

# REFERENCE LIST OF CONTRAINDICATIONS

The following contraindications have been explained more thoroughly in the chapters of this text. This is a referral list to review contraindicated bodywork practices by technique and by trimester. The majority of pregnancy-related contraindications have developed to avoid association for client or massage therapist between bodywork and any pregnancy-related problems that may develop soon after massage. In reality, there is little chance that a skilled and respectful massage therapist may cause harm to a woman during pregnancy.

The most standard contraindication to remember is that if a client has an irritable uterus, with a higher risk than normal for preterm labor or miscarriage, then stimulating massage and abdominal work is contraindicated. This is not because there is a great risk for a massage therapist to endanger the mother or baby, but because when a pregnant woman experiences a negative outcome with her pregnancy, women and families often question the cause of the problem. Neither a family member nor a massage therapist wants the massage to be questioned as a potential influence in a miscarriage or bad outcome of a pregnancy. Hence, certain types of bodywork are avoided during these higher risk situations, merely to eliminate one possible source of concern.

## CONTRAINDICATIONS FOR SPECIFIC BODYWORK TECHNIQUES DURING PREGNANCY, LABOR, OR POSTPARTUM

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### Abdominal Massage

- Avoid deep abdominal massage during the first trimester.
- Avoid deep abdominal bodywork throughout pregnancy and for 6 to 8 weeks postcesarean.
- Avoid all abdominal bodywork with known risk of miscarriage, preterm labor, bleeding, or placental or uterine dysfunction.
- Avoid abdominal bodywork if it interferes with accurate external fetal monitoring during labor.

### Acupressure

- Until the last 2 weeks of pregnancy, avoid directed, intentional pressure on acupressure points Large Intestine 4 and Spleen 6.
- Avoid stimulating acupressure to Bladder 60, Gall Bladder 21, Bladder 31, and Bladder 32 for clients at risk for preterm labor or miscarriage.

## Aromatherapy

- Avoid use of all essential oils without training specific to the perinatal cycle.
- Avoid essential oils, incense, or other scents without first determining if your client responds agreeably to the odor.

## Breast Massage

- Know the legality of breast massage in your state or locale.
- Avoid with a risk of miscarriage or preterm labor.
- Avoid with mastitis or other breast infection.
- Avoid the use of essential oils on breastfeeding clients, unless you are trained in their use for postpartum.
- Practice and teach good hand-washing technique before touching the breasts and instruct client to wash oils off breasts before nursing.
- Careful communication and verbal (and in some cases possibly written) consent from the client for breast massage is required.

## Electromagnetic Fields: Electric Blankets and Heating Pads

- Avoid the use of electric blankets and heating pads with pregnant clients.

## Foot Massage

- Avoid plantar flexion and ensure that the foot is well supported in sidelying position.
- Avoid deep tissue techniques directly on pitting edema.

## Leg Massage

- Through pregnancy and until 6 weeks postpartum, avoid tapotement, compression, deep vibration, cross-fiber friction, petrissage, deep effleurage, firm acupressure, or any pressure in the hip adductor region of the leg between the knee and groin.
- Avoid stimulating leg massage with any clients on restricted bedrest due to increased clot risk.
- Avoid all massage over varicosities, and on legs with known phlebitis or blood clot.

## Passive Range of Motion

- Avoid hip mobilizations with a separation of the symphysis pubis.

- Avoid overstretching joints that are already hypermobile.
- During postpartum, avoid gluteal work and hip joint mobilization that pulls or strains perineal area with possible lacerations, stitches, or episiotomy repair.

## Supine Positioning

- Except for short durations, avoid supine positioning after 22 weeks' gestation or when the pregnant belly is visibly obvious. Always avoid it when a client is uncomfortable lying supine.

## Thermal Therapies

- Avoid applications of heat for longer than 10 minutes to postpartum engorged breasts.
- Avoid hot or ice applications to areas numbed by epidural during labor.
- Immersions in hot water above 102°F should be limited to less than 10 minutes.

## Womb Massage in Postpartum Period

- Avoid womb massage and heat applications, such as vaginal steams or hydroculator packs to the abdomen, with clients with uterine infection, fever, or heavy bleeding.
- Avoid womb massage on women who have an intrauterine device (IUD).
- Use universal precautions (wear gloves) when handling linens soiled with body fluids, particularly bloody discharges.

## CONTRAINDICATIONS BASED ON PHYSICAL SYMPTOMS AND CONDITIONS OF PREGNANCY, LABOR, AND POSTPARTUM

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### Asthma (Maternal)

- Avoid the use of essential oils, scented oils, candles, and other scents that could trigger an asthma attack.

### Bedrest

- Communicate with the client's PCP to ascertain risks and concerns of a client on restricted bedrest.

- Type I full-body massage will often be contraindicated, though may be used on local areas of stress and extremities.
- Avoid stimulating leg massage due to increased risk of clots with immobility.
- Abdominal massage will often be totally contraindicated.

### Bleeding

- Medical release is indicated for bleeding associated with a high risk condition.
- Avoid abdominal massage and Type I full-body massage until the PCP indicates that risk has passed.
- For clients who had a postpartum hemorrhage, avoid deep, circulatory-stimulating full-body massage in the first 3 to 4 days postpartum.

### Blood Clots

- No work to the legs or region of a known clot.
- Medical release indicated if client has known blood clot.

### Eclampsia/HELLP Syndrome

- All Type I bodywork is contraindicated.
- Medical release is indicated.

### Edema

- Avoid deep tissue work on pitting edema.

### Fetal Genetic Disorders, Intrauterine Growth Restriction, Oligohydramnios

- Abdominal massage may be contraindicated to avoid association of massage with potential problems with the baby. This contraindication will be based on the woman's anxiety level and her desire to receive or avoid abdominal massage.

### Hypertension (Chronic)

- A medical release is recommended with severe hypertension, to determine if Type I techniques are contraindicated.
- Avoid abdominal massage with severe hypertension due to risk of placental abruption.

### Infertility (Prolonged) or Hormone Treatment

- Abdominal massage and vigorous Type I massage may be contraindicated if the client has a high level of anxiety surrounding the pregnancy.

### Miscarriage

- If client has had two or more consecutive miscarriage in previous pregnancies, avoid abdominal massage, and Type I full-body massage, until at least 6 to 8 weeks past the time she had the earlier miscarriages.
- A medical release is recommended with clients with history of three or more consecutive miscarriages.
- Avoid *excessive stimulation* of the sacrum, sacral foramen, and sacral nerves.

### Multiple Gestation (Twins or More)

- Avoid stimulating abdominal massage if there has been concern of preterm labor.
- Avoid excessively stimulating Type I work throughout pregnancy.
- Minimize the need for repositioning in the third trimester when mobility may be difficult.
- A medical release is recommended if premature labor has already occurred during this pregnancy.

### Nausea

- Avoid rocking or passive range of motion that could increase nausea.
- If nausea begins because the pregnant client was positioned supine, reposition to sidelying.

### Polyhydramnios

- No abdominal massage or Type I full-body stimulating work due to increased risk of placental abruption.
- Medical release may be indicated.

### Preeclampsia

- If client is restricted in activity or limited to bedrest, obtain medical release and avoid Type I full-body massage.
- If client is restricted to the left-sidelying position only, maintain this during massage.
- If a client is restricted to bed rest after delivery due to high-risk situations, have her obtain a medical release and use only Type II techniques, possibly with Type I to local areas of stress.

### Preterm Labor

- No Type I full-body massage.
- No abdominal massage.
- No breast massage.

### Previous Premature Birth

- Avoid abdominal massage until 6 to 8 weeks past time of previous premature labor.
- Avoid abdominal massage if client currently has a condition that was associated with the first preterm birth.
- Avoid Type I full-body massage if client is considered at high risk for preterm labor again.
- A medical release may be indicated.

### Symphysis Pubis Separation

- Avoid hip range of motion, external rotation, or hip abduction.
- Avoid squatting, or rocking backward from hands and knees position.

### Urinary Tract Infection

- Avoid massage to the abdomen until a UTI is fully resolved.

### Uterine and Placental Abnormalities (i.e., resolved partial abruption, placenta previa)

- Avoid abdominal massage.
- Avoid Type I full-body stimulating massage.
- A medical release is highly recommended.

### Uterine Infection

- Type I bodywork is contraindicated with any uterine infection or fever.

# RESOURCES FOR THE PRACTITIONER

## ADVANCED TRAININGS IN PERINATAL SUPPORT

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### Doula and Childbirth Educator Trainings

Association of Labor Assistants and Childbirth Educators (ALACE), PO Box 390436, Cambridge, MA 02139. 888-222-5223. <http://www.alace.org/>. Doula and childbirth education training.

Birth Works<sup>®</sup>, Inc., PO Box 2045, Medford, NJ 08055. 888-TO-BIRTH (862-4784). <http://www.birthworks.org/>. Research resource with links and childbirth educator certification.

Childbirth and Postpartum Professional Association, PO Box 491448, Lawrenceville GA 30049. 888-MY-CAPPA. <http://www.cappa.net/>. Doula training.

Doulas of North America: DONA International, PO Box 626, Jasper, IN 47547. 888-788-DONA (3662). [www.dona.org](http://www.dona.org). Doula trainings.

HypnoBirthing<sup>®</sup>, P.O. Box 810, Epsom, NH 03234. 603-789-4781. <http://www.hypnobirthing.com>. Hypnobirthing Professional Labor Companion Training and Certification.

International Childbirth Education Association (ICEA), PO Box 20048, Minneapolis, MN 55420. 952-854-8660. <http://www.icea.org/>. Trainings to become doula; perinatal fitness educator; childbirth educator; postnatal educator; excellent charts, books, educational materials.

Lamaze International, 2025 M St. NW, Suite 800, Washington, DC 20036-3309. 800-368-4404. <http://www.lamaze.org>. Information for new and expectant parents and professionals about birth; childbirth educator training.

### Infant Massage

International Loving Touch Foundation, 4133 SE Division Street, Portland, OR 97202. 503-253-8482. <http://www.lovingtouch.com>. Infant massage training.

International Association of Infant Massage Instructors (IAIM), PO Box 6370, Ventura, CA 93006. 805-644-8524. <http://www.iaim.ws/home.html>. Infant massage instruction certification program.

### Other

Elizabeth Noble, 448 Pleasant Lake Avenue, Harwich, MA 02645-1040 508-432-8040. <http://www.elizabethnoble.com/>. Training in pregnancy and postpartum exercise and women's health.

Mayan Abdominal Massage: The Arvigo Institute, LLC. 77 West Street, Antrim, NH 03440. 603-588-2571. <http://www.arvigomassage.com>. Uterine and abdominal massage training.

## HIGH-RISK AND GENERAL SUPPORT RESOURCES FOR PREGNANCY AND POSTPARTUM

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Global Maternal/Child Health Association/Waterbirth International, PO Box 1400, Wilsonville, OR. 800-641-2229. <http://www.waterbirth.org>. Education, videos, conferences regarding waterbirths and natural birth.

International Cesarean Awareness Network, P.O. Box 98, Savage, MN 55378. 800-686-4226. <http://www.ican-online.org/>. Advocacy and support regarding cesareans.

La Leche League International, PO Box 4079, Schaumburg, IL 60168-4079. [www.la lecheleague.org](http://www.la lecheleague.org). Breastfeeding support organization, resources, links.

Postpartum Support International, 927 N. Kellogg Avenue, Santa Barbara, CA 93111. [www.postpartum.net](http://www.postpartum.net). Postpartum depression support, resources, and information.

Pregnancy Bed Rest: Information and Support for Families and Caregivers. Case Western Reserve University Bolton School of Nursing, 10900 Euclid Avenue, Cleveland, OH 44106. <http://fpb.case.edu/Bedrest/>.

Sidelines National High Risk Pregnancy Support Network, PO Box 1808, Laguna Beach, CA 92652. 888-447-4754 (HI-RISK4). <http://www.Sidelines.org>. Support and information for pregnant women on bedrest.

Vaginal Birth after Cesarean. Center for Family. 24050 Madison Street, Suite 200, Torrance, CA 90505. 310-375-3141. [www.vbac.com](http://www.vbac.com). Resources and research regarding vaginal birth after cesarean.

## MATERNITY ABDOMINAL SUPPORTS

BellyBra. <http://www.bellybra.com>

Loving Comfort Maternity Support Family. Website <http://www.maternitysupport.com>. Wraps for pregnancy, postpartum, breastfeeding.

Maternity In Style. <http://www.maternitystop.com/supportbelts&hose.html> Maya Wrap. 888 Maya Wrap. 888-629 2972 or 402-614-7340. <http://www.mayawrap.com/>. To purchase Rebozos.

Supports 4 Less. <http://supports4less.com/brace-type/abdominal-supports/index.htm>

The Rebozo Way Project. PO Box 22506, Santa Barbara, CA 93121. 805-965-4402/ 877-4REBOZO. <http://rebozoway.org>. Information about use of the Rebozo.

## PREGNANCY INFORMATION RESOURCES

American College of Obstetricians and Gynecologists. 409 12th St., SW, P.O. Box 96920, Washington, DC 20090-6920. 202-638-5577. <http://www.acog.org>.

MedlinePlus—Pregnancy. <http://www.nlm.nih.gov/medlineplus/pregnancy.html>. National Library of Medicine pregnancy-related information, including childbirth, high-risk pregnancy, and prenatal care.

Midwifery Today. PO Box 2672, Eugene, OR 97402. 800-743-0974. [www.Midwiferytoday.com](http://www.Midwiferytoday.com). Organization supporting homebirth, international midwifery, magazine publication.

Motherisk. 416-813-6780. <http://www.motherisk.org/index.jsp>. Evidence-based information about morning sickness and the safety or risk of drugs, herbs, chemicals, and disease during pregnancy and lactation.

MyMidwife.org. <http://www.mymidwife.org>. American College of Nurse-Midwives; provides general information about pregnancy.

National Women's Health Resource Center—Pregnancy. 157 Broad St., Suite 106, Red Bank, NJ 07701. <http://www.healthwomen.org/healthtopics/pregnancy>. Nonprofit, national clearinghouse for women's health information, including pregnancy.

Society for Maternal-Fetal Medicine. 409 12th St. SW, Washington, DC 20024. 202-554-1132. <http://www.smfm.org>. Organization for physicians certified in maternal-fetal medicine, with consumer information about pregnancy, including high-risk pregnancies.

The Association for Pre- & Perinatal Psychology and Health. PO Box 1398, Forestville, CA 95436. 707-887-2838. <http://www.birthpsychology.com/>. Annual conference for perinatal psychology.

Touch Research Institute. <http://www6.miami.edu/touch-research>. Tiffany Field's touch research on touch with infants, pregnant, and laboring women.

## MASSAGE RESOURCES

### Massage Supplies: Cushions, Foam, Positioning supports

Banner Therapy Products. 891 Broadway Street, Asheville, NC 28804. 828-277-1188. <http://www.bannertherapy.com>. Variety of pregnancy massage support products.

Body Support Systems, Inc. 1040 Benson Way, Ashland, OR 97520. 800-448-2400/541-488-1172. <http://www.bodysupport.com/>. bodyCushion for pregnancy positioning on massage table.

Bruce Medical. 411 Waverly Oaks Road, Suite 154, Waltham, MA 02452. 1-800-225-8446. <http://www.brucemedical.com/bedwedfoamsl.html>. Foam wedges for positioning (bed wedge).

Orthopedic Physical Therapy Products. 3800 Annapolis Lane, Suite 165, PO Box 47009, Minneapolis, MN 55447-0009. 800-367-7393. <http://optp.com/index.cfm/pageid/229>. Foam wedges for positioning.

### Advanced Training in Perinatal Bodywork Therapies

Active Birth/Janet Balaskas. <http://www.activebirthcentre.com/pb/catchoosingcompltherapy.shtml>. Active birth education and center for complementary therapies during pregnancy.

Bodywork for the Childbearing Year/Kate Jordan. <http://www.katejordanseminars.com/>. Perinatal massage certification course.

MaMassage/Leslie Stager. <http://www.LeslieStager.com>. Perinatal massage certification course, educational films and booklets, pregnancy massage oils.

Maternity Reflexology/Suzanne Enzer. <http://www.reflexology-polarity.co.uk/>. Trainings specialized in reflexology during pregnancy.

Mother Massage/Elaine Stillerman. Mothermassage.net. Perinatal massage certification course.  
 Pre and Perinatal Massage Therapy/Carole Osborne-Sheets. <http://www.bodytherapyassociates.com/PrePeri.php>. Perinatal massage certification course.  
 Well Mother Shiatsu/Suzanne Yates. [www.wellmother.org](http://www.wellmother.org). Trainings in shiatsu for pregnancy.

McCuthcheon S. *Natural Childbirth the Bradley Way*. New York: Plume Publishing, 1996.  
 Murkoff H. *What to Expect When You're Expecting*. 3rd Ed. New York: Workman Publishing, 2001.  
 Perez P. *Special Women: The Role of the Professional Labor Assistant*. Johnson, VT: Cutting Edge Press, 2000.  
 Perez P. *The Nurturing Touch at Birth: A Labor Support Handbook*. Johnson, VT: Cutting Edge Press, 2006.

## RECOMMENDED VIDEO RESOURCES

*Birth As We Know It* (DVD). [www.birthasweknowit.com](http://www.birthasweknowit.com). Russian birth film highlighting conscious, natural birthing.  
*Birth Into Being* (DVD). [www.birthintobeing.com](http://www.birthintobeing.com). Russian birth film showing water births in the Black Sea and in tubs at home.  
*Mastering Pregnancy Massage* DVD. [www.LeslieStager.com](http://www.LeslieStager.com). 3-hour instructional video of pregnancy massage techniques.  
*Mothertouch: Nurturing Touch for Birth* DVD. [www.LeslieStager.com](http://www.LeslieStager.com). Educational birth video demonstrating touch techniques during birth.

## SUGGESTED READINGS

### General Pregnancy and Comfort Measures

Balaskas J. *Natural Pregnancy: A Practical Holistic Guide to Well-Being from Conception to Birth*. London: Gaia Books, 1990.  
 Charlish A. *Your Natural Pregnancy: A Guide to Complementary Therapies in Pregnancy and Childbirth*. Berkeley: Ulysses Press, 1996.  
 England P. *Birthing From Within*. Albuquerque, NM: Partera Press, 1998.  
 Field TM, Hernandez-Reif M, Taylor S, et al. Labor pain is reduced by massage therapy. *J Psychosom Obstet Gynaecol* 1997;18(4):286-291.  
 Jimenez SLM. *The Pregnant Woman's Comfort Guide*. Garden City Park, NY: Avery Publishing Group, 1992.  
 Jones C. *Sharing Birth: A Father's Guide to Giving Support During Labor*. New York: Quill Publishing, 1985.  
 Jones C. *Mind Over Labor*. New York: Viking, 1988.  
 King JM. *Back Labor No More: What Every Woman Should Know Before Labor*. Elmo, TX: Plenary Systems, 1994.  
 Kitzinger S. *The Complete Book of Pregnancy and Childbirth* (Rev Ed.). New York: Alfred Knopf, 1996.  
 Klaus M, Kennell J, Klaus P. *The Doula Book: How a Trained Labor Companion Can Help You Have a Shorter, Easier, and Healthier Birth*. New York: Perseus Books, 2002.  
 Klaus MH, Klaus PK, Kennel JH. *Mothering the Mother*. Reading, MA: Addison-Wesley, 1993.  
 Lieberman AB. *Easing Labor Pain*. Boston: Harvard Common Press, 1992.  
 Marshall C. *From Here to Maternity*. New York: Prima Publishing, 1991.

### Labor and Labor Support

Balaskas J. *New Active Birth: The New Approach to Giving Birth Naturally*. Boston: Harvard Common Press, 1992.  
 Dick-Read G. *Childbirth Without Fear*. 4th Ed. London: Pinter & Martin, 2005.  
 Gaskin IM. *Spiritual Midwifery*. 4th Ed. Summertown, TN: The Book Publishing Company, 2002.  
 Kitzinger S. *The New Experience of Childbirth*. London: Orion, 2004.  
 Lamaze F. *Painless Childbirth: The Lamaze Method*. Chicago: Contemporary Books, 1984.  
 Leboyer F. *Birth Without Violence*. Rev. Ed. Rochester, VT: Inner Traditions/Bear and Co, 2002.  
 Odent M. *Birth Reborn: What Childbirth Should Be*. Souvenir Press, 1994.  
 Peterson G. *An Easier Childbirth: A Mother's Guide to Birthing Normally*. Berkeley, CA: Shadow & Light, 1994.  
 Simkin P. *The Birth Partner: Everything You Need to Know to Help a Woman Through Childbirth*. Boston: Harvard Common Press, 1989.  
 Simkin P, Ancheta R. *The Labor Progress Handbook*. Malden, MA: Blackwell, 2000.  
 Simkin P, Whalley J, Keppler A. *Pregnancy, Childbirth, and the Newborn: The Complete Guide*. Deephaven, MN: Meadowbrook Press, 1991.

### Psychology and Spirituality of Pregnancy

Freedman L. *Birth as a Healing Experience: The Emotional Journey of Pregnancy Through Postpartum*. New York: Haworth Press, 1999.  
 Frymer-Kensky T. *Motherprayer: The Pregnant Woman's Spiritual Companion*. New York: Riverhead Books, 1995.  
 Jones C. *The Secret Life of the Expectant Mother: Nine Months of Mysterious Intuitions and Heightened Perceptions*. Secaucus, NJ: Carol Publishing Group, 1997.  
 Jones C. *Visualizations for an Easier Childbirth*. New York: Simon and Schuster, 1988.  
 Odent M. *The Scientification of Love*. London: Free Association Books, 1999.  
 Panuthos C. *Transformation Through Birth: A Woman's Guide*. Westport, CT: Bergin and Garvey, 1984.  
 Rees B. Effect of relaxation with guided imagery on anxiety, depression and self-esteem in primiparas. *J Holist Nurs* 1995;13:255-267.  
 Seligson F. *Queen Jin's Hand Book of Pregnancy*. Berkeley, CA: North Atlantic Books, 2002.

## Addressing Common Pregnancy Complaints

### Morning Sickness

- Belluomini J, Litt RC, Lee KA, Katz M. Acupressure for nausea and vomiting of pregnancy: a randomized, blinded study. *Am J Obstet Gynecol* 1994; 84(2):245–248.
- De Aloysio D, Penacchioni P. Morning sickness control in early pregnancy by Neiguan point acupressure. *Obstet Gynaecol* 1992;80(5): 852–854.
- Dundee JW, Sourial FB, Ghaly RG, Bell PF. P6 acupressure reduces morning sickness. *J R Soc Med* 1988;81:456–457.
- Hyde E. Acupressure therapy for morning sickness. *J Nurse Midwifery* 1989;34(4):171–178.
- Vickers AJ. P6 Acupuncture Point Stimulation as an Anti-Emetic Therapy: A Review of the Research Literature, Research Council for Complementary Medicine, 1995.

### General Musculoskeletal Complaints

- Appel C. Obstetrical Considerations. In: Myers RS, ed. *Saunders Manual of Physical Therapy Practice*. Philadelphia: WB Saunders, 1996.
- Polden M, Mantle J. *Physiotherapy in Obstetrics and Gynaecology*. London: Butterworth-Heinemann, 1990.
- Sapsford R, Bullock-Saxton J, Markwell S. *Women's Health: A Textbook for Physiotherapists*. London: WB Saunders, 1998.
- Schwartz Z, Katz Z, Lancet, M. Management of puerperal separation of the symphysis pubis. *Int J Gynaecol Obstet* 1985;23:125–128.

### Low Back Pain

- Blankenship T, Blankenship VG. Biomechanics of back pain in the gravid female. *ACA J Chiropr* 1980;14:S-113–115.
- Colliton J. Back pain and pregnancy: active management strategies. *Phys Sportsmed* 1996;24(7). Last accessed online 9/16/08 at: [www.medscape.com/viewarticle/408838](http://www.medscape.com/viewarticle/408838).
- Daly JM, Frame SP, Rapoza PA. Sacroiliac subluxation: a common, treatable cause of low-back pain in pregnancy. *Fam Pract Res J* 1991;11(2):149–159.
- Diakow RP, Gadsby TA, Gadsby JB, et al. Back pain during pregnancy and labour. *J Manipulative Physiol Ther* 1991;14(2):116–188.
- Gutke A, Josefsson A, Oberg B, et al. Pelvic girdle pain and lumbar pain in relation to postpartum depressive symptoms. *Spine* 2007;32(13):1430–1436.
- Koch L. Pregnancy and birth; Releasing the psoas muscle throughout pregnancy. In: Koch L. *The Psoas Book*. 2nd Ed. Felton, CA: Guinea Pig Publications, 1997:62–67.
- Ostgaard, HC, Zetherstrom G, Roos-Hansson, E. Reduction of back and posterior pelvic pain in pregnancy. *Spine* 1994;19(8):804–900.
- Moore K, Dumas GA, Reid JG. Postural changes associated with pregnancy and their relationship with low-back pain. *Clin Biomech* 1990;5:169–174.
- Röst CC, Jacqueline J, Kaiser A, et al. Pelvic pain during pregnancy: a descriptive study of signs and symptoms

of 870 patients in primary care. *Spine* 2004;29(22): 2567–2572.

- Scott J, Bachrach RM. *Goodbye to Bad Backs: Stretching and Strengthening Exercises for Alignment and Freedom From Lower Back Pain*. 3rd Ed. Hightstown, NJ: Princeton Book Company, 2002.
- Vleeming A, de Vries HJ, Mens JM, van Wingerden JP. Possible role of the long dorsal sacroiliac ligament in women with peripartum pelvic pain. *Acta Obstet Gynecol Scand* 2002;81(5):430–436.

### High Risk Pregnancy

- Chism D. *The High Risk Pregnancy Source Book*. Columbus, OH: McGraw-Hill, 1997.
- Gilbert ES. *Manual of High Risk Pregnancy and Delivery*. 4th Ed. St. Louis: Mosby, 2006.
- Hirozawa A. Preeclampsia and Eclampsia, while often preventable, are among top causes of pregnancy-related deaths. *Fam Plann Perspect* 2001;33(4). Last accessed online 9/20/07 at: [www.guttmacher.org/pubs/journals/3318201.html](http://www.guttmacher.org/pubs/journals/3318201.html).
- Isenock PD. *Bedrest Before Baby: A Survival Handbook for High Risk Moms*. Perry Hall, MD: Mustard Seed Publications, 1995.
- MacKay AP, Berg CJ, Atrash HK. Pregnancy-related mortality from preeclampsia and eclampsia. *Obstet Gynecol* 2001;97(4):533–538.
- Rich LA. *When Pregnancy Isn't Perfect*. New York: Dutton, 1991.
- Urbano FL. Homan's sign in the diagnosis of deep vein thrombosis. *Hosp Physician* 2001 March:22–24. Last accessed online 9/20/07 at: <http://www.turner-white.com>.

### Hydrotherapy

- Baddeley S. Aquanatal advantages. *Mod Midwife* 1993; July/August.
- Benfield RD. Hydrotherapy in labor. *J Nurs Scholarsh* 2002;34(4):347–352.
- Harper B. *Gentle Birth Choices*. Rochester, VT: Healing Arts Press, 1994.
- Zwelling E, Johnson K, Allen J. How to implement complementary therapies for laboring women. *MCN Am J Matern Child Nurs* 2006;31(6):364–370.

### Perinatal Massage

- Bernhardt RT. Massage therapist as doula. *Massage Ther J*. Summer 1994:46–48
- Campbell JB. Massage, pregnancy and birth—an historical perspective. *Massage* 1992;36:70–74.
- Curties D. *Breast Massage*. Moncton, NB, Canada: Curties-Overzet Publications, 1999.
- Dawes N, Harrold F. *Massage Cures: The Family Guide to Curing Common Ailments With Simple Massage Techniques*. New York: Harper Collins, 1990.
- Field TM. Massage therapy effects. *Am Psychol* 1988;53: 1270–1281.



- Field TM. *Touch*. Boston: The MIT Press, 2003.
- Field TM, Hernandez-Reif M, Hart S, et al. Pregnant women benefit from massage therapy. *J Psychosom Obstet Gynaecol* 1999;20:31–38.
- Field TM, Grizzle N, Scafidi F, Schanberg S. Massage and relaxation therapies' effects in depressed adolescent mothers. *Adolescence* 1996;31:903–911.
- Kaada B, Torsteinbo O. Increase of plasma beta-endorphins in connective tissue massage. *Gen Pharmacol* 1989;20(4):487–489.
- Keenan P. Benefits of massage therapy and use of a doula during labor and childbirth. *Altern Ther* 2000;6(1):70.
- Klaus M. Touching during and after childbirth. In: Field TM, ed. *Touch in Early Development*. Mahwah, NJ: Lawrence Erlbaum, 1995:19–33.
- Montagu A. *Touching: the Human Significance of the Skin*. New York: Perennial Library, Harper & Row, 1971.
- Osborne-Sheets C. *Annotated Bibliography for Pre and Perinatal Massage Therapy*. San Diego: Body Therapy Associates, 1997.
- Osborne-Sheets C. *Pre and Perinatal Massage Therapy: A Comprehensive Practitioner's Guide to Pregnancy, Labor, Postpartum*. San Diego: Body Therapy Associates, 1998.
- Roth LL, Rosenblatt JS. Mammary glands of pregnant rats: development stimulated by licking. *Science*, 1966;151:1403–1404.
- Stager L. *Mastering Pregnancy Massage*. [DVD], 2005.
- Stager L. *Mothertouch: Nurturing Touch for Birth*. [DVD]. Expected 2008.
- Stern J. Licking, touching and suckling: contact stimulation in maternal psychobiology in rats and women. *Ann N Y Acad Sci* 1986;474:95–107.
- Stillerman E. Mother massage: massage during pregnancy. *Massage Ther J* 1994 Summer:42–44.
- Stillerman E. Mother Massage: Touch for Happier, Healthier Pregnancies. *Massage Magazine* Sept/Oct 2000: 82–95.
- Stillerman E. *Mother Massage: A Handbook for Relieving the Discomforts of Pregnancy*. New York: Delta, 2006.
- Tiran D, ed. *Complementary Therapies for Pregnancy and Childbirth*. London: Baillere Tindall, 1995.
- Touch in Labor and Infancy: Clinical Implications*. Brunswick, NJ: Johnson & Johnson Consumer Products:, 1995.
- Waters B. *Massage During Pregnancy*. Mesilla, NM: Bluewater Press, 1995.
- Watson S. The effects of massage: an holistic approach to care. *Nurs Stand* 1997;11:45–47.
- White-Traut RC, Nelson MN. Maternally administered tactile, auditory, visual and vestibular stimulation: relationship to later interactions between mothers and premature infants. *Res Nurs Health* 1988;11(1):31–39.
- Yokoyama Y, Ueda T, Irahar M, Aono T. Releases of oxytocin and prolactin during breast massage and suckling in puerperal women. *Eur J Obstet Gynecol Reprod Biol* 1994;53(1):17–20.
- Beckmann MM, Garrett AJ. Antenatal perineal massage for reducing perineal trauma. *Cochrane Database Syst Rev* 2006 Jan 25;(1):CD005123.
- Hastings-Tolsma M, Vincent D, et al. Getting through birth in one piece: protecting the perineum. *MCN Am J Matern Child Nurs* 2007;32(3):158–164.
- Labrecque M, Marcoux S, Pinault JJ, et al. Prevention of perineal trauma by perineal massage during pregnancy: a pilot study. *Birth* 1994;21(1):20–25.
- Mynaugh PA. A randomized study of two methods of teaching perineal massage: effects on practice rates, episiotomy rates, and lacerations. *Birth* 1991;18(3): 153–159.

## Aromatherapy

- Balacs T. Safety in pregnancy. *Int J Aromatherapy* 1992 Spring:22–25.
- Burns E, Blarmey C. Using aromatherapy in childbirth. *Nurs Times* 1994;90(9):54–60.
- Clifford F. *Aromatherapy During Your Pregnancy*. Essex, UK: CW Daniel, 2004.
- Dale A, Cornwell S. The role of lavender oil in relieving perineal discomfort following childbirth: a blind randomized clinical trial. *J Adv Nurs* 1994;19(1): 89–96.
- Davis P. *Aromatherapy an A–Z*. Saffron Walden, UK: CW Daniel Co, 1988.
- England A. *Aromatherapy for Mother and Baby: Natural Healing With Essential Oils During Pregnancy and Early Motherhood*. Rochester, VT: Healing Arts Press, 2000.
- Fawcett M. *Aromatherapy for Pregnancy and Childbirth*. Shaftesbury, Dorset: Element Book Limited, 1993.
- Lawless J. *The Encyclopedia of Essential Oils*. Shaftesbury, Dorset: Element Book Limited, 1992.
- Reed L, Norfolk, L. Aromatherapy in midwifery. *Aromatherapy World* 1993 Summer:12–15.
- Tiran D. *Aromatherapy in Midwifery Practice*. London: Baillere Tindall, 1996.
- Tiran D. *Clinical Aromatherapy for Pregnancy and Childbirth*, London: Churchill Livingstone, 2000.
- Tisserand M. *Aromatherapy for Women: A Practical Guide to Essential Oils for Health and Beauty*. Rochester, VT: Healing Arts Press, 1996.
- Tisserand R, Balacs T. *Essential Oil Safety A Guide for Health Care Professionals*. New York: Churchill Livingstone, 1995.

## Acupressure/ Shiatsu

- Betts D. *The Essential Guide to Acupuncture in Pregnancy and Childbirth*. Hove, England: The Journal of Chinese Medicine, 2006.
- Betts D. *Acupressure Techniques for Use During Childbirth and Pregnancy*. Last accessed online 9/20/07 at: <http://www.childbirthsolutions.com/articles/birth/acupressure/index.php>.
- Blum JE. *Woman Heal Thyself: An Ancient Healing System for Contemporary Women*. Boston: Charles E. Tuttle, 1996.

## Perineal Massage

- Albers LL, Borders N. Minimizing genital tract trauma and related pain following spontaneous vaginal birth. *J Midwifery Womens Health* 2007;52(3):246–253.

- Flaws B. Path of Pregnancy. Vol. I: A Handbook of Traditional Chinese Gestational and Birthing Diseases. Boulder, CO: Blue Poppy Press, 1993.
- Flaws B. Path of Pregnancy. Volume I: A Handbook of Traditional Chinese Postpartum Diseases. Boulder, CO: Blue Poppy Press, 1993.
- Gach MR. Acupressure's Potent Points: A Guide to Self-Care for Common Ailments. New York: Bantam Books, 1990.
- Ohashi W, Hoover M. Natural Childbirth the Eastern Way: A Healthy Pregnancy and Delivery Through Shiatsu. New York: Ballantine Books, 1983.
- Whitlocke B. Shiatsu Therapy for Pregnancy: A Handbook for the Therapist and Support Person. North Melbourne, Australia: Spinifex Press, 1999.
- Yates S. Redefining the Role of Shiatsu in Pregnancy, Birth, and Babyhood. 1997 Dec. Last accessed online 9/20/07 at [www.btinternet.com/~wellmother/9712redef.htm](http://www.btinternet.com/~wellmother/9712redef.htm)
- Yates S. Shiatsu for Midwives. London: Elsevier Science Limited, 2003.

## Reflexology

- Enzer S. Maternity Reflexology Manual. England: Soul to Soul Reflexology, 2004.
- Evans M. Reflex zone therapy for mothers. Nurs Times 1990;86(4):29-31.
- Gillanders A. Reflexology for Women's Health. Berkeley, CA: Ulysses Press, 2006.

## Exercises and Yoga for Pregnancy

- Balaskas J. Preparing for Birth With Yoga. Dorset, England: Element Books Limited, 1994.
- Birch BB. Women's conditions: menstruation and pregnancy. In: Bender B. Power Yoga. New York/London: Simon & Schuster, 1995:60-61.
- Larson J, Howard K. Yoga Mom, Buddha Baby: The Yoga Workout for New Moms. New York: Bantam, 2002.
- Laughlin K, Cristaudo J. Stretching and Pregnancy: Maintaining Fitness, Flexibility, and Wellbeing During Pregnancy. Australia: Simon & Schuster, 2001.
- Markowitz E, Brainen H. Baby Dance: A Comprehensive Guide to Prenatal and Postpartum Exercise. Englewood Cliffs, NJ: Prentice Hall, 1980.
- Mittlemark RA, Wiswell RA, Drinkwater BL. Exercise in Pregnancy. 2nd Ed. Baltimore, MD: Lippincott Williams & Wilkins, 1990.
- Noble E. Essential Exercises for the Childbearing Year: A Guide to Health and Comfort Before and After Your Baby Is Born. 4th Ed. Harwich, MA: New Life Images, 2003.
- Nordahl K, Petersen C, Jeffreys R. Fit to Deliver: An Innovative Prenatal and Postpartum Fitness Program. Vancouver, Canada: Hartley and Marks Publishers, 2005.
- O'Brien P. Birth and Our Bodies: Exercises and Meditations for the Childbearing Year and Preparation for Active Birth. London: Pandora, 1986.
- Olkin-Klein S. Positive Pregnancy Through Yoga: Techniques, Exercises, and Postures to Ensure an Easy Labor and a Healthy Mother and Baby. Englewood Cliffs, NJ: Prentice Hall, 1981.
- Olkin-Klein S. Positive Pregnancy Fitness: A Guide to a More Comfortable Pregnancy and Easier Birth Through Exercises and Relaxation. Wayne, NJ: Avery Publishing Group, 1987.
- Teasdill W. Yoga for Pregnancy: Essential Exercises for the Childbearing Year. Lincolnwood (Chicago), IL: Contemporary Books, 2000.
- Weller S. Easy Pregnancy With Yoga. Northamptonshire, UK: Thorson's Pub Group, 1991.
- Widdowson R. Yoga for Pregnancy. Chanhassen, MN: Creative Publishing International, 2001.
- Yogendra HJ, Armaiti ND. Pregnancy, Parenthood & Yoga. 2nd Ed. Santacruz (East), Bombay: The Yoga Institute, 1994.

## Multicultural Pregnancy/Birth Touch Practices

- Dunham C. Mamatoto: A Celebration of Birth. New York: Penguin Books, 1991.
- Engelmann G J. Labor Among Primitive Peoples. St. Louis: JH Chambers, 1884.
- Farwell E, Hubbell A Maiden. The wisdom of Tibetan childbirth. In Context 1992; 31:26-31.
- Goldsmith J. Childbirth Wisdom From the World's Oldest Societies. Brookline, MA: East West Health Books, 1990.
- Gordon JE, Gideon H, Wyon JB Childbirth in rural Punjab, India. Am J Med Sci March 1964: 345-362.
- Hedstrom LW, Newton N. Touch in labor: A comparison of cultures and eras. Birth 1986;12(3):181-186.
- Hrdlicka A. Physiological and Medical Observations Among the Indians of Southwestern United States and Northern New Mexico. Washington, DC: Smithsonian Institution Bureau of American Ethnology, Bulletin No. 34, 1908.
- Jackson D. With Child: Wisdom and Traditions for Pregnancy, Birth and Motherhood. San Francisco: Chronicle Books, 1999.
- Jelliffe D, Bennett FJ. Worldwide care of the mother and newborn child. Clin Obstet Gynecol 1962;5:64-84.
- Jordan B. Birth in Four Cultures: A Cross-Cultural Investigation of Childbirth in Yucatan, Holland, Sweden and the United States. 4th Ed. Prospect Heights, OH: Waveland Press, 1993.
- Kitzinger S. Rediscovering Birth. New York: Pocket Books, 2000.
- Maglaos ER. The Potential of the Traditional Birth Attendant. WHO Offset Publication No 95. Geneva: World Health Organization, 1986:105.
- Maiai S. Letter. In defense of traditional massage. NZ Med J 1985;98(776):251.
- Metzler D. Birth: An Anthology of Ancient Texts, Songs, Prayers, and Stories. San Francisco: North Point Press.
- Ploss HH, Bartels M, Bartels F. Are births easier among civilized or primitive natives? In: Woman: An Historical Gynecological and Anthropological Compendium. London: Heinemann, 1935. (originally published in German in 1885.)

- Reissland N, Burghart R. The role of massage in South Asia: child health and development. *Soc Sci Med* 1987; 25(3):231–239.
- Vincent Priya J. *Birth Traditions and Modern Pregnancy Care*. Rockport, MA: Element Books, 1992.

## Newborn/Postpartum

- Beck CT. A Meta-analysis of Predictors of Postpartum Depression. *Nurs Res* 1996;45(5):297–303.
- Chamberlain D. *Babies Remember Birth and Other Extraordinary Scientific Discoveries About the Mind of Your Newborn*. New York: Ballantine Books, 1988.
- Kitzinger S. *The Year After Childbirth*. New York: Fireside, 1996.
- Kleiman K. *This Isn't What I Expected: Overcoming Postpartum Depression*. New York: Bantam Books, 1994.
- Kruckman LD. Rituals and support: An anthropological view of postpartum depression. In: Hamilton JA, Harberger PN, eds. *Postpartum Psychiatric Illness: A Picture Puzzle*. Philadelphia: University of Pennsylvania Press, 1992.
- Lim R. *After the Baby's Birth: A Woman's Way to Wellness: A Complete Guide for Postpartum Women*. Berkeley: Celestial Arts, 1991.
- LoCicero A, Weiss DM, Issokson D. Postpartum Depression: Proposal for Prevention through an Integrated Care and Support Network. *Appl Prev Psychol* 1997; 6(4):169–178.

- Abdominal support binders** Elastic or cloth support for the abdomen that wrap around the belly and support its weight during the later stages of pregnancy.
- Active labor** The phase of labor in which cervical dilation is from 4 to 8 cm or so and contractions average a rate of every 3 to 5 minutes and last 60 to 90 seconds.
- Amniotic sac** The membranous bag that holds intact the developing fetus, placenta, and amniotic fluid in utero; also known as the “bag of waters.”
- Back labor** A condition when a laboring mother feels contractions primarily in her back, rather than in her abdomen or pelvis; often caused by a posteriorly positioned baby.
- Bloody show** A brownish, reddish discharge as the cervix begins to dilate. The blood may have occurred as a result of cervical exams by a PCP.
- Braxton-Hicks contractions** Irregular “practice contractions” that are generally mild and do not cause the cervix to dilate. Women in their first pregnancy tend to have fewer Braxton-Hicks contractions than those in subsequent pregnancies. Braxton-Hicks contractions are *not* the same as preterm labor contractions which tend to be more regular and consistent, may sometimes be feel crampy in the low pelvis, and which can cause an early delivery of the baby. If the client has more than 4 contractions in 1 hour and it is unclear what type of contractions they are, she should be referred to her prenatal care provider.
- Breech** When the baby is positioned in utero with the buttocks in the mother’s pelvis and head up toward her ribs. The normal vertex position for birth is with the baby’s head down in the mother’s pelvis.
- Broad ligament** Wide and thin uterine ligament that spreads out like a sheet from the lateral aspects of the uterus and sinks into the iliac fossa area in the anterior hip, the walls of the pelvic cavity, and the connective tissue of the pelvic floor. The ovaries and round ligament are suspended within the broad ligament.
- Cardinal ligament** A band of ligamentous tissue, also known as the *ligamentum transversalis colli*, that supports the cervix and uterus and attaches to the lateral vagina.
- Catecholamines** Chemicals produced by the adrenal medulla, such as epinephrine, that act as hormones and neurotransmitters. They stimulate the sympathetic nervous system, cause an increase in heart rate, blood pressure, and respirations, and divert blood away from digestion. They also relax smooth muscle, which, during pregnancy, results in slowing or stalling labor.
- Cervix** The bottom neck of the uterus that joins with the vagina.
- Cesarean section** (c-section) The surgical delivery of a baby through a mother’s abdomen.
- Chakra** Sanskrit word referring to a spinning vortex of energy located in specific areas of the body.
- Chloasma** Darkening of the skin like a mask on the face, caused by estrogen effects during pregnancy; it resolves after pregnancy.
- Contractions** Rhythmic uterine cramping that helps move the baby down and out and dilates the cervix.
- Corpuscles** Special tactile receptors found in different layers of the skin and sensitive to specific types of touch, such as continuous pressure, vibration, cold, and deep pressure.
- Crowning** The point during birth when the widest part of baby’s head fills the vagina, expanding the perineum and causing the tissues to stretch.
- Deep vein thrombosis** Development of a clot in the deep veins, usually in the legs.
- Diastasis recti** Thinning of the fascial linea alba so that the rectus abdominus muscles separate, reducing anterior support of the torso and often leading to back pain.
- Diastasis symphysis pubis** Separation of the symphysis pubis due to postural imbalance and/or relaxin’s softening effects. This condition can be very painful, especially with hip abduction.
- Dilate/dilation** The process of cervical opening during labor that allows the baby to enter the vaginal vault. This process of opening is called dilation.
- Doula** An Ancient Greek term for the handmaidens and birth companions to the upper echelon women, now used to describe professional birth and postpartum supporters. Many studies have been done indicating that doulas, or continuous birth supporters have a powerful and beneficial influence on the process and outcome of birth.
- Due date** A date when labor is expected to begin. It is determined by adding 40 weeks to the first day of the last menstrual period (LMP), (assuming a woman has a regular 28 day menstrual cycle), or adding 38 weeks to the known day of conception. Alternatively, 3 months can be subtracted from the LMP, and 7 days added onto that. Only 10% of births actually occur on the due date. The due date is often written in medical notes as EDC or expected date of confinement. This is a relic of days when women were kept separated from her family or community during birth. It is also sometimes called the EDD (estimated date of delivery).
- Early labor** The early part of labor, when the cervix begins to dilate from 0 to 4 cm or so.
- Eclampsia** Seizures during pregnancy, often following preeclampsia.
- Efface/effacement** The thinning or shortening of the uterine cervix that occurs before or in the process of labor. The cervix is normally 1.5 to 2 inches long. As it thins, or

- shortens, it is measured in percentages. Fifty percent effaced means it is about 1 inch long. The cervix must normally be 100% effaced and fully dilated before pushing begins.
- Embolus** Blood clot that becomes dislodged from the venous wall and travels through the circulation with the potential of becoming lodged in a vessel in the lungs, brain, or heart, often with devastating consequences. When it obstructs a blood vessel, it is called an *embolus* (plural: emboli).
- Endorphins** Neurotransmitters that help reduce painful sensations or affect pain perception. They are also related to mood, feelings of euphoria, memory retention, and the release of sex hormones.
- Engaged** The state in which the widest diameter of the baby's head settles into the mother's pelvis in preparation for or during birth.
- Engorgement** The swelling of the breast tissue with lymph, blood, and milk during the second to fifth postpartum day in preparation for mature milk production. Until this time, the baby has been drinking the pre-milk or colostrum, which contains primary antibodies that build a baby's immune system. Nursing stimulates the production of milk, and engorgement may follow as the milk "comes in." For some women, engorgement can be very painful.
- Epidural anesthesia** Anesthesia often used during labor to numb sensations from the waist down. A thin catheter is placed in the epidural space of the spine, and medications are injected which cause the numbing.
- Episiotomy** Cutting of the perineal tissues to help the baby to be born faster.
- Estrogen** Normally produced by the ovaries and adrenal cortex, estrogen is produced in early pregnancy first by the corpus luteum and then the placenta. Estrogen has multiple influences in the pregnant body, including softening connective tissue and preparing the endometrium for caring for the fertilized egg, embryo, and fetus. It also increases breast size, vascularity, and the number and size of milk-producing ducts and lobes. It contributes to the development of darker skin on the abdomen and face with the linea negra and chloasma. Estrogen contributes to extra blood flow to the nasal mucosa, causing swelling, stuffiness, and sometimes bloody noses.
- Fibolytic activity** This is the clotting mechanism of the blood—the blood clots faster than normal during pregnancy to help prevent excessive blood loss by hemorrhage at birth.
- First stage of labor** The first of three stages of labor involves dilation and effacement of the cervix from 0 to 10 cm, until pushing. The phases of pre-labor, early, and active labor and transition are all part of the first stage.
- Gestational diabetes** A type of diabetes, different from the common diabetes mellitus, that only occurs during pregnancy and resolves after delivery. When controlled, it generally does not require the use of insulin but does demand attention to diet to prevent excessive blood sugar level. Excess maternal blood sugar level will cause the baby to grow larger, thereby causing size-related difficulties at delivery.
- Gestational hypertension** High blood pressure that develops during pregnancy, usually beginning between 20 weeks' gestation and 1 week postpartum.
- HELLP syndrome** An acronym for Hemolysis, Elevated Liver enzymes, and Low Platelets. An insidious syndrome considered by some to be a variation of advanced preeclampsia. It is characterized by pain in the epigastric area or right upper quadrant of the abdomen, often accompanied by general malaise, nausea, vomiting, headache.<sup>1</sup>
- High-risk pregnancies** Pregnancies in which the woman has conditions that put her more at risk for complications. While these conditions place a woman at a higher *risk* for developing problems, they *are not necessarily a problem in and of themselves*.
- Interstitial fluid** Fluid located between cells with the functions of bathing and protecting the cells, filtering and removing waste. Lymph fluid originates as interstitial fluid. When excessive interstitial fluid builds up in the tissues, it manifests as edema. This is not uncommon in the hands or feet during the third trimester of pregnancy due to extra blood volume and more sluggish circulation in the extremities.
- Intrauterine growth restriction** The fetus is small for its estimated gestational age, as indicated by measurements and ultrasound. This condition may indicate it has fetal anomalies or other problems.
- Involute** To involute, or the process of involution is, in this case, the act of the postpartum uterus contracting back down to a nonpregnant size.
- Kegel exercises** Exercises that tone the perineal muscles.
- Labor** Commonly defined as the time when uterine contractions last 60 to 90 seconds, have been occurring consistently every 3 to 5 minutes for at least a couple hours, and are causing cervical changes.
- Lightening** In the late third trimester, the baby will usually "drop" down into the pelvis, engaging more fully into position for labor. The mother will feel relief of pressure in her diaphragm, be able to breathe more easily, and will suddenly have more pressure on her bladder. This shift of the baby's position is normally very obvious, as a mother's posture and appearance visibly change.
- Linea alba** Fascial line where abdominal muscles insert in centerline of abdomen.
- Linea negra** Skin in the area of the linea alba that darkens in pregnancy.
- Mastitis** Inflammation of the breast, often caused by a blocked milk duct or bacteria entering the breast through cracked nipples. Symptoms usually involve heat, hardness, and red streaking from the site of infection or inflammation, and maternal fever. Heat, massage, and frequent nursing will help to heal mastitis, along with antibiotics when needed.
- Meconium** The baby's first bowel movement, which is usually green or black and tarry.
- Medical release** A form signed by client's PCP which indicates approval for massage during the pregnancy, based on an obstetrical point of view. It can indicate restrictions or concerns applicable to bodywork according to the type of risk factors or complications the client has.

- Milk ejection reflex** Response to prolactin release from the pituitary gland when the baby nurses on the breast. The prolactin stimulates the release of oxytocin. Oxytocin, which causes the uterus to contract, also triggers the milk glands to contract, squeezing milk through the ducts to the nipple, to the baby. The sensation when the hormones trigger this response is often described by women as tingling, filling, and sensual, and often the breasts will begin to leak when the milk “lets down.” Often this occurs in response to baby crying, or close to regular feeding times.
- Miscarriage** Birth before week 20 of gestation. The vast majority of miscarriages occur in the first trimester as a healthy response to the early abnormal development of an embryo. However, other known associations with miscarriage include maternal issues, such as problems with the cervix or uterus or conditions such as diabetes, infection, or virus. Miscarriage is also associated with maternal drug use, including tobacco and alcohol use.
- Mucous plug** Thick mucous in the cervical opening that prevents the intrusion of bacteria into the uterus. It is discharged during labor.
- Oligohydramnios** Condition in which too little amniotic fluid is produced. It is associated with placental dysfunctions, fetal anomalies, or fetal death.
- Orthostatic hypotension** Due to extra blood and fluctuations in blood pressure, some women will experience a sudden drop in blood pressure when shifting from lying down to standing or sitting, resulting in sudden dizziness, nausea, blurred vision, headache, or fatigue.
- Oxytocin** Hormone released from the posterior pituitary gland that causes the uterus to rhythmically contract during labor and stimulates the “let down” reflex during lactation.
- Pelvic floor** The group of muscles located between and below the lower bones of the pelvis, also called the *perineum* or *perineal muscles*. These provide vital support for all the internal organs. When weak, multiple pelvic floor dysfunctions develop, including urinary incontinence and uterine, rectal, and bladder prolapse.
- Pitocin** A synthetic oxytocin used to stimulate or augment contractions during labor, as well as used in the immediate postpartum period to decrease the risk of postpartum hemorrhage.
- Pitting edema** Tissue swelling in which an indentation is left for more than a brief moment after pressing a finger pad into the tissue for 5 seconds and then lifting the finger up. It can vary from mild to extreme and may indicate potential problems, such as preeclampsia.
- Placenta previa** In this condition, the placenta has implanted itself partially or completely over the opening of the cervix, increasing risks for bleeding and preventing vaginal delivery.
- Placental abruption** A condition of pregnancy where the placenta begins to separate from the wall of the uterus before the delivery of the baby. It may separate only partially, or there may be a complete abruption, where the placenta detaches entirely. It occurs in an average of 1 out of 150 to 200 pregnancies.
- Polyhydramnios** A condition in which excessive amniotic fluid is produced in the uterus. It is associated with maternal shortness of breath, diabetes, preterm labor, and fetal anomalies. With the increased fluid, there is an increased intrauterine pressure and impaired perfusion of blood between the uterus and placenta.
- Posterior position** The position in which the baby in utero is head down, with the occiput toward the mother’s sacrum, and the face looking toward the mother’s abdomen.
- Postpartum “blues”** Normal fluctuation of mood and emotions in the first few days after birth, and peaking around postpartum day 5. Symptoms may involve labile moods, teariness, fatigue, difficulty sleeping, and irritability. Typically resolves within 2 weeks.
- Postpartum period** Also known as *puerperium*, this is the period of time after the birth of a child until anywhere from 6 weeks to 1 year later. Minimally, it is considered the period of time until the uterus involutes as much as possible to its prepregnant state. But many new mothers find themselves in a period of emotional, physical, and psychological adjustments for at least 1 year after birth, that can still be considered the *postpartum period*.
- Preeclampsia** A condition of pregnancy and postpartum, characterized by changes to the organ systems, blood chemistry, and by a rise in blood pressure. It has the potential to lead to the dangerous complications of eclampsia or convulsions. Some of the common symptoms a woman might experience include headache, visual changes, epigastric pain, and pitting edema. Blood pressures causing alarm may range from slightly high (140/90 to 150/100 mm Hg) to moderately high (150/90 to 180/110 mm Hg)
- Pre-labor** The earliest start of labor. Also called *prodromal* or *latent* labor. The mother may be having contractions, but they are gentle and having little effect on dilating her cervix.
- Premature birth** A birth that occurs between gestational weeks 20 and 37.
- Preterm labor** Also known as premature labor, onset of contractions with changes to the cervix (dilation, shortening, and effacing) before 37 weeks’ gestation and with risk of the baby being born early. Preterm contractions do not always lead to preterm *labor*. Also known as *premature labor*.
- Preterm labor contractions** Uterine contractions that begin after 20 weeks’ and before 37 weeks gestation and promote birth before fetal development is completed. They may be felt as mild aching in the pubic area or low back, pelvic pressure, or as intermittent abdominal pains. Alternatively, they may not be noticed at all by the mother. They may be accompanied with diarrhea or watery or bloody vaginal discharge. Contractions are usually at least 4 per hour, and may grow in frequency or strength. To positively diagnose the situation as preterm labor, the client would need a cervical exam to determine if she had dilated. A uterine monitor would also be used to validate the presence of contractions. Treatment is often bedrest, hydration, and/or the use of medications to stop contractions.

**Progesterone** A hormone produced by the corpus luteum during the first 2 to 3 months of embryonic development until the placenta is formed and functioning, at which point the placenta takes over. Progesterone thickens the uterine lining and prepares it for implantation, then relaxes smooth muscles to prevent uterine contractility.

**Prolactin** Hormone released by anterior pituitary gland which stimulates milk production and may increase general immune function.

**Prolapse** The sagging or dropping of the bladder or uterus. The level of prolapse can range from partial, where the organ is just slightly lower in the pelvis than normal, or complete, where the organ is suspended mostly outside of the vagina between the thighs.

**Pulmonary embolism** Occurrence of a blood clot traveling through the circulation and becoming lodged in an artery of the lung. Symptoms include shortness of breath and chest pain, and can lead to death.

**Quickening** First fetal felt movements by mother.

**Relaxin** Hormone produced by the ovaries beginning in week 10 of pregnancy that relaxes and loosens connective tissues and ligaments, including the cervix and the pelvic joints, to create more space for the baby's birth.

**Ring of fire** Sensations of burning or tearing of the perineum as it stretches and as the baby's head is crowning and being born.

**Round ligament** An anterior cord-like uterine ligament held within the broad ligament and connecting to the pubic mons, the inguinal area of the pelvis, and the labia of the vagina.

**Sciatica** Pain caused by compression of the sciatic nerve. The majority of "sciatica" during pregnancy is rarely true nerve compression, but more often a referred pain from psoas tightness and uterine broad ligament pain. However, the sensations of sharp shooting pain, vague numbness, or dull aching discomfort down the back, front, or sides of the leg or in the buttocks feel similar to sciatica. SI joint hypermobility can also lead to radiating pain in the gluteals and leg.

**Second stage of labor** The second of three stages of labor, this stage involves pushing the baby out after complete dilation of the cervix.

**Spider angioma** Also called telangiectasias, sunburst varicosities, or spider veins. These are thin, tiny blood vessels visible near the surface of the skin. They may have a dark or red dot in the center and wavy tiny vessels radiating out from it, or they may be linear, especially around the inner knee. These are not the same as the troublesome varicose veins, which are

larger, darker, and are a contraindicated condition for massage.

**Striae gravidarum** Commonly called stretch marks, these are lines on the skin which develop on the abdomen during pregnancy and seem to be caused by changes in the collagen deposits and rapid stretching of the abdomen. There is no known effective and reasonable treatment for the reduction of stretch marks once they have developed, although two creams were studied that were associated with a decrease in of the development of stretch marks.<sup>2</sup> Stretch marks will often become less noticeable or change to a silvery color, within a year postpartum.

**Superficial thrombophlebitis** Development of clots in the superficial veins of the extremities, most often the calf. Emboli do occur originating in the superficial veins, but are more common from the deeper veins.

**Third stage of labor** The third of three stages, this stage involves the delivery of the placenta.

**Transition** The final stage of cervical dilation from 8 to 10 cm.

**Transverse lie** The position in which the baby in utero is sideways to the pelvic opening.

**Trimester** One of three 13-week periods into which pregnancy is divided as a way of measuring dates and changes.

**Tubal ligation** Surgical birth control method in which the fallopian tubes are cut or tied or otherwise blocked off to prevent future pregnancies.

**Urinary tract infection (UTI)** A common infection during pregnancy. It increases the risks of preterm labor, kidney infection, and premature rupture of the membranes.

**Uterine fundus** The top part of the uterus.

**Uterosacral ligament** A uterine ligament that attaches from the posterior uterus to the anterior sacrum and pelvic cavity.

**Vertex** Fetal position with the baby's head down in the mother's pelvis, and the buttocks up toward her ribs. This is the most common and optimal position for a baby to be in for a vaginal birth.

## REFERENCES

1. Wolf J. Liver disease in pregnancy. *Med Clin North Am* 1996;80:1167-1187
2. Young GL, Jewell D. Creams for preventing stretch marks in pregnancy. *The Cochrane Database of Systematic Reviews*. 1996, issue 1.

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