Interventions on BL 67 for women with a breech foetus at 33 weeks gestation.

van den Berg I, Kaandorp G, Bosch J, Duvekot J, Arends L, Hununk M. Cost-effectiveness of breech version by acupuncture-type interventions on BL 67, including moxibustion, for women with a breech foetus at 33 weeks gestation: a modelling approach. Complementary Therapies in Medicine 2010;18, 67—77.

A modelling approach to evaluate the effectiveness and costs of using acupuncturetype interventions on BL67 (Zhiyin) compared to expectant management for women presenting with a baby in a breech position at 33 weeks gestation.

Summary

A modelling approach was used to predict the number of caesarean sections that could be prevented using moxibustion and or acupuncture on BL 67 at 33 gestational weeks. There were two strategies for women presenting with breech presentation at 33 weeks gestation:

- 1. Expectant management a wait and see approach with external cephalic version (ECV) offered if required
- 2. Acupuncture-type interventions on BL67

Ten thousand women were accounted for in this model. Also included were the medical costs of two ultrasounds for every woman, ECV treatment if required and costs for pre- and postnatal care until eight days post delivery.

The acupuncture treatment included extra costings for two visits with an acupuncturist and the moxibustion sticks supplied for home treatment.

Both strategies of this modelling included an option for women to receive an ECV at 36 gestational weeks and for all births to occur in hospital. Women refusing the option of acupuncture-type interventions on BL67 or non compliance with using the moxa treatment at home were also accounted for.

Treatment Methods

The probability that women would accept treatment and that babies would remain in a persistent breech presentation were retrieved from a systematic review and meta-analysis of six randomized controlled trials (RCTs) reporting on the effectiveness of acupuncture-type interventions on BL 67 versus expectant management. These trials comprised of three RCT's using moxibustion. The remaining three used acupuncture, electro- acupuncture and a mixture of moxibustion and acupuncture.

Conclusion

Two data analysis were preformed for the women receiving acupuncture type intervention: one with and one without ECV. Both resulted in a decreased breech presentation at term.

To prevent one caesarean section, seven women with breech presentation at 33 weeks gestation would need to be treated with acupuncture-type interventions on BL 67. Sensitivity analysis showed that if 16% or more of the women offered moxibustion treatment complied, it was more effective and less costly than expectant management. The cost difference per woman with a baby in breech position at 33 weeks gestation using the moxa around 33 weeks versus no additional treatment was \in 451 (95% CI \in 109, \in 775; p = 0.005) eight days post delivery.

The authors concluded that offering acupuncture type interventions at BL 67 to women with a breech foetus at 33 weeks gestation reduced the number of breech presentations at term, the number of caesarean sections required, and was cost effective when compared to expectant management.

Clinical Perspective

The lead researcher of this study has published a previous systematic review on the safety and effectiveness of using acupuncture type interventions on BL 67 for women presenting with breech presentation. This recent research approach is timely, enabling acupuncturists to now engage in discussions with medical, midwifery and hospital clinic management staff about of the cost effectiveness of implementing acupuncture type interventions for breech presentation. Being able to enter into such discussions may well be an important factor for acupuncturists to facilitate the integration of acupuncture services within main stream medical care.

http://www.ncbi.nlm.nih.gov/pubmed/20430289