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USE OF MOXIBUSTION AND ACUPUNCTURE IN PREGNANT WOMEN WITH BREECH PRESENTATION: AN INTEGRATIVE REVIEW

Mariana Haddad Rodrigues¹, Vivian Inácio Zorzim²

ABSTRACT: The objective in this study was to develop an integrative review to identify publications on moxibustion and acupuncture to turn fetuses in breech position. The research tool Patient, Intervention, Comparison and Outcome, available through the database of the United States National Library of Medicine, was used to produce a list of articles. The words used for the search were: breech, moxibustion, acupuncture and cephalic. The search was undertaken in March 2016. Twenty-four registers were found, 18 of which were analyzed, seven of them favorable to the use of moxibustion and five unfavorable. Based on the studies developed on the theme, there is evidence that moxibustion is safe and effective to try and “correct” breech presentations, as a tool to complement the care midwifery professionals provide.

DESCRIPTORS: Version, fetal; *Artemisia vulgaris*; Obstetric nursing; Acupuncture points.

USO DA MOXABUSTÃO E ACUPUNTURA EM GESTANTES COM APRESENTAÇÃO PÉLVICA: REVISÃO INTEGRATIVA

RESUMO: O objetivo deste estudo foi conduzir uma revisão integrativa a fim de identificar publicações sobre a moxabustão e acupuntura para versão de fetos em apresentação pélvica. A ferramenta de pesquisa Paciente, Intervenção, Comparação e Desfecho, disponibilizada pela base de dados da Biblioteca Nacional de Medicina dos Estados Unidos, foi utilizada para gerar uma lista de artigos. As palavras utilizadas para a busca foram os termos em *breech*, *moxibustion*, *acupuncture* e *cephalic*. A busca foi realizada no mês de março de 2016. Foram encontrados 24 registros, 18 foram analisados, dentre os quais sete foram favoráveis ao uso da moxabustão; e cinco, desfavoráveis. A partir dos estudos realizados sobre o tema, há evidências de que a moxabustão seja segura e efetiva para tentar “corrigir” apresentações pélvicas, apresentando-se como uma ferramenta no complemento da assistência prestada por profissionais na área da obstetrícia.

DESCRIPTORES: Versão fetal; *Artemisia*; Enfermagem obstétrica; Pontos de acupuntura.

USO DE LA MOXIBUSTIÓN Y ACUPUNTURA EN EMBARAZADAS CON PRESENTACIÓN DE NALGAS: REVISIÓN INTEGRADORA

RESUMEN: El objetivo de este estudio fue desarrollar una revisión integradora para identificar publicaciones sobre la moxibustión y acupuntura para versión de fetos en presentación de nalgas. La herramienta de investigación Paciente, Intervención, Comparación y Desfecho, publicada por la base de datos de la Biblioteca Nacional de Medicina de Estados Unidos, fue utilizada para generar un rol de artículos. Las palabras utilizadas para la búsqueda fueron: *breech*, *moxibustion*, *acupuncture* y *cephalic*. La búsqueda fue llevada a cabo en marzo del 2016. Fueron encontrados 24 registros, 18 fueron analizados, entre los cuales siete fueron favorables al uso de la moxibustión y cinco desfavorables. A partir de los estudios desarrollados sobre el tema, hay evidencias de que la moxibustión sea segura y efectiva para intentar “corregir” presentaciones de nalgas, siendo una herramienta para complementar la atención prestada por profesionales en el área de partería.

DESCRIPTORES: Versión fetal; *Artemisia vulgaris*; Enfermería obstétrica; Puntos de acupuntura.

¹Nurse-midwife. Ph.D. in Nursing. Nurse at Prefeitura do Município de Itu. Itu, SP, Brazil.

²Nurse-midwife. M.Sc. in Nursing. Professor, Post-graduation program in Obstetric Nursing at Universidade Adventista de São Paulo. São Paulo, SP, Brazil.

Corresponding author:

Mariana Haddad Rodrigues
 Prefeitura do Município de Itu
 R. Jose Lyra Filho, 110 - 13309-340 - Itu, SP, Brasil
 E-mail: mari.tradu@gmail.com

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● INTRODUCTION

The incidence of breech fetuses at the end of pregnancy ranges between 3-4%⁽¹⁾. The causes can be placenta previa, multiple pregnancy, uterine abnormalities, low uterine tone, oligohydramnios, polyhydramnios, tumors, fibromas, contracted pelvis, short umbilical cord, intrauterine growth restriction and congenital malformations⁽²⁾.

The risk of neonatal mortality in pelvic births equals up to 35 per thousand live births⁽³⁾. In pelvic vaginal births, perinatal mortality is between two and five times higher when compared to cephalic births. Although cesarean surgery reduced the risk of neonatal mortality, it increased the chances of maternal complications⁽⁴⁾.

Around the world, about 11% of the cesarean sections are due to breech presentation, which can represent up to 80% in some countries⁽³⁾. The disadvantages of this surgery are that it increases the risk of immediate maternal mortality by 29%, risks of adverse events in future pregnancies and risk for thrombosis, pulmonary thromboembolism, puerperal infection, uterine rupture during subsequent pregnancy and neonatal respiratory problems⁽⁵⁾.

There is sufficient strong evidence and consensus (recommendation level A) to affirm that the cesarean section is not the first option for these cases and, if necessary, it should take place intrapartum⁽³⁾. Before choosing the surgery, external cephalic version (ECV) can be tried at 37 weeks⁽³⁾. ECV is the procedure through which the obstetrician tries to "correct" the breech presentation to the vertex position in order to follow the physiological course of the pregnancy and normal birth⁽⁶⁾. Usually, it is done between the 34th and 37th week of pregnancy, with success rates ranging between 50 and 60%⁽⁵⁾. This is an option before choosing the cesarean section, reducing the risk of this surgery by 55%⁽³⁾. There are some contraindications, such as active labor, uterine scar or abnormalities and vaginal hemorrhage, among others⁽⁶⁾. Nevertheless, the safety and efficacy of this procedure has been demonstrated. Therefore, it should be offered to women with breech presentation in low-risk prenatal care⁽³⁾.

The pregnant women should receive advice on the benefits and risks of ECV, ranging from the most negative outcome of perinatal death to complications like circular of umbilical cord, fetal hypoxia, premature membrane rupture and abruption placentae⁽⁷⁾, which can lead to an emergency cesarean section. In Brazil, ECV is not popular among obstetricians, due to a lack of technical preparation to undertake the procedure⁽³⁾.

Hence, the choice of the type of delivery should be based on the mother's decision and the obstetrician's experience; in Brazil, however, few professionals feel confident to assist breech delivery, as they lack the training and skills needed for this purpose⁽³⁾.

There are other methods to induce the "correction" of a non-vertex position, such as hypnosis, postural exercises, chiropractice, acupuncture, moxibustion⁽⁸⁾, yoga, homeopathy and fetal acoustic stimulation⁽⁷⁾. Few studies have assessed the efficacy of these methods. The systematic review in the Cochrane Library recommends further studies to determine the effects and results of moxibustion and acupuncture for these cases⁽¹⁾.

Moxibustion, moxa therapy or Moxa is a traditional Chinese medicine technique that consists in stimulating acupuncture points using the heat produced by burning the weed called *Artemisia vulgaris*⁽⁹⁾, generally used in the form of a stick similar to a cigar. The technique is cheap, safe, simple, permits self-administration, is non-invasive, painless and generally well-tolerated⁽¹⁰⁾. Moxibustion is contraindicated in cases of unstable presentation, multiple pregnancies, previous cesarean section or uterine scar, pre-partum hemorrhage, diabetes, abnormal amniotic fluid volume, large fetus or fetal malformation, known head-pelvis disproportion, history of infertility and intrauterine fetal death or suffering⁽⁷⁾.

Moxibustion and acupuncture in point BL67⁽¹¹⁾ (located on the Bladder meridian, close to the corner of the nail on the lateral side of the small toe) are indicated for the cephalic version of breech fetuses and some studies have been conducted to assess the efficacy of these methods⁽¹²⁾. This technique is said to stimulate the placental estrogen and maternal prostaglandin production, as well as to promote

uterine contractions and fetal movements⁽¹³⁾.

The objective in this study was to undertake a literature review to identify publications on moxibustion and acupuncture for the version of breech fetuses.

METHOD

An integrative literature review was undertaken, which is intended to permit the formulation of general conclusions on a theme by synthesizing various previously published studies⁽¹⁴⁾. The results of an integrative review permit new discussions and reflections on the theme, identifying knowledge gaps that demand new and future studies; besides guiding decision taking and improving clinical practice⁽¹⁵⁾.

The review was developed in phases: (1) identify the theme and establish the research question; (2) establish inclusion and exclusion criteria and search the literature; (3) define the information to be extracted from the selected studies and rank the studies; (4) assess the studies included in the integrative review; (5) interpret the results; (6) present the review and knowledge synthesis⁽¹⁵⁾.

The following research question was used: "How are moxibustion and acupuncture used in pregnant women with a breech presentation to achieve the cephalic version?", elaborated according to the Patient, Intervention, Comparison and Outcome (PICO) strategy. This strategy helps to delimit the search and makes it more objective, clear and specific, permitting a more focused and comprehensive analysis, permitting conclusions that are easy to identify and apply⁽¹⁴⁻¹⁵⁾.

On the website of the United States National Library of Medicine (PUBMED), a research tool is published, also called PICO⁽¹⁶⁾, which permits the inclusion of keywords and descriptors in the search categories P – patient, I – intervention, C – compare to, O –outcome, producing a list of articles published. Item C was not completed so as not to limit the search, allowing for the inclusion of all possible comparisons.

The articles cited on this list were included which were available in the PUBMED database until February 2016, containing the descriptors breech, moxibustion, acupuncture and cephalic. Studies published in other languages than English and not available free of charge were excluded.

RESULTS

Among the 24 articles on the list the PICO/PUBMED produced, six were excluded from the analysis, resulting in 18 publications, as demonstrated in Figure 1.

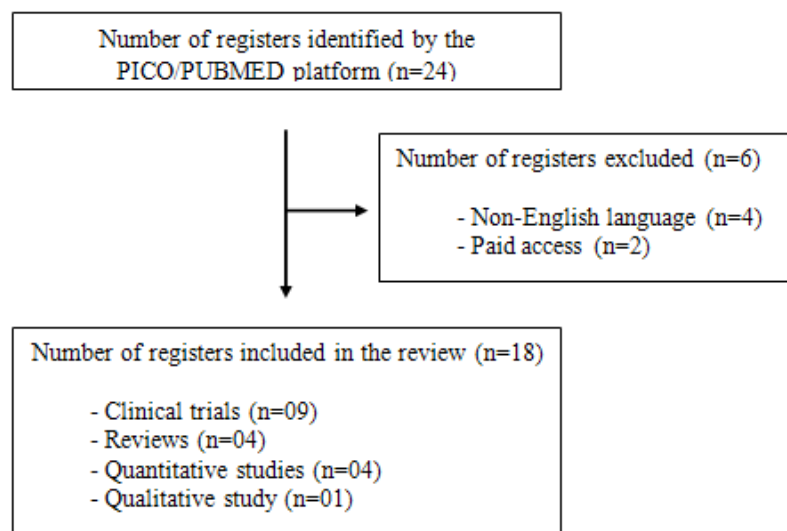


Figure 1 – Flowchart of sample selection phases. Itu, SP, Brazil, 2016

The “correction” of the breech in singleton and low-risk pregnancies as from the third term was considered as the objective or primary outcome in all studies, using moxibustion in point BL67.

The articles analyzed have been characterized in Table 1 according to authorship, journal and year of publication, country of publication and design/method.

Table 1 – Articles analyzed according to authorship; journal and year of publication; country of publication; and study type and method. Itu, SP, Brazil, 2016

| Authorship | Journal and year of publication | Country of publication | Design/method |
|--|---|---------------------------|---|
| Bue L, Lauszus FF. ⁽¹⁾ | Dan Med J; 2016;63(2). | Denmark | Randomized clinical trial Blinding: no |
| Smith CA; Betts D. ⁽¹⁷⁾ | Complement Ther Med; 2014; 22(1):75-80. | Australia and New Zealand | Quantitative study Delphi expert consensus. |
| Vas J, Aranda-Regules JM, Modesto M, Ramos-Monserrat M, Barón M, Aguilar I, et al. ⁽¹⁸⁾ | Acupunct Med; 2013;31(1):31-8. | Spain | Multicenter clinical trial Blinding: raters |
| Do CK, Smith CA, Dahlen H, Bisits A, Schmied V. ⁽¹²⁾ | BMC Complement Altern Med; 2011;(11):81. | Australia | Randomized clinical trial Blinding: no |
| Van den Berg I, Kaandorp GC, Bosch JL, Duvekot JJ, Arends LR, Hunink MGM. ⁽⁵⁾ | Complement Ther Med; 2010;18(2):67-77. | The Netherlands | Quantitative study Hypothetic model |
| Guittier MJ, Pichon M, Dong H, Irion O, Boulvain M. ⁽¹⁹⁾ | ObstetGynecol; 2009; 114(5):1034-40. | Switzerland | Randomized clinical trial Blinding: no |
| Manyande A; Grabowska C. ⁽²⁾ | Midwifery; 2009;25(6):774-80 | United Kingdom | Quantitative, prospective study |
| Vas J, Aranda JM, Nishishinya B, Mendez C, Martin MA, Pons J, et al. ⁽¹³⁾ | Am J ObstetGynecol; 2009;201(3):241-59. | Spain | Systematic review and meta-analysis |
| Guittier MJ, Klein TJ, Dong H, Andreoli N, Irion O, Boulvain M. ⁽⁹⁾ | J Altern Complement Med; 2008;14(10):1231-3. | Switzerland | Randomized clinical trial Blinding: raters |
| Mitchell M; Allen K. ⁽²⁰⁾ | Complement Ther Clin Pract; 2008;14(4):264-72. | United Kingdom | Qualitative research Phenomenological approach |
| Vas J, Aranda JM, Barón M, Perea-Milla E, Méndez C, Ramírez C, et al. ⁽²¹⁾ | BMC Complement Altern Med; 2008; 8:22. | Spain | Quantitative study Clinical trial protocol |
| Cohain JS. ⁽⁸⁾ | Midwifery Today Int Midwife; 2007;(83):18-9, 65. | Not informed | Descriptive literature review |
| Cardini F, Lombardo P, Regalia AL, Regaldo G, Zanini A, Negri MG, et al. ⁽²²⁾ | BJOG; 2005;112(6):743-7. | Italy | Randomized clinical trial Blinding: raters |
| Tiran D. ⁽⁷⁾ | Complement Ther Nurs Midwifery; 2004;10(4):233-8. | United Kingdom | Descriptive literature review |
| Neri I, Airola G, Contu G, Allais G, Facchinetti F, Benedetto C. ⁽²³⁾ | J Matern Fetal Neonatal Med; 2004;15(4):247-52. | Italy | Randomized clinical trial Blinding: raters |
| Neri I, Fazzio M, Menghini S, Volpe A, Facchinetti F. ⁽²⁴⁾ | J Soc Gynecol Investig; 2002;9(3):158-62. | Italy | Randomized clinical trial Blinding: raters |
| Ewies A; Olah K. ⁽¹⁰⁾ | Acupunct Med; 2002;20(1):26-9. | Not informed | Descriptive literature review |
| Cardini F; Weixin H. ⁽²⁵⁾ | JAMA; 1998;280(18):1580-4. | China | Randomized clinical trial Blinding: raters |

In the clinical trials^(1,9,12,18-19,22-25), women with twin pregnancies, risk of premature birth, renal or cardiac comorbidities, placenta previa, history of pre-partum hemorrhage, intrauterine growth restriction, hypertensive disease, isoimmunization, background uterine surgery, uterine anomalies, congenital fetal alterations, contraindications for vaginal birth and intrauterine fetal death were excluded.

The studies were conducted in different countries, including Denmark⁽¹⁾, Australia^(12,17) and New Zealand⁽¹⁷⁾, Spain^(13,18,21), The Netherlands⁽⁵⁾, Switzerland^(9,19), United Kingdom^(2,7,20), Italy⁽²²⁻²⁴⁾ and China⁽²⁵⁾, demonstrating that, although the technique has Chinese origins, it has become quite popular in Western countries. Many professionals are that familiar with moxibustion that they feel the need to test its efficacy in order to enhance their confidence to apply it in clinical practice.

Table 2 presents the articles analyzed according to sample and gestational age (GA); intervention and conclusion.

Table 2 – Articles analyzed according to sample and GA; intervention and conclusion. Itu, SP, Brazil, 2016

| Sample and GA | Intervention | Conclusion |
|--------------------------------|---|--|
| N=200 GA:33w | a) M (n=102), b) C (n=98) | No evidence of effect of M ⁽¹⁾ . |
| N=16 | Online questionnaire for experts. | Clinical validity of the study to create a research protocol ⁽¹⁷⁾ . |
| N=406 GA:33-35w | a) M (n=136), b) PM (n=136), b) C + PE (n=134) | M is effective and safe and should be considered as an intervention option ⁽¹⁸⁾ . |
| N=20 GA:34-36.6w | a) M (n=10), C (n=10) | Study without statistical power due to small sample ⁽¹²⁾ . |
| N=does not apply GA: 33w | a) M b) C | M presented reduced in breech presentations and cesarean section, cheaper than C, including ECV ⁽⁵⁾ . |
| N=212 GA:34-36w | a) M (n=106) b) C (n=106) | Did not demonstrate benefits of M to “correct” breech position ⁽¹⁹⁾ . |
| N=76 GA:28w | M (n=76) | There is evidence to believe that M can reduce the number of breech presentations ⁽²⁾ . |
| N=1087 GA:≥32w | c) M, b) C, c) PE, d) A | M (isolated or combined with PE) positive influenced C or only PE ⁽¹³⁾ . |
| N=65 GA:34-36w | BCT before, during, after (10’/20’/10’) M. | M did not causes changes in fetal and maternal wellbeing or adverse effects ⁽⁹⁾ . |
| N=8 GA:≥33w | M and interview. | Good acceptance and compliance with technique, no side effects ⁽²⁰⁾ . |
| N=492 GA:33-35w | a) M, b) PM, c) C + PE | Does not apply ⁽²¹⁾ . |
| Does not apply | a) ECV, b) M or A, c) chiropractice, d) hypnotherapy, e) postural exercises. | No sufficient evidence to absolutely recommend any of the five methods mentioned ⁽⁸⁾ . |
| N=123 GA:32-33.3w | a) M (n=65), B) C (n=58) | Errors in protocol and insufficient sample led to the interruption of the study ⁽²²⁾ . |
| Does not apply | Description of techniques: a) M, b) ginger paste, c) homeopathy, d) fetal acoustic stimulation, e) hypnosis, f) chiropractice, g) yoga, h) others. | Midwives are the professionals with the best opportunity to provide information on alternative methods to “correct” breech presentation ⁽⁷⁾ . |
| N=226 GA:33-35w | a) M and A (n=112), b) C (n=114) | M and A more effective than C ⁽²³⁾ . |
| N=12 GA:33w | a) PA, b) A, BCTbefore and after (20’/20’) both. | Changes in FHF and FM during A and absent in PA ⁽²⁴⁾ . |
| Does not apply | Reports on characteristics of Moxa technique. | No evidence on effect of M ⁽¹⁰⁾ . |
| N=130 GA:33w | a) M (n=130), b) C (n=130) | M was effective to induce increased cephalic versions in this population ⁽²⁵⁾ . |

Legend: N = number, GA = gestational age, M = Moxa, MP = placebo Moxa, C = usual care, PE = postural exercises, BCT = baseline cardiotocography, ECV = external cephalic version, A = acupuncture, PA = placebo acupuncture, FHF = fetal heart frequency, FM = fetal movements.

Most studies collected sociodemographic data^(1,9,12,18-19,22-25), types of birth^(1-2,5,9,12-13,18-20,22-25), frequency of ECV^(1,9,12,18-19,22-25), adverse effects and signs and symptoms^(1,9,12,18-20,22-24) reported during the treatment. Some studies intended to identify the involved professionals' opinion on the technique applied^(5,17,20).

All intervention studies^(1-2,9,12-13,18-19,21-25) applied the technique as from the third pregnancy trimester, mainly from the 33rd week onwards. If the cephalic version did not take place, ECV was offered.

The participants reported some adverse effects of the Moxa therapy, such as bad smell^(1,22), headache⁽¹⁾, nausea^(1,18,20,22), dizziness⁽¹⁸⁾, mild hypertension⁽¹⁸⁾, abdominal pain^(18,22), throat ache^(10,22) and burns⁽¹⁰⁾. The signs and symptoms experienced were uterine contraction^(1,9,12,18-19,20,24-25), fetal movements^(1,19-20,24), fetal hiccups⁽¹⁸⁾, relaxation^(9,20), urinary urge⁽²⁰⁾ and increased intestinal peristalsis⁽²⁰⁾.

The pregnant women's acceptance and compliance with the moxibustion treatment was good, although the participants in one study indicated frequent discomfort and many dropped out of the treatment for that reason, making the conclusion of the study impossible⁽²¹⁾.

Among the 18 registers analyzed, seven^(2,5,8,13,18,23,25) were favorable to the use of moxibustion, identifying the efficacy of the method when compared to usual care or an expectant approach; while five found unfavorable results^(1,10,12,19,22). In the other six studies, the researchers did not categorically affirm their position in favor of or against the technique, as the study described a study protocol^(17,21), a clinical trial on the effects of Moxa on fetal vitality^(9,24), a qualitative study on the participants' opinion about Moxa and breech⁽²⁰⁾ and a narrative review on breech "correction" techniques⁽⁷⁾.

A group of Spanish researchers developed a clinical trial protocol⁽²¹⁾ that was put in practice⁽¹⁸⁾.

● DISCUSSION

About the maternal variables and factors associated with moxibustion

Regarding parity, in an English clinical trial, greater chances of a successful cephalic version were identified among multipara than among primipara (95% CI 0.05-0.94, $p < 0.05$), probably because their abdominal muscles may be more flexible⁽²⁾. The chances doubled when third parties (family and friends) participated in the administration of the technique (95% CI 0.87-5.16, $p < 0.04$), suggesting that the motivation was intense to the extent of involving a third party, favoring detailed compliance with the instructions⁽²⁾. Consequently, the pregnant woman received more attention and support, allowing her to feel safer and more relaxed⁽²⁾.

The results of an Italian study⁽²²⁾ appointed more positive outcomes when the cephalic version was undertaken at 35 weeks in women aged ≤ 31 years, $n=25$ (45%) when compared to women ≥ 31 years, $n=17$ (27%). As for education, the outcome was more favorable to women with ≤ 8 years of education, $n=14$ (47%) when compared to women with secondary or higher education, $n=26$ (29%)⁽²²⁾.

Moxa therapy is safe for pregnant women and fetuses

No evidence was found that associate moxibustion with the risk of premature birth. Therefore, Spanish researchers suggest that, the earlier the treatment starts, the better the chances of success⁽¹⁸⁾. The same study did not identify clinical changes in the maternal or fetal cardiac rhythm during the moxibustion sessions the two groups (Moxa and placebo Moxa) were submitted to when compared to women who only received the usual care⁽¹⁸⁾. No case of maternal hyper/hypotension was reported during the Moxa sessions⁽⁹⁾ with a statistically significant reduction in the use of oxytocin in the group submitted to the technique when compared to the group submitted to the usual care⁽¹³⁾.

In a meta-analysis, the variables cesarean section, Apgar < 7 at 5th minute, surgical birth and premature membrane rupture tended in favor of the group that used the moxibustion, but without

statistical significance due to the heterogeneity of the studies⁽¹³⁾.

To verify the safety of fetal wellbeing, in a study conducted in Switzerland, the adverse effects of the technique were measured when using cardiotocography before, during and after the sessions, which were assessed by three independent observers using the Fischer score⁽⁹⁾. This was the first study to systematically assess fetal safety through the cardiotocography, identifying a slight reduction in the FHF and in the number of accelerations during and soon after the sessions, both associated with a lesser frequency of fetal movements within the normal range⁽⁹⁾. Although the action mechanism of acupuncture and moxibustion in point BL67 remains unknown, there is a change in the fetal movement and cardiac rhythm patterns during the application of the technique⁽²³⁾.

Treatment compliance and effects during the use of moxibustion

Most(10/12) participants defined the treatment as favorable or highly favorable, in line with the treatment compliance, as none of the participants missed the sessions or dropped out of the study protocol⁽⁹⁾. Some participants mentioned uterine contractions and increased fetal movements during the day of the treatment; none of them reported side effects, and others considered the treatment pleasant and relaxing⁽⁹⁾. More than 98% of the participants would recommend the technique to a friend in the same situation and 95% would do it again if necessary⁽¹⁹⁾.

Some discomfort was mentioned during the application of the technique, such as the feeling of pain, assessed by means of a visual analogue scale (0 to 100) and ranging between 0 and 15⁽⁹⁾. In an Italian study, 41% of the pregnant women included in the Moxa group indicated nausea, throat ache and painful contractions, making 21% give up the treatment⁽²²⁾. Cultural factors could explain the treatment compliance difficulty, as the study was conducted in Italy⁽²²⁾, where the practice is not as common as in China, where the model study was conducted⁽²⁵⁾.

Among the women who most reported side effects, the success rate of cephalic version was lower, hypothetically because the unpleasant symptoms impeded the relaxation of the abdominal muscles and thus made the spontaneous version more difficult⁽²⁾.

Alternative methods for cephalic version

In a simple Internet search, other alternative methods are cited, such as playing music on the abdomen, increasing the relaxation and leading to a spontaneous version⁽⁷⁾. In this sense, it was verified by means of magnetic encephalography that repeated sound pulses provoke fetal reactions⁽⁷⁾. A change in the position of the dorsal midline of the fetus was also verified, from the anterior to the lateral position, which increases the chances of successful ECV⁽⁷⁾.

As far as the use of acupuncture is concerned, a small number of experts recommended the use of the technique two to three times per week. Other points can be used besides BL67, such as SP6⁽¹¹⁾, GV20⁽¹¹⁾, ST36⁽¹¹⁾ and GB34⁽¹¹⁾; no consensus was found on the need to obtain the De Qi⁽¹⁷⁾. In one of the studies, it was questioned whether mere heat in point BL67 could be sufficient to produce the same results as moxibustion, proposing a study to compare the technique with another heat source than Moxa⁽¹⁸⁾.

In Traditional Chinese Medicine, the use of fresh mown ginger paste is also recommended, to be applied overnight for 10 days, as another heat source to be used in point BL67⁽⁷⁾. Few studies exist on the technique, with successful spontaneous cephalic version rates of up to 80% and none of them reporting any side effects⁽⁷⁾.

Homeopathy is also indicated for cases of breech, recommending the use of *Pulsatilla* and *Natrum muriaticumformulae*⁽⁷⁾.

Australian midwifery professionals (physicians and midwives) expressed positive opinions on the use of alternative and complementary therapies in general, appointing that there is room for these techniques in common health care⁽¹²⁾. They demonstrate that there are gaps in the knowledge on

the clinical efficacy of the technique and suggest a sense of responsibility to guarantee new safe and effective treatments⁽¹²⁾.

Implications, benefits and reflection on the practice

From the prenatal service managers and professionals' viewpoint, to offer the technique in the public service, its efficacy and cost-benefit should be proven with evidence⁽²⁰⁾. A consensus exists that midwives can apply the technique provided that there exists a protocol for this purpose; and forwarding, when the breech is diagnosed, should be done before the gestational age of 33 weeks⁽²⁰⁾.

Dutch authors affirm that, although there is no guarantee that the use of this technique will be successful, the mere attempt can be beneficial in low-income countries or in rural areas distant from medical centers, as women living there have less probability of getting access to an ECV or cesarean section in cases of breech⁽⁵⁾.

The breech diagnosis causes anxiety and concern, mainly regarding the maternal and fetal consequences of a pelvic birth or a cesarean section, as well as frustration about not having the opportunity to experience a normal birth and apprehension about the ECV option, even if that were the only option to try a vaginal birth⁽²⁰⁾. The pregnant women reported that the ECV can be invasive by "forcing" the baby to turn, and that it could cause future problems⁽²⁰⁾. Knowing the implications of a pelvic birth or a cesarean surgery, the women demonstrated satisfaction about accepting the moxibustion treatment offer⁽²⁰⁾.

As regards the feelings on the type of birth, at the moment of the randomization, half of the women (106/212) declared that they preferred vaginal birth, while less than a quarter actually chose this type of delivery⁽¹⁹⁾. Other important information was that not all pregnant women submitted to moxibustion tried the ECV (60/106)⁽¹⁹⁾. The authors raise two hypotheses to explain it: reluctance to submit to a cesarean section, but accepting it as a reality after a failed "correction" attempt by means of an alternative method, no matter what that method was; or decision taking after talking to the obstetrician about the alternatives at the end of the pregnancy, when being informed about the results of an earlier clinical trial⁽¹⁹⁾.

It is important for women who seek alternatives for the breech presentation to be attended by a professional who can offer a range of options, including both complementary and conventional treatments, and who can appropriately assess the indications and contraindications of each method⁽⁷⁾. Traditional Chinese Medicine or homeopathic professionals without a background in obstetrics are incapable of confirming the breech position before applying a specific method and are unaware of the risk factors, contraindications and obstetric complications⁽⁷⁾. This argument *per se* justifies the need to train midwives to offer these alternatives to "correct" a breech, and this content should be part of these professionals' continuing education⁽⁷⁾.

● FINAL CONSIDERATIONS

The results found in the studies above differ on the efficacy of moxibustion as a cephalic version technique for breech fetuses. More solid data are needed, with studies that include the same protocol of the initial gestational age, length of application of the technique and frequency to affirm how it can be used with higher success rates.

Nevertheless, based on some results, we can affirm that it is a safe, effective, simple, non-invasive and low-cost technique that can be offered to women with breech presentation before the indication of ECV, which is a more expensive and potentially risky procedure. When offered as an alternative before or together with ECV, it can increase the chances of reducing the number of cesarean surgeries, their costs and their fetal and maternal morbidity and mortality rates.

Obstetric professionals should provide the pregnant women with impartial information on the conventional and complementary methods to "correct" the pelvic presentation, including their risks and benefits. Independently of the decision the pregnant woman makes, the professional should

welcome and support her, apply the techniques chosen when possible or referring her to competent and trained services or professionals to perform these (Moxa therapy, ECV, pelvic birth, cesarean surgery).

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