



## Factors affecting the success of moxibustion in the management of a breech presentation as a preliminary treatment to external cephalic version

Anne Manyande, BSc, MSc, PhD (Chartered Health Psychologist and Senior Lecturer),  
Christine Grabowska, BSc, MSc, RM, Lic Ac (Senior Lecturer in Midwifery, Acupuncturist and Oriental Herbalist)\*

Faculty of Health and Human Sciences, Thames Valley University, Paragon House, Boston Manor Road, Brentford TW8 9GA, UK

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### ABSTRACT

*Objectives:* to explore the effects of moxibustion treatment, to examine the predictors of its use in causing a breech presentation to spontaneously turn to a cephalic presentation which will result in a vaginal birth (the paper will refer to this as 'successful') and offer external cephalic version (ECV) subsequently after moxibustion treatment when the fetus remains in a breech presentation.

*Design:* a prospective study over a two-year time period from February 2004 until January 2006.

*Participants:* 76 pregnant women from various acupuncture practices in the UK, with a third trimester breech presentation.

*Interventions:* the acupuncturist taught the women how to apply moxibustion (sticks of compressed dried herbs—*Artemisia vulgaris*) treatment at home by stimulating the acupoint on the outer edge at the base of the little toe nail for seven days twice a day (morning and afternoon). If the breech presentation persisted after treatment, ECV was carried out towards the end of the pregnancy. The obstetricians offered this during the routine antenatal hospital visits.

*Findings:* the results show that following treatment with moxibustion, 31 (40.8%) of the breech presentations spontaneously turned to cephalic presentations, and a further 33 (43.4%) breech presentations were turned by ECV. Women who involved other people in the administration of moxibustion were twice as likely to be successful. Multiparous women were also 16% more likely than primiparous women to succeed in achieving a spontaneous version with the use of moxibustion. Fewer side effects reported when using moxibustion were the strongest predictor of successful spontaneous cephalic version with an odds ratio of 12% ( $p = 0.02$ ).

*Key conclusions:* moxibustion creates a better chance of vaginal birth for expectant mothers. Of the women who were successful in turning their babies using moxibustion, 88% went on to have a normal birth and 12% had a caesarean section. Moxibustion treatment also significantly increases version from a breech presentation to a cephalic presentation where there are fewer side effects reported, if the woman is multiparous and has support during the administration of moxibustion treatment.

*Implications for practice:* moxibustion treatment should be offered to all women with a breech presentation because it is non-invasive and can be self-administered by the woman. It is therefore a simple, cost-effective technique that requires no medical intervention.

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### Introduction

Breech presentation occurs in 3–4% of pregnancies at term (Yahya et al., 1998; Shennan and Brewley, 2001). The reasons for breech presentation are numerous such as placenta praevia, multiple fetuses, uterine abnormalities, poor uterine tone (Coyle et al., 2002; Ulander et al., 2004), oligohydramnios, polyhydram-

nios, tumours and fibroids, contracted pelvis (Banks, 1998; Collins et al., 2007) short umbilical cord, intra-uterine growth restriction and birth defects (Albrechtsen and Irgens, 2002; Sibony et al., 2003). It is because of these problems that a fetus will not turn at external cephalic version (ECV), and even if it turns to a cephalic presentation, it will continue to have problems in labour that require a surgical intervention (Bassaw et al., 2004).

In the UK, ECV is a standard practice in some hospital trusts to reduce the cost of care and give women the option of a vaginal birth. At the onset of labour, about 2% of babies will remain in or revert to a breech presentation (Hofmeyr, 2002). At present, if

\* Corresponding author.

E-mail address: [christine.grabowska2@tvu.ac.uk](mailto:christine.grabowska2@tvu.ac.uk) (C. Grabowska).

women have a breech presentation, the choice lies between ECV and an elective caesarean section (Hannah et al., 2000) with the odds for caesarean section being greater than ECV. However, more recent analysis of the Term Breech Trial found no difference in perinatal outcomes at two years (Whyte et al., 2004). Until this news becomes well known in the hospital trusts, women will continue to be offered ECV as an intervention.

Paradoxically, spontaneous version will occur in 57% of cases at 32 weeks of gestation as opposed to 25% after 36 weeks of gestation (Westgren et al., 1985). The Royal College of Obstetricians and Gynaecologists (RCOG, 1993) propose that ECV is more likely to succeed when performed at term or in early labour. Routinely collected data on ECV, however, are not widely available. Hofmeyr and Kulier (1996) found that ECV performed in labour reduced the caesarean birth rate for breech presentations by 14% and vaginal breech births by 34% (Hofmeyr, 1991). Nevertheless, the subsequent systematic review by Hofmeyr (2002) demonstrated that ECV before term does not improve pregnancy outcomes despite the 1996 systematic review which found statistical significance in the reduction of breech births when ECV was attempted (Hofmeyr and Kulier, 1996).

In another study, offering women ECV after the 36th completed week of gestation (344 women), a 51% success rate was achieved (Laros et al., 1995). However, the rates vary depending on the gestation at which ECV is performed; the intervention at 34 weeks showed a rate of 43.1% compared with 33.6% at 37 weeks (Hutton et al., 2003; Hutton and Hofmeyr, 2006). ECV success is also improved by the use of tocolytic drugs (Marguette et al., 1996), but again Hofmeyr (2004) showed that the reduction in non-cephalic presentations at birth was not significant. Another systematic review revealed that the intrapartum caesarean section rate for successful ECV is still double that of babies presenting by the head (Chan et al., 2004). On the other hand, when comparing the differences between breech births without ECV and breech births with ECV, the difference is significant (Skupski et al., 2003; Le Bret et al., 2004). Vezina et al. (2004) suggested that the caesarean section rate is raised significantly in those who have had a cephalic presentation despite having ECV because of labour dystocia.

Collaris and Oei (2004) looked at 44 studies on ECV and found that the side effects were: abnormal cardiography patterns (0.37%), vaginal bleeding (0.47%), placental detachment (0.12%), fetomaternal transfusion (3.7%) and emergency caesarean section at the time of ECV, probably to prevent perinatal mortality (0.43%). The resulting perinatal mortality was 0.16%. The reasons for these side effects from ECV could be: fetal distress (even though the presentation was changed to cephalic), ante-partum haemorrhage and cord entanglement, as well as the possibility of premature rupture of membranes bringing an abrupt end to the pregnancy (Zwolinski et al., 2003). ECV, therefore, does not always provide the best outcomes for mother and infant. Perhaps women should be offered another alternative for achieving a cephalic presentation at term, such as with the use of moxibustion.

Moxibustion is the practice of burning the herb mugwort (*Artemisia vulgaris*) over an acupuncture point bladder (BL) 67, which is used in traditional Chinese medicine to promote cephalic version of fetuses presenting in a breech presentation. Moxibustion has been used routinely, in China, for the correction of a breech presentation and appears to be less risk than with ECV (Budd, 2004; Cardini and Weixin, 1998). The only randomised controlled trial has been conducted by Cardini and Weixin (1998). Work on turning a breech presentation with the use of moxibustion is just beginning in the UK. Maciocia (2004) has suggested that the treatment will cause the fetal adrenals glands to be stimulated via the adrenocortical response from the maternal blood stream. This will cause the fetus to respond to moxibustion

by increasing fetal movements within seven minutes after commencement of the treatment.

## Background to the study

In China, moxibustion is integrated into the culture and performed by individuals in their own homes (Cardini and Weixin, 1998). This is different from in the UK, where it is only performed as part of acupuncture treatments and the one moxibustion stick, which is used for a series of treatments, only costs £1. Women in the UK with a breech presentation at term are offered routine caesarean section to deliver their babies since the publication of the Term Breech Trial Collaborative Group's findings (Hannah et al., 2000). Alternatively, some obstetricians will offer women an ECV during pregnancy, so that they may have an increased chance of a vaginal birth, but this is fraught with some danger to the fetus as shown by Collaris and Oei (2004).

The purpose of this study was to explore the effects of moxibustion and further investigate what factors contribute to a higher conversion rate in turning the fetus from a breech presentation to a cephalic presentation. The design does not include a control group or use of randomised trials as the American College of Obstetricians and Gynecologists (1986) has acknowledged the suitability of the role of ECV in breech presentations (Kotaska, 2004). Cardini et al. (2005) also acknowledged how compliance with the use of moxibustion by the staff in an Italian hospital maternity unit was low. This created an early conclusion to their controlled trial. Cardini et al. (2005) suggested that observance of the trial protocol would be high if the trial was conducted in a country familiar with the use of moxibustion (e.g. Cardini and Weixin, 1998; trial conducted in China). The use of acupuncturists as participants in the study ensured that non-familiarity with the use of moxibustion was not a threat to the study.

## Methods

### Design

A prospective study was conducted over a two-year time period from February 2004 until January 2006. This study used a convenience sample of women who could benefit from ECV following the use of moxibustion. The women were not compared with another group who were not having moxibustion treatment.

### Participants

#### Client

The women studied were aged 22–42 years (mean, 32.83 years). They were attending private acupuncture treatment in different locations in the UK, between the 32nd and 38th weeks of pregnancy, carrying a singleton fetus in a breech presentation, which had been diagnosed during routine antenatal care. The study protocol stipulated exclusion criteria that the acupuncturists had to adhere to for admitting women to the study. Participants were excluded if they had a placenta praevia, multiple pregnancies, bleeding disorders including antepartum haemorrhage, hypertension/pre-eclampsia, a history of preterm labour or cephalo–pelvic disproportion, and if they had difficulties in English language comprehension. The women continued to receive routine antenatal care and the study did not prevent any further treatments from being instituted. When women attended routine antenatal appointments following the use of moxibustion and a breech presentation was diagnosed, they were offered ECV

in accordance with the individual obstetrician's preference. The gestation at which ECV was offered ranged between 38 weeks and term. The final sample size was made up of 76 women who consented to participate in this study: 48 primiparous and 21 multiparous (seven did not indicate their parity).

#### Acupuncturists

One thousand and seventy-one letters were mailed to every acupuncturist on the British Acupuncture Council's register for voluntary participation in the study. Three hundred and seventy-one responded positively (a 35% response rate) (76 male, 295 female).

Access was bountiful at private acupuncture clinics compared with the four National Health Service (NHS) antenatal acupuncture clinics. Separate ethical approval was sought for the NHS clinics and this was refused for two reasons: (1) because an obstetrician was not part of the research team, and (2) because the study was not a controlled trial.

#### Materials

The packs contained a reply stamped envelope, consent forms, information sheets about the study for the women and instruction sheets on how to carry out the procedure. Diary booklets were also given to the women to fill in twice a day on the effects of each treatment. A list of pleasant and unpleasant suggested side effects was offered for the women to choose. The pleasant effects were: (a) felt the infant moving, (b) liked the smell, (c) felt relaxed and (d) liked the attention. The unpleasant effects were: (a) could not reach the toe easily, (b) did not like the smell, (c) felt uncomfortable and (d) felt it was too time consuming. A practitioner questionnaire included details of the treatment (e.g. gestation at first treatment and last treatment, whether successful or not, number of treatments and side effects). A client questionnaire included demographic information and the birth outcome (such as gestation at term, type of presentation, type of birth, Apgar score and birth weight). Each practitioner also received a copy of the ethics approval letter and a study protocol. The questionnaires had closed-ended questions with a specific choice of answers. The questions included the side effects and observations of the treatment where the practitioner/client was expected to tick the appropriate box (yes/no). The daily diary entries had the addition of open comments to be made by the women.

#### Procedure

Each acupuncturist was sent 10 sets of coded packs with a return addressed stamped envelope. The recruited women were taught the technique and given written instructions of how to locate and stimulate acupoint BL 67 by the acupuncturist. Before administering treatment at home, the participants had to choose a suitable place and time in the morning and in the afternoon when they could use the moxibustion without interruptions. During the treatment, the woman had to relax in the sitting or semisupine position and treatment lasted for up to 15 minutes (about seven minutes on each toe) (Wang and Wei, 2004). Following the initial consultation with an acupuncture practitioner, the woman was given a moxibustion stick for home use to continue the bi-daily treatment for seven days with an explanation of the usage and side effects. If she could reach the outside of her little toes, she could self-administer the treatment, but to be comfortable, she could ask another person to apply the treatment for her according to the training and written instructions she had received from the

acupuncturist. The acupuncturist fully disclosed the nature of the study, what was expected of the woman, and her right to refuse participation at any point during the study. Anonymity and confidentiality were also ensured. The University Committee on Ethics approved the protocol for the study.

#### Data analysis

Data were analysed using Statistical Package for Social Sciences Version 14 (SPSS Inc, Chicago, IL, USA). Chi-square test was used to determine whether moxibustion treatment was effective in spontaneously turning a breech presentation to a cephalic presentation. Binary logistic regression was used to examine the variables associated with whether or not moxibustion stimulated fetuses to turn from a non-cephalic to a cephalic presentation. These variables included parity, age, number of people who applied the treatment on behalf of the woman and side effects. For each variable in the model, the regression coefficient, SE, probability value, and odds ratio and its confidence interval are given.

#### Findings

In this study, the women with a breech presentation were offered moxibustion treatment to turn a non-cephalic fetus to cephalic presentation. Table 1 illustrates the interaction between the success rate of the type of breech management, parity and type of birth.

#### Management of breech on mode of childbirth

Of the 25 women who had conversion of the breech presentation following moxibustion treatment, 22 (88%) had normal childbirths and three (12%) were delivered by caesarean section ( $\chi^2 = 39.37$ ,  $DF = 1$ ,  $p < 0.001$ ). ECV was offered to 27 women during the remaining weeks before commencement of labour at the end of pregnancy; only five (20.8%) women who had successful ECV had normal childbirth and 22 (79.2%) had a caesarean birth ( $\chi^2 = 10.13$ ,  $DF = 1$ ,  $p < 0.001$ ). Figs 1 and 2 show the summary of these findings.

**Table 1**

Type of delivery in various groups after management of breech

	Type of delivery		
	Normal <sup>a</sup>	Caesarean	<i>p</i>
Management of breech			
Spontaneous cephalic version after using moxibustion <sup>b</sup>	22 (88%)	3 (12%)	0.001
External cephalic version	5 (20.8%)	22 (79.2%)	0.001
Total <sup>c</sup>	27	25	

<sup>a</sup> Normal here means a cephalic presentation and a vaginal birth.

<sup>b</sup> The fetus is not forcibly turned manually as with ECV. Therefore, if the fetus does turn from a breech presentation to a cephalic presentation, it will do so by itself and, therefore, it is spontaneous.

<sup>c</sup> There were missing data. Out of a total of 76 participants included in the study, not all the data were returned on the client questionnaires. Fifty-two responses were received on the questionnaires regarding the effects of moxibustion treatment (24 missing).

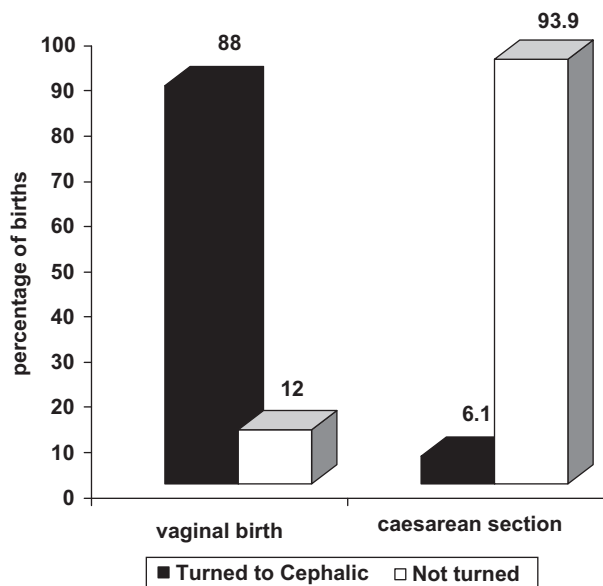


Fig. 1. The number of fetuses that turned to a cephalic presentation or remained in a breech presentation following moxibustion treatment and the type of childbirth.

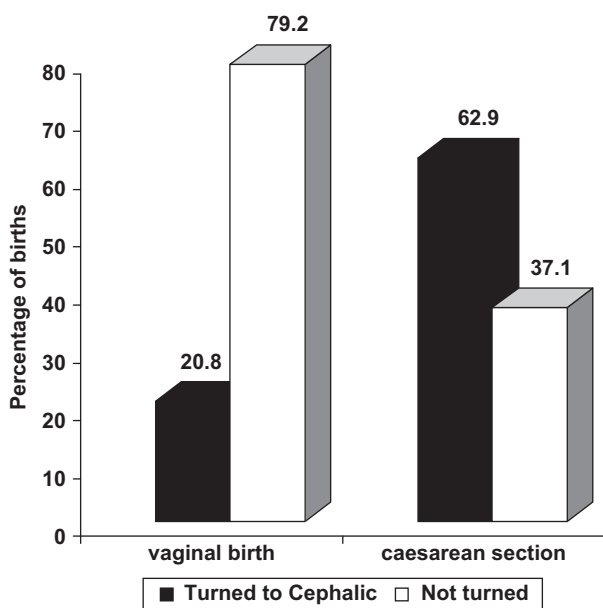


Fig. 2. The number of fetuses that turned to a cephalic presentation or remained in a breech presentation following the effect of external cephalic version and the type of childbirth.

Management of breech by parity

Seventeen (39.5%) women who had used moxibustion and had spontaneous cephalic version were primiparous, and 11 (52.4%) were multiparous (seven women did not indicate their parity). On the other hand, 22 (53.7%) primiparous mothers had successful ECV compared with nine (42.9%) multiparous women. With both strategies, the groups of women did not differ significantly ( $p > 0.05$ ).

Administration of moxibustion on success rate

Women were treated initially by the acupuncturist and shown how to self-administer the treatment. Acupuncturists were more successful in turning a non-cephalic to a cephalic presentation using moxibustion compared with the woman or when a partner assisted (80% vs. 66.7% vs. 37.5, respectively,  $\chi^2 = 5.39$ ,  $DF = 2$ ,  $p = 0.03$ ).

Side effects on the efficacy of moxibustion

Women who had fewer side effects were more successful in achieving a spontaneous cephalic version (52% vs. 48%). Of those who experienced more side effects, only 31.3% were successful in achieving cephalic version and 68.8% were unsuccessful. The difference did not, however, reach significance ( $p > 0.05$ ).

Predictors of successful version in the use of moxibustion

In the binary logistic regression analysis (Table 2), the least amount of side effects was the strongest predictor of successful spontaneous cephalic version when using moxibustion, with an odds ratio of 12% and a confidence interval of 0.04–1.23 ( $p = 0.02$ ). This indicates that after adjustment for the number of people administering the treatment and parity, fewer side effects were more likely to result in a successful spontaneous cephalic version. The results are reported elsewhere (see paper in press).

Similarly, a multiparous woman using moxibustion was 16% more likely to succeed in achieving a successful version than a primiparous woman (confidence interval 0.05–0.94,  $p < 0.05$ ) and the odds of a successful version doubled when more people (family, friends) were involved in administering the moxibustion (confidence interval 0.87–5.16,  $p = 0.04$ ). The combined sensitivity of the experience of side effects, parity and the number of people who assisted the women in treatment with moxibustion, in correctly predicting successful spontaneous versions in these pregnant women is 64% (63/65).

Discussion

The aim of this study was to explore the effects of moxibustion treatment and to examine the predictors of its successful use in causing a breech presentation to effectively turn to a cephalic

Table 2 Variables of the relative odds of having a successful cephalic version

Variables	Coefficient	SE	Significance (p)	Odds ratio	95% confidence interval for odds ratio
Parity	1.80	0.98	0.05	0.16	0.05–0.94
Number of people applying moxibustion treatment	0.74	0.38	0.04	2.00	0.87–5.16
Number of side effects	-2.10	0.96	0.02	0.12	0.04–1.23

presentation. The theory is that moxibustion over acupuncture point BL 67 assists in turning a non-cephalic to a cephalic presentation by increasing fetal activity via adrenocortical stimulation (Maciocia, 2004; Tiran, 2004).

The results seem to suggest that moxibustion creates a better chance of vaginal birth for expectant mothers. Multiparous women had a slightly better chance of their infant turning compared with primiparous women, as corroborated by the Co-operative Research group on moxibustion version (1984). The present study also found that those who experienced fewer side effects were more likely to achieve spontaneous version. In addition, the present results indicate that the more support the mother had in administering moxibustion, the greater the chance of achieving spontaneous cephalic version. These results are discussed below.

The results of this study provide evidence in support of the argument that moxibustion plays a part in reducing the number of breech presentations, as shown in other studies (Budd, 2004; Brill, 2003). Of all the women who were successful in turning their babies using moxibustion, 88% went on to have a normal birth whilst the other 12% had a caesarean section (Fig. 1) for reasons other than breech presentation. Of the women who were successful in turning their babies using ECV, only 20.8% had a normal childbirth and 79.2% had a caesarean section. Vezina et al. (2004) have also reported that ECV leads to a higher rate of caesarean sections at term. Successful ECV has a potential for spontaneous rupture of membranes and cord prolapse, detachment of placenta causing fetal distress and maternal shock (Collins et al., 2007). This could be the reason for the caesarean section being performed at the time of ECV, alongside the possibility of any abnormality that may have pre-existed as the original cause of the breech presentation. Moxibustion, on the other hand, does not interfere with the spontaneous version of the fetus, thus preventing the above problems and creating a greater chance of the outcome of a normal birth (Habek et al., 2003). There are many reasons why the fetus may lie in a breech presentation (lower segment tumours, bi-cornuate uteri, placenta praevia, anencephaly and multiple pregnancy), and some fetuses will not turn no matter what treatment is instituted (Hofmeyer, 2002). These may need to be evaluated carefully before making final conclusions.

Although moxibustion has a long history in China (about 4500 years), the side effects have not been formally evaluated and thus appear to be minimal. It is not clear what the effects of inhaling the smoke emitted from the burning tinder can cause. Minor burns can be caused by applying the moxibustion stick too close to the skin or from falling tinder; therefore, the importance of positioning and application need to be considered.

An interesting finding was that women who reported more side effects appeared to be least successful in turning their babies. An explanation for this might be that the irritation from the side effects could have prevented them from sufficiently relaxing their abdominal muscles, making version more difficult. On the other hand, the women could have reduced the number of times they used the moxibustion treatment and the time spent on each application. Inclusion of these variables would improve the study.

Clearly, multiparous women were more likely to be successful in turning their babies than primiparous women. The reason for this could be that because they have given birth before, their abdominal muscles are more relaxed. These findings are similar to those of Wen (1979).

Furthermore, it appeared that women had a better chance of success in turning a breech presentation if more people helped in applying the treatment, as opposed to the woman self-treating. A plausible explanation could be that her motivation is high enough

to involve others and they were meticulous about following the instruction sheet. As a consequence, she received attention and support, which could have enabled her to feel secure and relaxed (Oakley, 2005).

Moxibustion is a relatively unknown procedure in the West and has not yet been well evaluated scientifically (Uchida et al., 2003). Much of the work produced in China comes from case studies and anecdotes, and, therefore, cannot be held up to scientific rigour. A randomised controlled trial, on the other hand, has been conducted in China by Cardini and Weixin (1998). This trial has been acclaimed in the literature as having a representative outcome (75.4% success), which has a lower success rate than other studies have shown (Wen, 1979; Ewies and Olah, 2002; Co-operative research group, 1984). However, this is still a higher success rate than ECV. In this study, ECV was offered at the end of pregnancy after failed spontaneous version using moxibustion to enable women to have a further chance of achieving a cephalic presentation. However, when ECV was successful, the results were better in primiparous women than multiparous women. Unsuccessful versions were delivered by caesarean section. A reasonable explanation for increased rates of caesarean section could be the incidence of obstetric interventions surrounding childbirth (Hannah et al., 2000).

Cardini et al. (2005) followed the study in China by conducting a similar experiment in Italy. They stopped the experiment after recruiting only 46% of their planned sample size when they realised that there was poor adherence to the study protocol by the women and staff. The authors were not expecting the cultural context to have such an impact on failure to follow the protocol. This claim, however, is not supported by the analysis of the present study; both practitioners and women followed the protocol.

Although these results suggest that, given the right circumstances, moxibustion treatment is likely to succeed (Neri et al., 2002), the suitability of moxibustion to a Western population where this is not already integrated in the culture should be considered. Some women found the procedure uncomfortable (e.g. unpleasant smell of smoke) and were unable to reach their toes. Reservations in its use would apply both to professionals as well as pregnant women, as shown in Italy by Cardini et al. (2005).

The authors had anticipated that, in the UK, the methods for obtaining the sample meant that no control was available within private acupuncture practices. Randomised controlled trials would increase internal validity, because it is easier to observe changes that are similar in both groups which are not associated with the intervention (moxibustion) (McLaughlin and Marascuilo, 1990). But Kotaska (2004) has pointed out that randomised trials have "their limitations when examining complex phenomena" (p. 1039). This study could also be improved by a larger sample size within an NHS setting.

Generalising the results can only occur if the study was conducted in a real health-care setting (Parahoo, 1997; Oboro et al., 2004). In China, moxibustion is considered a part of the culture and is used throughout the country in peoples' own homes. The present study has ecological validity, in that it incorporates self-administration of moxibustion in the home by the woman or someone of her own choosing. There is, however, little point in providing a treatment that is unacceptable to women and those who offer it. It is, therefore, important to have insights into women's and practitioner's views of using moxibustion through data collection of their responses to the treatment.

The women were self-referring to acupuncturists for private treatment and thus willing to use moxibustion. If women had been recruited from an NHS antenatal clinic and then expected to follow the procedure which required effort and skill to master, would the results have been similar? The results may have

differed if women were suspicious of using a treatment modality from a different culture (Cardini et al., 2005).

### Implications for practice

Moxibustion treatment should be offered to women whose pregnancies are progressing uneventfully with a breech presentation, because it is non-invasive and can be self-administered by the woman. It is, therefore, a simple, cost-effective technique that requires no medical intervention.

### Limitations to the study

The limitations of the study include a small sample size and a convenience sample with no control group. Future work should consider comparing an experimental group with a control, and that the effects of moxibustion can be analysed with the use of ECV. This should include efficacy and side effects.

It is unfortunate that not all women completed every section of the questionnaires and diaries, and future studies should follow up the women directly to obtain the missing data. Data were not collected on the characteristics of the acupuncturists such as years in practice, types of training, age and experience with maternity cases. The study could also be enhanced by collecting data to include the features of those who assisted the women in administering moxibustion treatment. This could show why conversions from breech presentations were greater when more people were involved with the treatment.

Data collected in this study were exploratory in nature and focused initially on examining factors that affect the success rate of moxibustion management of a breech presentation. However, because the authors did not collect a complete profile of women's characteristics, such as accessibility to medical facilities, daily activity during the days of moxibustion treatment and previous visits to acupuncturists, this might have improved the design and enabled full analysis of the data. These initial results, therefore be treated with caution. A follow-up study should carefully collect the confounding factors that could have affected breech conversion, such as attending yoga/relaxation classes, daily periods of rest, spending time on their hands and knees, the psychological state such as stress or well-being, level of physical fitness, employment, social support and treatment prior to receiving moxibustion.

The women in this study will have been charged for treatment by the acupuncturists. The cost implication would have excluded some women. Others may have been fearful of attending alternative practitioners, and a number may never have been informed (in the antenatal clinic or elsewhere) about other treatments for breech conversion. Finally, future studies could include comparisons between different ethnic groups, socio-economic status, and levels of education to help to predict acceptability of the treatment and effects.

### Conclusions

These results lend support to Cardini and Weixin's randomised controlled trial (1998). The findings obtained in this study also provide further evidence to suggest that, given the right circumstances, moxibustion treatment is more likely to succeed than ECV in spontaneously turning a breech presentation to a cephalic presentation. These factors include fewer side effects, multiparity and support during the administration of moxibustion treatment. Although there were increased numbers of caesarean

births, the authors were unable to ascertain which fetuses reverted to breech presentation after spontaneous cephalic version, and why, as this was beyond the scope of this present study. Work of a similar nature would need to take place in the West on the use of moxibustion to turn the breech presentation to determine its effectiveness by conducting trials, for example, within the NHS.

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