



## Aromatherapy in pregnancy

### **1 Field T 2010 Pregnancy and labor massage Expert Rev Obstet Gynecol. 5(2):177-181**

In this study, massage is shown to be effective during pregnancy, decreasing depression, anxiety, and leg and back pain. Cortisol levels decrease and, in turn, fetal activity decreases, and the rate of prematurity is lower in women receiving massage when compared to controls. In a study of labour pain, women who received massage experienced significantly less pain, and their labours were on average 3 hours shorter with less need for medication. An underlying mechanism suggests that these effects are mediated by increased vagal activity, possibly occurring through stimulation of pressure receptors that are innervated by vagal afferent fibers, which ultimately project to the limbic system, including hypothalamic structures involved in autonomic nervous system regulation and cortisol secretion.

### **2 Dhany A 2008 Essential oils and massage in intrapartum care PractMidwife.11(5):34-9**

This paper reports the implementation of aromatherapy and massage for labour care in a maternity unit in central England, including the results of an audit undertaken after the aromatherapy service had been operational for some time.

### **3 Burns et al 2000 The use of aromatherapy in intrapartum midwifery practice an observational study Complement Ther Nurs Midwifery. 6(1):33-4**

This evaluative study of 8058 labouring mothers in Oxford conducted over an 8 year period, is the largest aromatherapy research initiative undertaken in a health-care setting. 10 essential oils were used, plus a carrier oil, which were administered to women via the skin and in inhalation. The study found little direct evidence that aromatherapy per se reduces the need for intrapartum pain relief, or the incidence of operative delivery, although it was suggested that clary

sage and chamomile oils are effective in alleviating pain. The evidence suggests that aromatherapy can be effective in reducing maternal anxiety, fear and/or pain during labour and appears to facilitate reduction in the use of systemic opioids. It also appears to be cost effective. There was a less than 1% incidence of associated symptoms, all of which were mild and none affected the babies.

**4 Burns et al 2007 Aromatherapy in childbirth: a pilot randomised controlled trial BJOG. 114(7):838-44.**

This Italian randomised controlled trial aimed to compare aromatherapy with standard care in labour. 251 women were randomised to receive aromatherapy and compared to 262 controls. Outcome measures were the incidence of operative or spontaneous delivery, first- and second-stage acceleration, pharmacological pain relief, vaginal examinations, episiotomy, length of labour, Apgar scores and transfer to neonatal intensive care unit. There were no significant differences for Caesarean section, ventouse delivery, spontaneous vaginal delivery, or labour acceleration. However, more babies born to control participants were transferred to the neonatal unit. Nulliparae in the aromatherapy group experienced less pain than the controls. This study demonstrated that it is possible to undertake an RCT using aromatherapy as an intervention to examine a range of intrapartum outcomes, and it provides useful information for future sample size calculations.

**5 Hongratanaworakit T, Buchbauer G 2006 Relaxing effect of ylang ylang oil on humans after transdermal absorption Phytother Res. 20(9):758-63**

This study aimed to investigate the effects of ylang ylang oil on human physiological parameters and self-evaluation after transdermal absorption. 40 healthy volunteers participated. Skin temperature, pulse rate, breathing rate and blood pressure were measured. Self-evaluation was assessed by means of visual analogue scales. Ylang ylang oil was found to decrease blood pressure and increase skin temperature and subjects in the study group rated themselves as calmer and more relaxed than subjects in the control group. These findings suggest a relaxing effect of ylang ylang oil and relieve depression and stress