

## RESEARCH

Posted March 11, 2010

[www.massagemag.com](http://www.massagemag.com)

## Massage Benefits Depressed Pregnant Women

Massage eases anxiety and depression, as well as leg and back pain, in depressed pregnant women, and their newborns seem to benefit as well, according to a recent study.

"Massage therapy effects on depressed pregnant women" was conducted by staff of the Touch Research Institutes at the University of Miami School of Medicine, in Florida.

Eighty-four depressed pregnant women in their second trimester participated in the study. They were randomly assigned to either a massage group, a muscle-relaxation group or a standard-care control group. A group of 28 non-depressed pregnant women were used as a comparison group.

Women in the massage group received two 20-minute massages per week for 16 weeks, provided by their significant others. Professional massage therapists taught the significant others the massage routine, which focused 10 minutes on each side of the mother as she laid on either side with pillows behind her back and between her legs.

Subjects in the muscle-relaxation group were taught a 20-minute, progressive muscle-relaxation routine to be performed at home twice a week for 16 weeks.

Immediate effects of the intervention were measured before and after sessions on the first and last days of the study. These included anxiety, measured on the State Anxiety Inventory; depressed mood, measured on the Profile of Mood States Scale; and leg and back pain, assessed on the VITAS pain scale, a visual analog scale.

More sustained effects were evaluated by comparing outcomes from the first and last days of the study. The Center for Epidemiological Studies-Depression Scale was used to rate depressive symptoms of the previous week. Urine samples were used to measure levels of cortisol; catecholamines, including norepinephrine, epinephrine and dopamine; and serotonin.

Fetal activity was monitored at 18-24 weeks and again at 36 weeks, using interval recording on a real-time ultrasound scanner. Every three seconds for three minutes, the researcher recorded whether the fetus was making single-limb movements, multiple-limb movements, gross body movements, or no movements.

After birth, the Obstetrics Complications Scale was used to assess complications that arose during the pregnancy, delivery and neonatal period. The Postnatal Factor Scale was used to evaluate any complications in the newborn, and the Brazelton Neonatal Behavior Assessment was used to assess the newborn's reflexes, social responses and motor behaviors.

Results of the study showed that women in the massage group had significantly increased levels of serotonin and dopamine, and significantly decreased levels of cortisol and norepinephrine at the end of

the study. Women in the other groups showed no significant changes in any of these levels from the first to last days of the study.

The massage group also showed a greater decrease in depression on the last day of the study as compared to the first, while the other groups showed no significant changes. There was also a greater improvement in mood and decreased anxiety among women in the massage group immediately after the massage on both the first and last days of the study, as well as decreased leg and back pain.

Results also showed a greater decrease in fetal activity in the massage group as compared to the other groups, as well as fewer premature births, as revealed on the Obstetrics Complications Scale. Newborns of the women who received massage performed better on the Brazelton assessment as well.

“Overall the findings suggest that massage therapy is effective for reducing pregnant women’s stress hormones, stressful mood states, leg and back pain and for lessening obstetric and post-natal complications, hence improving neonatal outcomes,” state the study’s authors. “They also suggest the efficacy of using a significant other as massage therapist.”

—Source: *Touch Research Institutes at the University of Miami School of Medicine, in Florida. Authors: T. Field, Ph.D.; M.A. Diego; M. Hernandez-Reif, Ph.D.; S. Schanberg; and C. Kuhn. Originally published in the Journal of Psychosomatic Obstetrics and Gynecology, June 2004, Vol. 25, No. 2, pp. 115-122.*

---

For more info or to schedule a prenatal massage, call Certified Somatic Therapist Karen Axelrod at 310-376-0113.

