the fact that there is uncertainty associated with any early pregnancy. Miscarriage—birth before 20 weeks gestation—is very common during the first trimester of pregnancy, occurring in about 15 percent of pregnancies annually.⁵ The vast majority of these occur before 12–13 weeks gestation. According to the US Centers for Disease Control and Prevention (CDC), of the 6.4 million estimated pregnancies in the United States in 2000, miscarriage occurred in 1.03 million.⁶ The numbers are much greater when we consider all the miscarriages that happen too early to be recognized or reported as pregnancies.⁷

Most miscarriages result from a healthy response to the early abnormal development of an embryo. Other known associations include maternal issues, such as cervical or uterine problems or conditions such as diabetes, infection, or virus. Miscarriage is also associated with increased paternal age,⁸ as well as maternal drug use. Women who have three consecutive miscarriages in the first trimester have a 35 percent chance of having another miscarriage.⁹ Women with this experience will often have a significant level of anxiety during consequent pregnancies until well past the time of the previous miscarriage. Massage can be very helpful at this time by encouraging relaxation and self-care, although very deep lower abdominal work that could unintentionally physically manipulate the newly pregnant uterus is contraindicated.

Legalities

Despite the difficulty of intentionally inducing contractions with bodywork, one of the greatest fears therapists have about working with a pregnant woman is doing something that could cause her to miscarry or experience preterm labor. Not only would the burden of guilt be unbearable in thinking that your nurturing touch caused a miscarriage, but potential litigation is frightening as well. Could a massage practitioner be held responsible for a miscarriage if they rubbed the ankles of a pregnant woman? I could uncover no legal evidence of a case where massage to the ankles was shown to be related to miscarriage. As for anecdotal evidence, none of the experts interviewed for this article knew of any successful lawsuits. Author Susan Enzer had heard of two unsuccessful lawsuits against reflexologists—one in the United Kingdom and one in Australia—where the reflexologists were accused of causing a miscarriage with their work. The outcomes were in favor of the reflexologists, but tensions and fears increased. One massage therapist reported that years ago at a spa in California, a massage therapist was unsuccessfully sued when a pregnant client suffered a miscarriage after the massage. The therapist was accused of rubbing the client's ankles and causing the miscarriage, but there was no evidence to support the case. We live in a litigious culture, and miscarriage is an emotionally traumatic event, leading women to seek a reason for their loss. However, there is no research or evidence to support a lawsuit accusing a therapist of causing a miscarriage by rubbing the ankles.

Preterm labor is defined as the onset of contractions that change the cervix and put the baby at risk of being born before 37 weeks gestation. Early contractions without cervical changes can be caused by simple things, such as dehydration or urinary tract infection, while more serious preterm labor can be caused by issues with the baby's health, a shift in hormones, rupture of the amniotic sac, or infection. Most often the cause is unknown.

Despite the prevalence of miscarriage and the fear of preterm labor, gentle therapeutic massage to the feet and ankles is not an associated cause. According to obstetrician Pete Chandler, as well as midwives Carol Gray and Sue Firman, CNM, if contractions could be intentionally started with a few minutes of effleurage to a woman's ankles, everyone would use this method instead of the synthetic hormones used in medical inductions of labor.

REFLEXOLOGY ZONES

Reflexology has also been, at times, labeled as dangerous during pregnancy. Under the medial and lateral malleoli are reflexology zones related to the uterus and ovaries. Not uncommonly, therapists express concern that reflexology might be overly stimulating in the first trimester of pregnancy, or that reflexology or massage to the uterus and ovary reflexology zones will cause contractions. Dwight Byers, director of the International Institute of Reflexology, is emphatic that massage cannot stimulate the uterine and ovarian reflexology zones, and that reflexology itself applied to these zones will not stimulate miscarriage or preterm contractions.

Both Byers and Christopher Shirley, director of the Pacific Institute of Reflexology, describe reflexology as facilitating improved blood supply to the organs in the corresponding areas of the body. This, in turn, facilitates optimal physiological functioning. Stimulation of the pelvic reflex areas around the ankles produces relaxation and reduction of stress and can be offered safely throughout pregnancy. Reflexology to

the ankles may actually reduce the occurrence of miscarriage by helping nurture a healthy maternal environment and supporting the developing fetus.

Byers agrees with the midwives: "If it was that easy to stimulate labor, reflexologists would have a big business running reflexology-induced abortion clinics and pregnant women, partners, midwives, and doctors would use this noninvasive method for inducing labor."

Suzanne Enzer, a midwife, nurse, reflexologist, and author of the *Maternity Reflexology Manual* (Soul to Sole Reflexology, 2004), says that reflexology cannot, does not, and will not make the body do something unnatural. The balancing and harmonizing qualities of reflexology will enhance the woman's own self-regulating mechanisms. Reflexology may give a boost of energy and tip a woman into labor if her body was already prepared to give birth, but cannot induce labor otherwise.

The primary danger with reflexology during pregnancy, many reflexologists say, is the use of very deep pressure by inexperienced practitioners that can cause pain and/or damage to edematous tissues. Deep pressure that is painful also causes stress, counteracting the benefits of nurturing touch.

ACUPRESSURE POINTS

Another common reason cited for avoiding massage to the ankles is the fear of stimulating acupressure points that might trigger contractions. Again, misunderstandings abound regarding the use, locations, and methods of accessing acupoints, as well as the differences between acupressure as opposed to acupuncture prohibitions. Some acupuncture contraindications exist to prevent causing direct harm using the needling technique. These points are not necessarily contraindicated for acupressure.

Acupressure and shiatsu can be used to support the induction of labor; however, a different type of touch is required than is provided by general massage. Acupressure typically requires applications

of direct pressure stimulating specific points over a period of hours or days in order to have this effect. Even then, many skilled practitioners are not successful in inducing contractions.

Acupoints that are often considered useful in efforts to stimulate contractions are located on the inner leg, hand, sacrum, and one adjunctive point just posterior to the lateral malleolus—Bladder 60. However, there are discrepancies in massage and acupressure texts regarding prohibited acupoints. A variety of points around the ankles are sometimes listed as contraindicated, including Kidney 3, Kidney 4, Kidney 5, Kidney 8, and Bladder 62.¹⁰ These points can be used to support labor, calm the mind, beneficially influence the uterus, drain heat, move blood, or relax the back. But they are not considered points that trigger contractions and are not standard contraindications during pregnancy.

Bladder 60 is the only point around the ankle that the majority (but not all) of the sources I researched referred to as contraindicated. It has properties of drawing energy downward and is often used in combination with other points when attempting to induce labor.

Acupuncture and acupressure specialists indicate there are no blanket contraindications for acupoints and some suggest that the stimulation of acupuncture points to help induce labor may be "way overrated." Chad Dupois, LAc of the Chattanooga Acupuncture and Wellness Center writes, "As with all of acupuncture, nothing is ever set in stone. There are people/styles [of acupuncture] who regularly use contraindicated points during pregnancy." An example of this is a study investigating the use of acupuncture for reducing back pain in pregnancy that used the ankle point Bladder 60 on subjects between 12–30 weeks pregnant, with no ill consequences.¹¹

Acupressure has its own rules of practice and contraindications and can be very powerful when properly applied. But the question being explored here

is whether massage can stimulate these contraindicated acupoints, resulting in serious consequences. Bronwyn Whitlocke, LAc and author of *Shiatsu Therapy for Pregnancy* (Spinifex, 1999), says gentle massage or acupressure applied to the ankles with the intention of relieving discomfort will not cause harm or induce labor. Instead, it can help reduce edema in the feet and therefore be beneficial. She finds acupressure to be subtler than acupuncture. When working with a woman due for labor, she stimulates points hourly with deep and continuous pressure over 2–3 days in order to bring on the type of cervical changes that she might see in a shorter time span with acupuncture. One session on the ankles will not be effective to promote labor.

Debra Betts, LAc, RN, and author of *The Essential Guide to Acupuncture in Pregnancy and Childbirth* (Journal of Chinese Medicine, 2006) finds Bladder 60 to be stimulating to the uterus. She feels that general massage could stimulate this acupressure point and cause an undesirable result if combined with Spleen 6 (on the medial calf) and used with strong pressure over a period of time on a woman who is susceptible and sensitive to acupressure points or who is at high risk for miscarriage. The concern is greater, she states, with pregnancies earlier than 12 weeks or later than 36 weeks, when the risks of miscarriage or preterm labor are greatest. She suggests avoiding touch to this and all the contraindicated acupoints during pregnancy.

On the other hand, Suzanne Yates, bodyworker, antenatal educator, and author of *Shiatsu for Midwives* (Books for Midwives, 2003), says that she often gently massages around the ankles with light pressure. “I have done this kind of work for 18 years now and not had any problems. Indeed, I feel it is of benefit. In the first trimester, it is calming and supports the flow of *jing*, an important energy which nurtures the baby.”

Stephanie Halderman, EMT, director of the Eastern Holistic Center, has been instructing acupressure and massage for pregnant women for years, and says she has not learned of Bladder

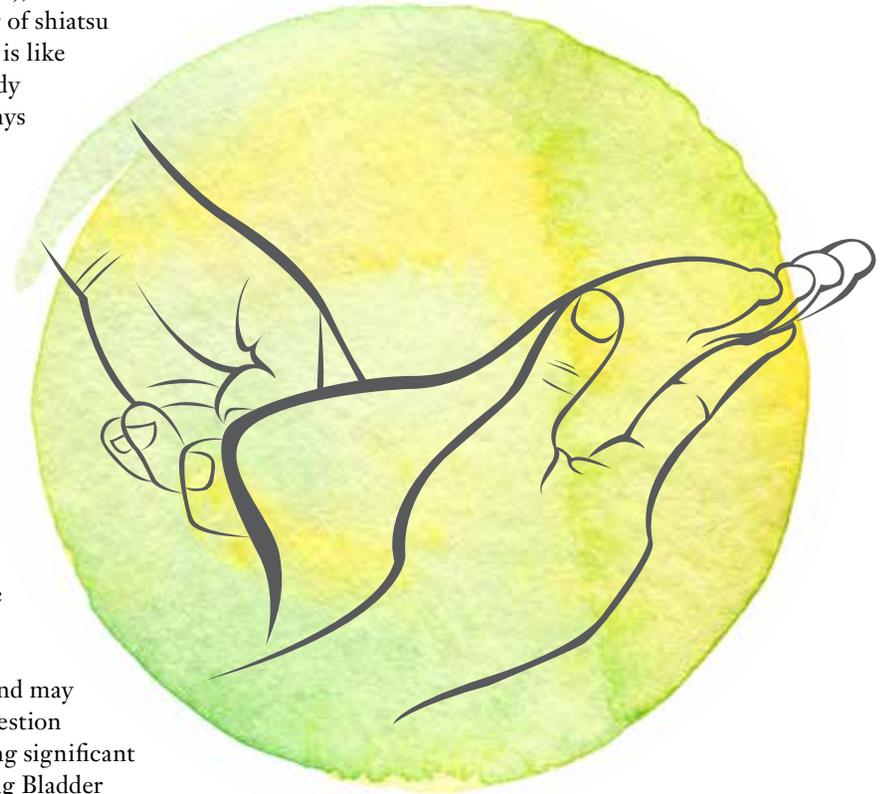
60 being a contraindicated point. “B60 is not a forbidden point, so it is safe to massage. Light, gentle, full strokes [effleurage] are fine and will not induce labor, but focused work can,” she says.

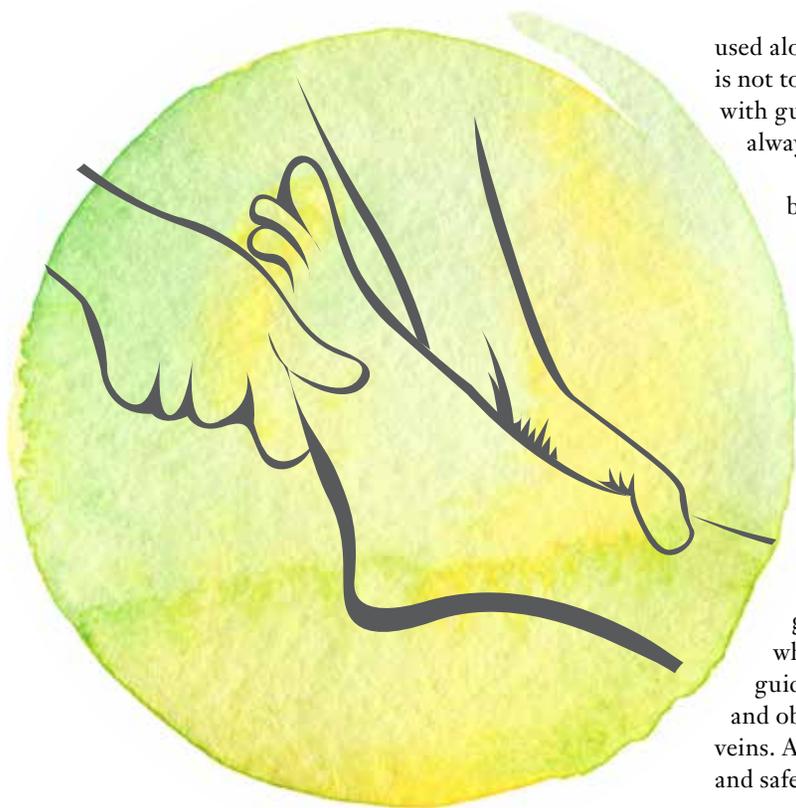
Kensen Saito, director and co-founder of the International Academy of Tokyo in Canada and author of *Shiatsu-dob* (Cross Media, 2004), trained under Tokujiro Namikoshi, the founder of shiatsu whose motto was, “The heart of shiatsu is like a mother’s love. Pressing the human body stimulates the fountains of life.” Saito says safety is the key to treating clients. He works gently on the whole body with pregnant women, including the ankles in most cases. The only concern Saito expresses is the improper application of pressure that may be too deep and strong. This type of intensive pressure application would be injurious to both the tissues and the emotion of the client, he says.

IN THE END

Ultimately, the ankle massage warning seems to refer to stimulation of acupoint Bladder 60. The other ankle points that pregnancy massage sources have labeled with concern do not have properties that bring on contractions, and may actually support a pregnancy. So the question remains: what is the likelihood of causing significant or dangerous contractions by stimulating Bladder 60 with stroking and squeezing along the Achilles tendon for a few moments during a foot massage?

The likelihood seems remote for several reasons: massage therapists typically do not repetitively massage one specific spot posterior to the ankle for extended periods; general effleurage does not have the same effects as acupressure; and Bladder 60 is not generally





used alone or as a primary contraction stimulator. This is not to say that one should rub the Achilles tendon with gusto for hours on end. Nurturing, gentle touch is always expected and appropriate during pregnancy.

Clarifying contraindications can reduce both the therapist's and client's fears about the delicacy of pregnancy and improve awareness about the prevalence of miscarriages unrelated to external forces. If we have concern about stimulating Bladder 60 with effleurage and want to avoid it, then to be consistent, we must, as Betts says, also avoid massage to areas of all the prohibited points. Ironically, the more powerful contraindicated acupoints on the hand (Large Intestine 4), inner calf (Spleen 6), and sacrum (Bladder 32) have not formerly elicited massage contraindications.

Alternatively, we can offer nurturing gentle massage that includes those areas, while following more critical and relevant guidelines for safety in positioning, pressure, and observation for thrombosis and varicose veins. And we can educate the public on the benefits and safety of prenatal massage along the way. ■

Notes

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Chair Massage 4 Moms

An ABMP Member's Experience

BY JED HENEBERRY

Kim Fellini, who practices acupressure and massage, formed her company Chair Massage 4 Moms (www.chairmassage4moms.com) to bring moms relief from the aches and pains of pregnancy. “Moms don’t always take the time to treat themselves, so I wanted to offer the convenience and nurturing to make it as easy for them as possible.”

It was her own experience during pregnancy that inspired Fellini to create her chair massage concept. “I had low-back pain and my shoulders ached,” she recalls, “but the thought of going to a spa, undressing, and hopping up on a massage table was not enticing—it just sounded uncomfortable because of my belly.” After graduating from her massage program in 2009, she put her plan into action. “Chair massage just seems to make sense,” she says. “Just bend your knees and ease into the massage chair.”

Fellini suggests taking a class on prenatal massage before working with pregnant clients. In addition, Fellini has developed a protocol for safely accommodating a pregnant client in the massage chair. Sometimes, though, the bigger problem is getting clients out of the chair after the massage. “You can just see it in their faces,” Fellini says. “They’re so relaxed, they don’t want to get up right away.”

SAFE SEATING IN A MASSAGE CHAIR

1. Adjust the chest cushion to accommodate the belly.
2. Add a pillow underneath the belly to reduce strain on oblique muscles.
3. Add a pillow underneath the chest if needed because of increased tenderness.
4. If the client’s belly is larger, turn the client around for seating facing away from the chair and add a pillow to support the low back.

Watch a Demo!

Watch a demonstration of Fellini’s protocol at www.youtube.com/watch?v=F8Q7To20fys.



Product Safety for Pregnant Clients

BY ELIZABETH WASSERMAN

It's no secret that pregnant women love massage. And we know all about the benefits of pregnancy massage for health, relaxation, and mood, and that a more relaxed mom means a less stressful in utero environment for the developing baby. What we must also consider, however, is whether the products used for that massage may directly impact the health of your client's child.

THE DANGEROUS DETAILS

What we know today is so much more than the information we had even five years ago, and it's more available to the public. For example, most people are aware that products containing parabens should be avoided. But do you know why exactly? Hormone disruption. Used as preservatives, parabens are frequently found in water-based products like body lotions, conditioners, facial creams, shampoos, and scrubs. They can also be absorbed through the skin—our body's largest organ—and into our blood and digestive system.

It's known that parabens disrupt hormone function, which impacts every system in our bodies. Additionally, they have been linked to breast and other cancers, reproductive disorders, immune system function, and neurotoxicity.

Here's another fact I wish I'd known during my own pregnancy: "fragrance" can be a euphemism for "undisclosed, trade-secret chemical cocktail." On average, fragrances contain a minimum of 14 synthetic chemicals, which can cause everything from skin irritation and immune system damage to hormone disruption and neurotoxicity, especially if they include phthalates.

What's a phthalate? Often found in fragrance ingredients and scented products like candles, lotions, and air fresheners, phthalates are a class of synthetic chemicals linked to reproductive and fertility problems in both men and women.

You should also be cautious when using essential oils on or around a pregnant client. These oils are at their safest when naturally extracted and undiluted with fillers or solvents. Even then, it's important to use them correctly. Pure essential oils are very potent and highly concentrated—it can take more than 12,000 roses to produce just 5 milliliters of rose oil! While appropriate amounts of essential oils are a natural way to make life smell deliciously sweet, their intensity means that some oils may be irritating or even dangerous to a pregnant woman.



WHAT'S A BODYWORKER TO DO?

You may be asking at this point whether choosing only products labeled with the terms “all natural” or “organic” is the way to go. The short answer is both yes and no. Ideally, all brands would be honest in their marketing claims and free of questionable ingredients.

Unfortunately, since the government doesn't regulate the word *natural* or safety testing of personal care products, brands can make greenwashed claims like “all natural,” while still using almost any synthetic ingredient they want, regardless of safety. The key is to always read the fine print on product labels. If there's an ingredient with which you're not familiar, look it up. Keep in mind, too, that an ingredient is not necessarily safe or helpful just because it is natural.

With so much information to keep track of, what's a bodyworker to do? Simply follow this handy cheat sheet of tips and tricks.

- First and foremost, keep in mind that the choices made today will impact the developing baby for a lifetime. Studies have revealed a shocking average of 200 industrial chemicals and pollutants in umbilical cord blood.
- Avoid products containing ingredients with the word *paraben* in them, like propylparaben, butylparaben, and methylparaben—some of the worst offenders.
- Choose products scented naturally with pure essential oils and organic extracts, and avoid the ingredients “fragrance” and “parfum.”
- Purchase pampering essentials from brands or shops you can trust to make your health and safety a top priority. ■

Elizabeth Wasserman, LCSW, is founder and CEO of True Goods (www.truegoods.com), an online shop for nontoxic personal care and household goods. Fueled by a passion for preventive health, a commitment to clean living, and a strong belief in the power of informed prenatal care, she launched True Goods with a mission to help customers harness their purchasing power to create healthier lives and a more sustainable environment.

Resources

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Herbs & Pregnancy

BY KARRIE OSBORN



Many herbal experts recommend avoiding herbal remedies entirely during the first trimester of pregnancy, unless advised differently by a qualified health professional. There are many herbs that are specifically contraindicated for pregnancy and during lactation. The same cautions hold true for certain essential oils, including those that promote menstruation or impact the central nervous system.

HERBS/OILS TO AVOID DURING PREGNANCY

Aloe, angelica, barberry, basil oil (food dose OK), black/blue cohosh, cascara sagrada, catnip, celery seed (food dose OK), chamomile tincture, cinnamon oil (food dose OK), comfrey, devil's claw, dong quai, ephedra, evening primrose, fennel oil (food dose OK), fenugreek, feverfew, ginger (food dose OK), ginseng (American and Korean), goldenseal, hyssop oil, juniper oil, kava kava, licorice, lobelia, lovage, marjoram oil, mistletoe, motherwort, mugwort, myrrh, nutmeg oil (food dose OK), Oregon grape root, parsley juice, passion flower, pau d'arco, pennyroyal, poppy, rhubarb, rosemary oil (food dose OK), rue, sage oil (food dose OK), sarsaparilla, saw palmetto, senna, St. John's wort, tansy, turmeric, uva ursi, wormwood, yarrow, and yohimbe. ■

Resources

American Pregnancy Association. www.americanpregnancy.org/pregnancyhealth/naturalherbsvitamins.html

Pregnancy.org. www.pregnancy.org/article/herbs-avoid-during-pregnancy

Today's Parent. www.todayparent.com/pregnancy/being-pregnant/herbal-teas-to-avoid-during-pregnancy

WebMD. www.webmd.com/baby/features/foods-to-avoid-when-youre-pregnant?page=3

Healing Inside and Out

Massage for the Cesarean Section Client

BY MELODY COOK



If your client has given birth by Cesarean section (C-section), she has scars that need to heal. The surface scar, unless there are physical complications such as infection, will heal on its own given time. Deeper scarring, both physical and emotional, may take more work and conscious effort from both you and your client. To recover from a C-section, and to prepare for subsequent pregnancy and birth, your client needs to heal on all levels—from deep-tissue healing to releasing emotions related to the surgery. Your job as a bodyworker is to facilitate and nurture her through this process.

ADHESION FORMATION AND OTHER POSTSURGERY ISSUES

C-sections can save the lives of mothers and babies. During surgery, however, the body registers pain, loss, and outrage at being violated. It tries to protect itself from further injury by setting up involuntary muscle contractions and tension in the injured area. In my massage therapy practice, I have noticed that an area of ticklishness, for instance, in an otherwise nonticklish person, almost always indicates an unconscious chronic muscle tension. Keeping this internal sentry standing guard can be the cause of a secondary pain, which may even outlast the original cause.

Chronic pain may also indicate the formation of adhesions after surgery. Adhesions are bands of scar tissue that can distort anatomy and glue together organs and tissues that are normally separate. An important clue that adhesions have formed may be the appearance of an external scar. Tissues glued together cause an uneven look, as the top layer of skin is pulled down toward deeper tissue layers.

Adhesion formation is extremely common for postsurgical patients. The Women's Surgery Group and other researchers estimate that adhesions form in 55–100 percent of patients who have had gynecological surgery involving the fallopian tubes, ovaries, or uterus (including C-section).¹ For the C-section client, other issues may arise in addition to chronic abdominal pain, including pain during intercourse (dyspareunia), bowel obstruction, and infertility (caused by the fallopian tubes being kinked, distorted, or blocked by adhesions). Subsequent surgeries, including repeat C-sections, are more complicated due to adhesions and can take longer and be more difficult to perform.

RELEASE ADHESIONS WITH MASSAGE

While surgery for “lysis of adhesions” (adhesion removal) is commonly performed, resulting in 303,000 US hospitalizations in one year alone at a cost of \$1.3 billion,² adhesions can re-form as much as 80 percent of the time, and additional adhesions can form as a direct result of the surgery meant to release them.

Certain massage techniques, however, such as Bindegewebsmassage, neuromuscular therapy, Rolfing, specific postpartum massage therapies, and deep-tissue sculpting, can limit the formation of adhesions and scar tissue in new injuries and can reduce scar tissue, or make it more pliable, at old injury sites.

As soon after surgery as the client’s surgeon approves it, delicate massage and thermal therapy using the body heat from your hands can increase circulation and therefore reduce ischemia to the injured tissues. This type of massage can also discourage the formation of thick hypertrophic scars and adhesions, drain injured tissues of the build-up of excess fluid caused by the surgery, and help reestablish lymphatic flow. With her doctor’s permission, the client can begin the process even earlier by using her own (clean) hands to gently touch her incision and provide thermal stimulation.

The client can apply circular massage strokes to the abdomen in a clockwise direction to help reestablish the flow of the intestines and stimulate organ function. After about two weeks, gentle vibration of the skin over the incision, progressing to deeper pressure as healing occurs, can stimulate nerves and help relieve any numbness. Tissue stretching can begin after about six weeks to encourage movement and to loosen existing adhesions. Abdominal trigger points, or irritable spots that make the muscles prone to spasm, should be located by a bodyworker and extinguished with appropriate techniques.

Delicate massage and thermal therapy using the body heat from your hands can increase circulation and therefore reduce ischemia to the injured tissues.

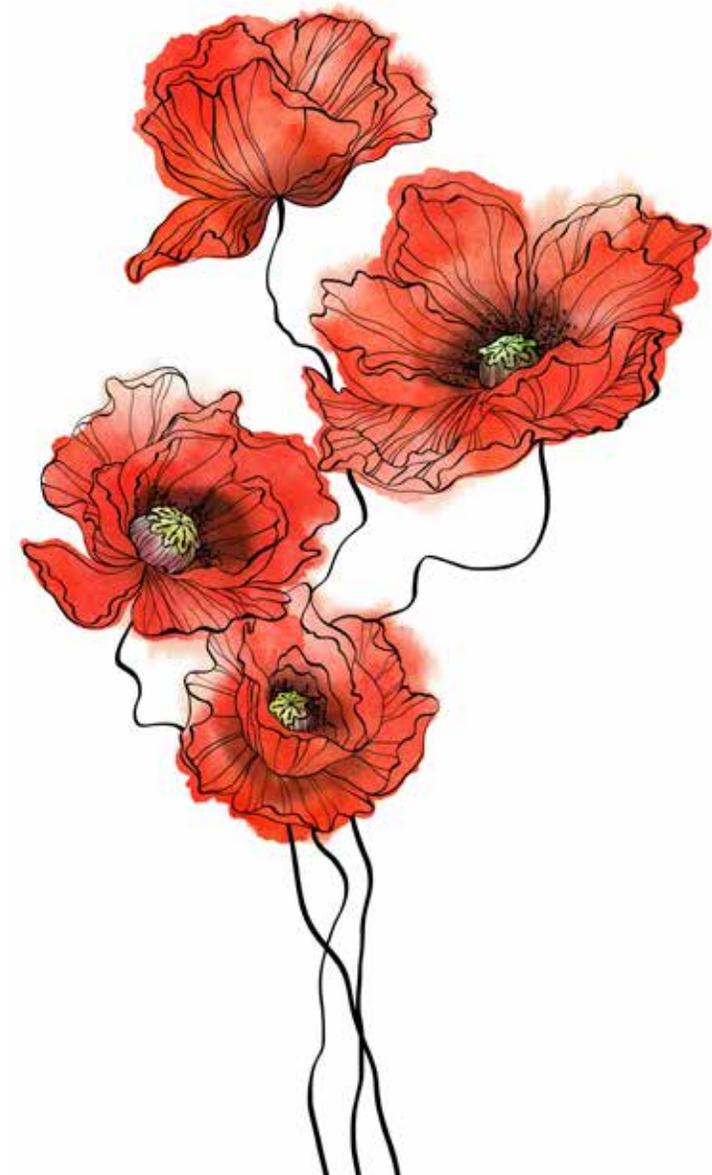
THE MASSAGE PROTOCOL

When working with post-Cesarean clients, massage therapists and bodyworkers should remember to work only within their expertise. Concern for the safety of your client should be foremost in your mind.

When arranging an appointment with a new client, determine at the very first phone call if she is postpartum, and find out how many weeks. A note of caution—if her baby has died, she may not think of herself as postpartum, even if she is post-Cesarean, so be sure to ask about recent pregnancies and/or births.

I will work with a woman as soon as 24 hours after delivery, if she had a vaginal birth with no complications. If there were any complications, or if the birth was by Cesarean, I will work with her only if she brings a release from her OB-GYN authorizing massage therapy, or after she has been released from the surgeon’s care after her six-week postpartum visit. I have a standardized release form that I send to her doctor, advising him or her of the work that I plan to do and asking for a list of any limitations or precautions they want me to follow.

What if you walk into the room to begin a massage session with a client, and you find out that she is not only postpartum, but also less than six weeks post-Cesarean? Consider carefully whether or not to continue the session. If you decide, for whatever reason, to work with her, be as safe as possible. Many of the concerns and precautions applicable to pregnancy massage will still apply for up to 8–12 weeks into the postpartum period.



THE EMOTIONAL SCARS

During and after the surgery, physical damage reports flood the nervous system. As a surgical nurse, I've noticed that even while totally anesthetized, a patient's heart rate and/or blood pressure can go up in response to certain aspects of the surgery. Unconscious psychological controls can be activated, potentially producing anxiety, jumpiness, a lowered pain threshold, even a subconscious feeling of betrayal and anger at the person(s) who caused the experience.

Emotions may not be rational, but are valid. They can't be explained or justified; they just are. As a massage therapist, I've noticed that a medically necessary, planned C-section that resulted in a beautiful, healthy child, may still bring about emotional turmoil, and that turmoil may be present whether or not the woman links it to her surgical experience.

Long after visible scars are healed, she may still feel emotionally overwhelmed by details and obligations. She may distance herself from other people, from herself, or from her experience. She may not be aware of, or allow herself to feel, her emotions, instead storing them in her body. As she remains busy dealing with her ongoing life and caring for her new baby, this client may never make time for the emotional healing she may not even be aware she needs.

C-Section Massage Protocols

While clearly not a comprehensive list of protocols for working with the postoperative C-section client, consider these caveats:

- **DO NOT** attempt any work on her abdomen, especially over or around her incision, without written permission from her doctor.
- **DO NOT** massage directly over varicose veins.
- **DO NOT** massage the inner thighs or the popliteal areas to avoid dislodging thrombi (causing emboli), or causing trauma to veins (phlebitis). Pregnant and postpartum women are at increased risk for developing deep vein thrombosis (DVT), which can have life-threatening consequences.
- **DO NOT** perform deep work on the calves. Refer the client to her physician if you notice heat, swelling, or redness of her calves. Avoid all leg massage, including Swedish massage strokes, if she has been on extended bed rest.
- **DO** encourage her to breathe deeply to expand her lungs. Teach her to “splint” her incision by holding a pillow to her abdomen to reduce pain when breathing and coughing, as necessary.
- **DO** provide extra pillows to support her lactating, tender breasts, and realize she may be more comfortable wearing her bra during the session. Provide extra towels on the table, both to protect the surface and to reduce any embarrassment about leaking milk.
- **DO** realize that lochia (vaginal discharge) may continue for up to six weeks after birth. Provide adequate draping for modesty and to accommodate underwear and sanitary napkins.
- **DO** realize that you may need to interrupt the session several times for her to empty her bladder, as water retained during pregnancy is eliminated early in the postpartum period.
- **DO** reassure her that excessive perspiration during this time can also be a normal method of eliminating retained fluid.
- **DO** remember that an epidural site on her back may be tender.
- **DO** remember that a post-Cesarean client is recovering from major surgery. All precautions for working with postsurgical patients apply.



Until she finds a place where she can feel safe enough to release both the stored emotions and the muscle contractions with which her body is protecting itself, she may continue to physically and emotionally guard the areas where pain has lodged itself. A nonjudgmental bodyworker offers a safe place for her to experience positive touch, to develop awareness of her charged areas, and to reconnect with her body and emotions.

MORE THAN JUST A RUB

It's clear that, just as surgery involves more than the physical body, massage is more than just rubbing oil onto someone's skin. Touching connects to the brain's emotional centers. Massage therapy can be empowering, reaching not just the body but also affecting the client's self-image. As she gradually becomes aware of feelings stored in her body, maybe in the form of ticklishness, TMJ or jaw pain, lower back achiness, a rigid neck, or tight shoulders, the client can begin to use this awareness in her healing process. Once she acknowledges her feelings, she can take the energy she's been using to block them, and use it instead to guide their release.

Like her new baby, a post C-section mother needs to be cradled. Her surgeon and other caregivers usually don't have the training or the time to work with her the way you, a bodyworker, can. Although it is not your job, nor within your scope of practice to provide psychological counseling, you can support her and give her safe space if she wants to cry or express emotion, and help her feel at home again in her postsurgery body. Releasing deeply ingrained emotional patterns and extreme negative self-images may require the help of a psychological counselor, to whom you can refer. For a woman who wants to attempt a subsequent vaginal birth, this release can be a vital part of recovery. In some cases, psychological counseling from a postpartum specialist may be appropriate.

From my experience, labors following a previous C-section can slow or stop at the point when the Cesarean was performed, as old thoughts and emotional patterns surface. The more deeply hidden the issues are, the more difficult they may be to resolve. If a woman hasn't dealt with them before her next labor, she'll likely have to deal with them in the middle of it.

From adhesions causing chronic pain and infertility to repressed emotions and self-image issues, the deeper scars that can follow a C-section need to be healed. Complete healing is possible if this client allows herself to seek and accept appropriate care. I encourage you to work with her and support her in her search for it. ■

Notes

1. Women's Surgery Group, "Adhesions," available at www.womenssurgerygroup.com/conditions/adhesions/overview.asp.
2. N. F. Ray et al., "Abdominal Adhesiolysis: Inpatient Care and Expenditures in the United States in 1994," *Journal of the American College of Surgeons* 186, no. 1 (1998): 1-9.

Melody Cook, RNFA, BS, LMT, CNOR, is an operating room nurse and an RN first assistant at surgery. Since 1989, Cook has been a Texas-registered massage therapist, specializing and certified in prenatal/postpartum massage therapy, and is also a certified infant massage instructor. She developed a "Supporting Birth Through Massage" class to teach birth partners massage and bodywork techniques for use during labor, which she teaches privately and to labor and delivery nurses, midwives, and doulas.

Adhesions

Adhesion formation can be the result of many surgical issues:

- **A delay in moving around or walking after surgery.**
 - **A surgeon too aggressively trying to reduce blood loss during surgery, resulting in tissues being undersupplied with blood (ischemia).**
 - **An inflammatory response to surgery.**
 - **Excessive or rough handling of organs.**
 - **Existing conditions, such as poor nutrition, prior surgeries, and endometriosis.**
 - **Inadequate postoperative fluid and electrolyte balance.**
 - **Infection.**
 - **Poor surgical technique.**
-



Soothing Moms' Aches and Pains

Soft-Tissue Strategies for New Mothers

BY WHITNEY LOWE



Caring for a new baby is a joyful time for parents, but it can be complicated by significant pain—even without the lingering effects of pregnancy and birth.

Sure, some of this pain will be mitigated by the high level of “love” chemicals coursing through a new mom’s veins (opiate-like chemicals the brain releases when triggered by a new love, i.e., the baby), but this effect gradually decreases. Here are some of the common musculoskeletal pain complaints that new moms have—many of which apply just as much to fathers, adoptive parents, or anyone else caring for an infant—and a discussion about the very important role massage can play in bringing relief.

PREGNANCY CREATES PHYSIOLOGICAL CHANGES

The hormone relaxin is released during pregnancy in order to increase elasticity of the ligaments and allow the pelvis to expand for the baby’s delivery; it can take several months for relaxin levels to return to normal after the birth. During this time, moms can be at greater risk for back and sacroiliac pain due to excess ligamentous laxity. Stability issues at other joints may also cause similar pain or biomechanical dysfunction.

While some pain will be reduced after the birth, as the load of the baby is no longer there, any pain complaints as a result of ligament and tendon changes, or postural distortions developed during the pregnancy, are likely to continue. If the mother was not in good condition in the first place or already had postural-related pain, then pregnancy will likely have exacerbated these issues.

As the baby grows during pregnancy, the mother’s center of gravity is altered, and her low-back muscles and ligaments must adapt to these changes. Inevitably, postural adaptations are made, which, on their own, add pain and discomfort. The pre-birth physiological changes, along with postural adaptations made to accommodate pregnancy, can lead to ongoing pain and discomfort after the child’s birth.

The body is particularly adaptive and able to restore much of its previous health after the baby is born, but new moms usually wind up exacerbating their pain with new, problematic activities. While it would be great if there were ergonomic solutions

to all of the following, often there are not—but there are functional changes that can help. These behavioral adaptations, along with massage, can provide new moms some greatly earned relief.

FORWARD-HEAD AND UPPER-BACK POSTURE

Lack of rest is a significant factor contributing to postural disorders. To rest overloaded tissues, there must be breaks from problematic postures. In work-related settings, the person has at least some respite from cumulative stress when they go home at the end of their workday. However, caring for a baby is a 24-7 job, particularly during the first few weeks.

Multiple activities, including comforting, feeding, or holding the infant while he or she sleeps, require parents to lean over their child, stressing the upper-back region. This posture is often held for a long period of time, leading to cumulative tissue overload.

Once the upper back comes forward of the line of gravity, more effort must be expended by the upper thoracic extensor muscles to hold the torso and head against the pull of gravity (Image 1). In addition, when the head is thrust forward (i.e., forward-head posture), the load on the posterior cervical muscles is increased. It is estimated that for every inch your head is forward of the center line of gravity, an additional 10 pounds of effort must be offset by the posterior cervical muscles.

Chronic muscular tightness and myofascial trigger points are the most common dysfunctional problems resulting from this position, but an underemphasized danger of these long periods of biomechanical distortion is that they produce dysfunctional neuromuscular patterns. Constant reinforcement of these bad postural patterns can have long-term detrimental effects on posture and proper tissue health.

Treatment should focus on reducing tension in the pectoralis major and other anterior chest muscles. It is often these chronically shortened muscles that perpetuate the dysfunctional patterns. Deep stripping techniques and static compression methods are particularly advantageous. Of course, usually the

greatest discomfort is in the upper-back muscles, which have become over-lengthened and fatigued. These muscles will get relief from the same techniques.

Massage will feel good, but soft-tissue treatment alone is frequently not enough for lasting relief. To combat dysfunctional postural patterns, there must be neuromuscular reeducation. It is highly important for moms to address these postural challenges by consciously working to reinforce correct postural alignment and engaging in home care, such as stretching.

AWKWARD LIFTING POSITIONS

A challenge facing new parents is adapting to the increased lifting activities. Picking up the baby starts in the morning and continues after every feeding time, nap, playtime, task, trip, etc. Just this change alone is a huge new physical demand the body is generally unprepared for. The baby will be gaining weight rapidly as well, and that means the lifting demands continually increase. The low-back muscles often end up doing a disproportional amount of this lifting work.

It is common knowledge that it is better to bend with the knees when lifting. However, many times parents are bending over a car seat or crib, or are in a situation where it just isn't practical to bend with the knees to lift. In addition, lifting feels like more effort if you have to fully bend down with the legs and lift the body each time as well. Consequently, there is a great deal of bending at the waist and lifting with the low back. This movement puts significant stress on the lumbar muscles, and is a common contributor to low-back pain.

The average multitasking mom also winds up engaging in a lot of quirky maneuvers in an attempt to hold her child and get other things done at the same time. The result is awkward positioning involving side bending and rotation in the lumbar region, which is a notoriously challenging position that can lead to lumbar-tissue overload. In many cases, a seemingly small and insignificant movement can cause serious pain simply because it's the last straw of biomechanical overload for the body.



Image 1. Leaning forward for prolonged periods stresses the upper back and neck.

Carrying the infant in a car seat creates another physical demand on the already fatigued mom. The seat is usually carried on one side instead of with both arms, which means the opposite-side lumbar muscles are taking the primary responsibility for offsetting that load. The car seat's shape puts the baby's weight farther away from the parent's center of gravity as well. As with forward-head posture, the farther the load is from the central axis, the greater the load the muscles must offset. A weight that doesn't seem very heavy can seriously overwhelm soft-tissue structures simply by being lifted farther away from the body's center of gravity (Image 2).

Muscles such as the quadratus lumborum, multifidus, and erector spinae group carry a primary burden for lifting power in the lumbar region. These compromised positions put these muscles at a mechanical disadvantage, leading to chronic tightness from overload, and sometimes cause strain. Bringing the baby's weight in close to the body, as is done when wearing a front baby carrier, alters and reduces the load on these muscles.

Carrying a car seat also puts excess stress on the tissues in the shoulders and upper extremities. These stresses are magnified when the seat is not lifted close to the body, and can overwhelm muscles that are not that strong, but that still play a major lifting-action role in the upper extremity, specifically the rotator-cuff muscles. For example, lifting objects away from the body's center of gravity can put a much greater load on the supraspinatus muscle, a moderately small rotator-cuff muscle that maintains stability during shoulder movements. There is a poor blood supply to the supraspinatus tendon, and the musculotendinous junction is a common site of strain injury as a result. Overloading the muscle-tendon structures can lead to chronic problems like tendinosis, but could also be a primary cause of rotator-cuff strain.



Image 2. A car seat puts the baby's weight farther from mom's center of gravity and greatly increases the load on mom's low-back muscles, which must compensate.

Treatment approaches should be highly specific. A relatively superficial massage may feel good but not get at the real root of the dysfunction in the deep paraspinal muscles (Image 3, page 29). The quadratus lumborum is another deep, low-back muscle that requires highly specific treatment. However, make sure general and more superficial techniques are performed first to make the deep work more effective. The shoulder and upper-extremity regions should also be treated with this same protocol of general and superficial work first, followed by deep, specific work on those muscles most exposed to overuse, such as the deltoids, rhomboids, supraspinatus, and upper trapezius.

Remember that the new mom's joints in the lumbopelvic region may still be more mobile than normal. Advise the client to move slowly after the massage and encourage her to be particularly cautious in how she moves for the remainder of the day as the body readjusts to a different level of muscle tonus.

OFF-BALANCE LUMBOPELVIC STRESS

Watch any mother carrying an infant and it is easy to identify one of the chief biomechanical challenges that leads to lumbopelvic pain in mothers. Holding a child in one arm and hiking the hip on that same side causes a lateral tilt of the pelvis to the opposite side. For example, if the child is held on the right hip, that would be a left lateral pelvic tilt. (Lateral pelvic tilt is named for the low side of the pelvis because that's the side to which the pelvis is tilting.)

Substantial challenges and detrimental effects develop from this postural distortion. Prolonged lateral lumbar flexion with weight bearing can cause irritation of the facet joints on the concave side of the lumbar curvature. The altered compressive load on intervertebral disks can also cause eventual disk degeneration. In addition, this altered pelvic position can adversely affect mechanics and cause pain in the sacroiliac joint.

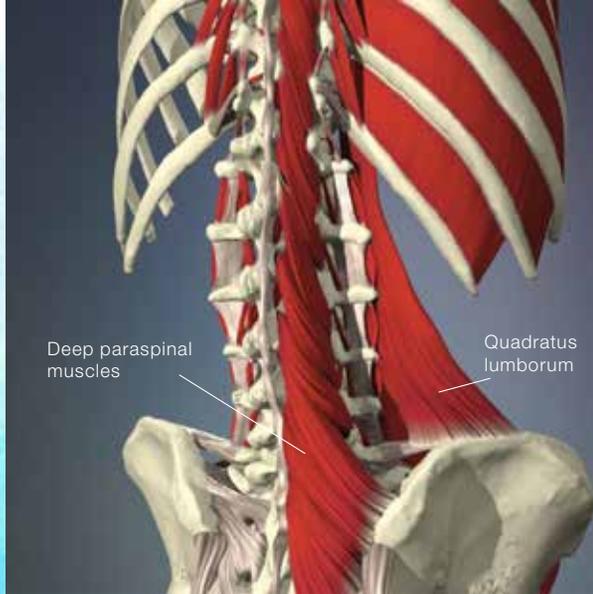


Image 3. Deep paraspinal muscles and the quadratus lumborum take heavy loads from postural strain. 3D anatomy images. Copyright of Primal Pictures Ltd. www.primalpictures.com.



Image 4. The side-lying treatment position for the quadratus lumborum.

The pain symptoms from these complaints can be similar and sometimes difficult to distinguish. For example, symptoms of sacroiliac-joint dysfunction can often mimic radiating neurological pain down the lower extremity caused by lumbar nerve root compression. As closely as possible, identify the primary source of pain and discomfort so appropriate treatment can be used.

A primary result of lateral pelvic tilt is tightness in the quadratus lumborum on the side of the hiked hip. It can be challenging to work the quadratus lumborum deeply enough to achieve the needed reduction in tightness in this muscle. A side-lying, active-engagement method is therefore a great way to get appropriate pressure on this muscle and encourage tissue lengthening.

This technique is performed with the client in a side-lying position and angled on the treatment table so that the uppermost leg can be dropped off the back edge of the table (Image 4). Bring the client's leg into full abduction and ask her to hold the position. You will apply pressure with a small contact surface (fingers, thumbs, or a tool) to the lateral aspect of the quadratus lumborum. The client will slowly lower her leg as you perform a static compression or deep stripping technique along the length of the quadratus lumborum. At the end of the technique, the client's leg will be lowered off the back edge of the table. The quadratus is engaged in an eccentric muscle contraction during this motion, which increases the muscle's density and magnifies the pressure applied during the technique.

Postural alterations or dysfunctional biomechanics from a lateral pelvic tilt can cause altered tension patterns in fascial connections from the lumbar region through the posterior lower extremity. Achieving postural and biomechanical balance in this area is most effectively achieved if attention is also given to the gluteal muscles, hamstring muscles, and myofascial and ligamentous connections through the lumbopelvic region.

MOM'S SELF-CARE

The new mom can do much to reduce the pain and stresses on her body throughout the day by making some simple changes. A nursing pillow (Boppy) or other pillow brings the baby closer to the chest for feeding, comforting, or napping. When feeding, postures that fully rest the upper back are better, like lying down or sitting in a comfortable chair and putting a pillow behind the head. A front backpack-type carrier is better than a car seat for carrying the child.

New parents should be conscientious about following the usual rules about bending and lifting: lift with the legs and not the low back, which means squatting to pick the child up as much as possible, and avoid odd, twisting positions. The baby should be brought close to the body before lifting (which means dropping the crib side down or removing the tray from the high chair).

A concerted effort to be conscious of posture is very important. The new mom should learn to be aware of how she is bending, holding the child, standing, etc. in order for new and healthy patterns to develop. Finally, that new mom needs a massage. There is abundant research showing the benefits of massage in reducing stress, enhancing the immune system (which also has a positive effect on the baby, for moms who are breastfeeding), and improving quality of life. ■

Whitney Lowe is the author of Orthopedic Assessment in Massage Therapy (Daviau-Scott, 2006) and Orthopedic Massage: Theory and Technique (Mosby, 2009). He teaches advanced clinical massage in seminars, online courses, books, and DVDs. Contact him at www.omeri.com.

The Pregnant MT

Working Safely and Enjoying a Stress-Free Leave

BY JOANNA HAUGEN

Tyffani Jackson and her husband had plans to add a child to their family, but when she got pregnant sooner than expected, the calendar started turning quickly. Before long, she would have to walk away from her massage therapy business, trusting that the money she had saved would carry her through the absence and hoping that her clients would understand when she came back with a restricted schedule, all while enjoying and appreciating the precious time she would have with her newborn.

“I worked my butt off for the entire nine months of my pregnancy. I worked until the day I went into labor,” says Jackson, who owns Therapeutic Massage & Bodywork in Pleasant Grove, Utah, and South Valley Therapeutic Massage & Bodywork in Midvale, Utah.

Planning to start—or add to—a family is not a decision to be taken lightly by anyone, in any profession. Certainly anyone who wants to take a maternity or paternity leave has to consider the financial and professional consequences of doing so; for massage therapists like Jackson, however, there are many more issues to consider.

Whether a pregnancy is planned or unplanned, time is of the essence to get everything in order. Many massage therapists are self-employed or work with a small staff, and though being a part of an intimate team has its advantages, taking working hands away from such a business can sharply cut into a clinic’s profits. The massage profession is also different because loyal clients often have regular appointments year after year with the same massage therapist. And, as if juggling finances and clients isn’t difficult enough, it’s also important to remember that massage therapy is a physically demanding job. The last couple of months before the baby comes, as well as when reentering the workplace, can be challenging.

Taking an extended maternity leave as a massage therapist isn’t simple, but thousands of people do it successfully every year. With a lot of planning, a bit of trust, and the willpower to push through the stress, preparing for, taking, and returning from a maternity leave is both possible and rewarding.

ALWAYS BE PREPARED

Pregnant or not, it is always a good idea to have a contingency plan in place for an extended leave of absence, especially if you are a business owner. You never know when an unexpected illness or emergency might occur. Having such a plan in place will make the transition to taking a maternity leave much easier, because you've already thought about how to deal with issues like finances and client communication. With a few months of advance notice, you can find ways to cut costs, save money, and work with clients to transition their care to someone else while you're gone.

Finances

There is never enough time to prepare for every possible circumstance when going on maternity leave, so start with the thing that concerns most people more than anything else: finances.

“Financially, what people need to do is understand how long they're going to be gone from the business and how much money they need to cover living expenses, plus anything that might be unexpected,” says Kimberly Loftis, president of Loftis Consulting, which offers professional services for the spa industry. It's not always possible to begin saving extra money right away, but when you are able, set up a fund and begin putting some savings aside. You may also want to open an account specifically for all fixed and recurring expenses. Set up automatic payments on these items so that you free up your time, while still knowing the bills are being paid.

Morgan Miller, owner of Elements To Wellness in Reading, Pennsylvania, began saving extra money about four months prior to going on maternity leave. Knowing it would be a large expense, she bought diapers in excess while she was still working full time, and she decided to breastfeed for 12 months, which she estimates saved about \$2,000. Shanna Horne, owner of Therapeutic Massage & Bodyworks in Moultrie, Georgia, cut financial corners by trading in her car for one that had less expensive insurance and required no monthly payments, saving several hundred dollars each month.

If you are a business owner, preparing to take a maternity leave may be an ideal time to reevaluate how money is allocated in the clinic. Take a look at all of your expenses and begin to cut back on things that are not really necessary while you're gone, such as laundry services. It is also a good time to think about how you can most profitably manage your clinic space. While your business is on hold, and if you are a sole proprietor, it may make sense to sublease your space to manage the cost of rent.

This is also a good time to take a close look at other business-associated tasks. For example, if you host a radio show on massage or serve on a board relevant to your business, do you want to—or need to—set them aside for a few months so you can concentrate on preparing for, and taking, your leave?

Communication

As soon as you're ready to announce your pregnancy and associated leave, it's time to start communicating with your boss, employees, and clients. If you work in a larger company and report to someone, give her enough advance notice so you can work together to manage the client load and make your temporary transition out of, and back into, the practice as seamless as possible. Keep your boss in the know regarding any changes in your plans, such as if you are experiencing medical issues that might require restricted hours prior to your official leave.

Bernadette Lindberg, who worked for a small business owner in Robbinsdale, Minnesota, with 15 other therapists, says she was the first massage therapist in the company to go on maternity leave who had intentions of returning to work. As a result, her boss didn't have high expectations that Lindberg really would return. To ease that fear, Lindberg says, they spoke on a weekly basis about how things were going, which gave her boss confidence that Lindberg was, in fact, returning to work. For those who are business owners, an open line of communication with employees is also essential.



One of the signs of a successful maternity or paternity leave is actually enjoying what the leave is about: you and your baby.

Ultimately, the success of your massage therapy business rests in the hands of your clients, so broach the conversation of your leave with solutions. Just as you rely on your clients for income, they rely on you for a service that has become a routine part of their lives. Letting them know your plans far in advance of your leave will help ease the transition. Make sure clients have enough time to ask you questions about their care and how their needs will be met in your absence. “Because I’ve had a practice for so long, I wasn’t so concerned about people leaving,” Jackson says. “But my big concern was if I could continue to provide a good quality of service for them while I was gone.”

For frequent clients, begin the transition to a new therapist with enough time to ensure that both client and therapist are happy and comfortable with the match. “Most of my clients have been coming to see me anywhere from four to six years,” Jackson says. “For those regulars, I did my best to find someone to cover for me that worked close to the type of work I did.” Horne directed her clients to another therapist working in the same chiropractor’s office under the assumption that they would be more likely to return if there wasn’t a major shift in their routines.

Other clients will be happy to wait for you to return to work. Though many of Miller’s clients waited for her in order to continue treatment, she offered them a \$10 coupon for each of the other therapists with whom she works. “Whether you own a business or work for someone else, you must recognize that you are in the service industry,” she says. “You must realize that to be successful you must be accountable and give each client 110 percent.”

LEAVING WORK AT WORK

One of the signs of a successful maternity or paternity leave is actually enjoying what the leave is about: you and your baby. For those who are solo therapists running everything from the finances to the scheduling, there isn’t much that can be done about your business until you decide to return to work. Now is the time for you to be a parent, not a business owner. You may be in touch with clients and employees, but keep the conversation light. “Some of my clients became close friends, so we were checking in with them with updates on how we were doing with the baby, but I never checked in to see how the clients were doing,” says Francis Dallaire, who took two paternity leaves while working for Fasulo Chiropractic in Patchogue, New York.

As a business owner, Miller says she continued to work with her employees in order to keep procedures organized and in place. “I did make a policy that I would only check my phone at 1:00 p.m. when my kids took a nap, or at 8:00 p.m. when they went to bed,” she says.

For those who are solo practitioners, leaving work behind is significantly easier. “I really didn’t worry about my business so much when I was gone,” Horne says. “I wasn’t seeing clients, and I wasn’t recruiting clients while I was on maternity leave. It was actually really calm, which is what I wanted. I wanted to leave and not think about all that while I was establishing good routines and bonding with my new baby.”

RETHINKING THE REENTRY PROCESS

As your leave comes to an end, it’s time to start thinking about reentering the workplace. Before putting your business in the forefront of your mind, however, take the time to address and manage some at-home issues first.

If both parents will be working, you’ll need to weigh the pros and cons of hiring in-home care or placing your baby in a larger child-care center or family-run child care. Sit down with a new family budget that takes into account the additional expenses that are now part of running the household. What changes will you need to make to your massage therapy business when you return to help make ends meet?

According to *The Complete and Authoritative Guide: Caring for Your Baby and Young Child*, edited by Steven P. Shelow, MD, adding a new member to the family can be stressful, and a successful balance in the family requires that each person plays an active role in the household. Everyone's contributions to the family should be valued and supported. Parents may have little time left for a social life, or each other, so it is important to set aside time as a couple, though that may be difficult to do in the early months. Making a recommitment to this relationship, as well as sharing household and child-care duties, can make the transition back to work much easier. "Most of my concerns were with my children," Miller says. "Would I be able to breastfeed for 12 months *and* work? Would I have the energy to do deep-tissue massage and then go home and have energy and play? My husband and I strive to find balance each day, and it is always a work in progress."

Just as you prepared your boss, employees, and clients in the months leading up to your maternity leave, you need to take time to prepare your child and family for your return to work. Keep the transition as simple as possible by making sure it doesn't coincide with other major life changes such as moving, a death in the family, or other personal crises.

Returning from maternity leave as a massage therapist is not as simple as walking back into the workplace with a full schedule. Massage therapy is a difficult business to reenter, largely because it is so physically demanding. Take this into account when planning your finances prior to leaving the workplace.

Begin the slow transition back to work by reaching out to clients and letting them know when you will be available again, but don't plan on taking all of them back at the same time. "I measured my maternity leave by how my body felt, not by the amount of money I had saved," Jackson says. She, like most other therapists, slowly reintroduced her body back into the art of massage by taking on a single client, then gradually adding additional time in the therapy room over several weeks and months. Many massage therapists choose to keep their workloads to a minimum, even after returning to the clinic. "When I was preparing to return to work, I sent an email out to my clients letting them know when I was returning and what my hours would be," Miller says. "I suggested they call right away to make their appointments as I knew my schedule would fill fast since I was only having limited hours."

Lindberg also listened to her body and worked with her boss to ensure she could handle scheduled appointments. "I told her that I didn't want to do any real deep work," she says. "For the first two weeks, I was working on people who just wanted relaxation."



Your clients and employees will need to realize that you are a changed person now that you're back from leave. This wasn't a vacation; it was a drastic life change. Because of this, continue to communicate with everyone about how your newfound responsibilities might affect them, all the while maintaining your professional boundaries. Though many therapists worry about losing clients while taking a maternity leave, just as many are impressed with how well these same clients adjust to the changes. Keep in mind that many of them have families as well and are familiar with the need to put family first. "I was surprised that a lot of clients who were particular about their times, or really difficult to find a time for, took a very large shift in their scheduling habits and currently take whatever is available," Jackson says. Realize that as a new parent you will likely have some restricted schedule availability because of doctor appointments, sick days that require a caregiver to be home, and other unforeseen circumstances. Mothers who breastfeed will need to rearrange their schedules to accommodate nursing needs.

Regardless of the financial, physical, and professional stresses that come packaged with the new bundle of joy, just about everyone acknowledges that parenthood is worth it—and that it is also nice to return to the life of a massage therapist. Horne recalls the moment when she stepped back into her office as she prepared to return to work. "I remember thinking I missed the smell of my office, the way the sheets smell, and the way the massage lotion smells, and I felt sad," she says. "I felt an overwhelming sense of something that was missing in me because I had not massaged someone in five months, so I knew it was the right decision to come back." ■

Las Vegas is home for writer JoAnna Haugen. She loves to delve into a variety of topics ranging from travel to financial and management issues. Contact her at joanna_haugen@hotmail.com.

Resources & Education

American Pregnancy Association. www.americanpregnancy.org

American Pregnancy Massage Association.
www.americanpregnancymassage.org

Body Therapy Associates. www.bodytherapyassociates.com

Claire Marie Miller Seminars. www.clairemariemiller.com

Massage Doula. www.massagedoula.com

Massage Therapy Foundation. www.massagetherapyfoundation.org

Massage Therapist's Guide to Pathology. By Ruth Werner

MotherMassage. www.mothermassage.net

MotherTouch Perinatal Education & Resources. www.touchforbirth.com

Mother Massage: A Handbook for Relieving the Discomforts of Pregnancy.
By Elaine Stillerman

Nurturing Massage for Pregnancy: A Practical Guide to Bodywork for the Perinatal Cycle. By Leslie Stager

Pre- and Perinatal Massage Therapy: A Comprehensive Guide to Prenatal, Labor, and Postpartum Practice. By Carole Osborne

Prenatal Massage: A Textbook of Pregnancy, Labor, and Postpartum Bodywork.
By Elaine Stillerman

PubMed. www.pubmed.gov

The Journal of Bodywork and Movement Therapies.
www.bodyworkmovementtherapies.com

The Touch Research Institute. www.miami.edu/touch-research

WebMD. www.webmd.com

What's Next?

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(available in English and Spanish in the Members section of ABMP.com;
click on “Marketing Center,” then “Client Brochures customized”).

For the latest research, visit the Massage Therapy Foundation at
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or The Touch Research Institute at www.miami.edu/touch-research.

For more continuing education in prenatal massage, visit:

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 - MotherMassage: www.mothersmassage.net
 - MotherTouch: www.touchforbirth.com
- Prenatal massage training and careers: www.naturalhealers.com/natural-health-careers/article/prenatal-massage
- Well Mother: www.wellmother.org/maternity-massage

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