

## Japanese Acupuncture - Current Research

### *Effect of Acupuncture & Moxibustion Treatment*

#### *to Turn Breech Baby*

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### 1. Introduction

Breech babies (breech presentations) as well as the mothers often have risky conditions including a longer time of delivery than in babies born head first and the departments of obstetrics and gynecology need cautious handling.

For the treatment to turn the breech presentations, there are exercise of the so-called breech pregnancy exercise and knee-chest positioning (kcp). However, no RCT reports have been published on the breech pregnancy exercise and its effectiveness is not clear 1) 2). And the exercise imposes a heavy physical burden on the mother. On the other hand, although the kcp is considered effective on the ground of certain RCT results 3), it cannot necessarily be recommended strongly because there may be the risk of accompanying complications, such as placenta abruption, compression of the umbilical cord, placental hematoma formation, and feto-maternal transfusion syndrome. Moreover, as the kcp is not a sure method 4), there are quite a number of medical professionals who do not employ this method, thinking of its probable risks arising from it. To turn breech presentations, there are no medicines available that have direct effects.

Recently many of the obstetricians and gynecologists in Japan prefer performing an elective cesarean section in the cases of a single breech presentation, partly in response to the 2004 report of the Committee of American College of Obstetricians and Gynecologists (ACOG). Even so, cesarean sections do not always go without

risks. Yoshida says “do not forget the attitude that vaginal deliveries must be performed carefully”6).

In Japan, acupuncture and moxibustion are available for the treatment of breech babies. Ob/gyn Nobuyasu Ishino, who had studied Oriental medicine, reported 7) in 1950 that moxibustion to the acupuncture point of san yin jiao (SP6), generally contraindicated in pregnancy since ancient times, was effective. In 1980s, Kazuo Hayashida reported that the method of moxibustion that was usually administered for delivery difficulties had great effects 8) in the treatment of a breech presentation, in which moxibustion was given to the meridian point of zhi yin (BL67) and the “kyutoshin”, warm needling with moxibustion was also given to the meridian point of san yin jiao (SP6). Since then, the treatment with acupuncture and moxibustion for a breech presentation has become popular in Japan. Now in other countries, this method is also adopted and RCTs are also being conducted 9), 10), 11).

And so, we searched for postwar literatures on the treatment of the breech presentation with acupuncture and moxibustion and went through them to study the effect of the treatment. And then, we further analyzed literatures published, up until 2004, as “EBM in Japan in the treatment of breech presentations with acupuncture and moxibustion.” Then we reported the results in “acupuncture and moxibustion treatment of breech presentations” with illustrations and photos for learning purposes 12). Hereunder is the results with an addition of literatures after 2004.

### 2. Method

Literatures reported after the war on breech presentation treatment with acupuncture and

moxibustion were searched for through the journal of “Ichushi” and on the “websites of Ichushi”. Searched were original papers published during a period of 2004 to July 2011. Then individual items in the searched papers were analyzed, such as age, primiparity or para, the number of weeks of pregnancy when the initial visit was made, the number of weeks when a breech baby turned around, turn ratio, use of meridian points, use of tools, method of treatment, other method of treatment, complications, and adverse events.

### 3. Results

#### (1) Entirety of published literatures

During a period of 61 years after the war from 1945 to July 2011, 16 literatures were reported in Japan on case-series studies of correcting the breech presentation with acupuncture and moxibustion. Of these 16 literatures, eight were published during six years from 1990 to 1995.

The total number of the cases reported was 2,150, including 969 cases in total in the seven literatures reporting the number of primiparous women and the number of parous women. The ratio of primiparous women (581) against parous women (388) was 1.5:1. In the 16 literatures, there was no reference to the method of randomization. However, there was one literature that made a comparison between the two groups – the group (34 cases) of knee-chest positioning and the group (34 cases) of knee-chest positioning combined with moxibustion to zhi yin (BL67). Others are of retrospective case series.

#### (2) Turn around ratio

In terms of turn ratio, 1,712 (79.6%) cases of the total 2,150 that were reported in the 16 literatures turned around to cephalic presentations with a turn ratio of 11.70% to 91.7%.

Of them twelve literatures showed a turn ratio of 72.2% or above.

#### (3) Treatment method

In regard to the method of treatment, 15 literatures showed the use of moxibustion, and eight literatures reported the use of acupuncture. Acupuncture alone was reported in one whereas the combination use of acupuncture with moxibustion was reported in seven literatures. The use of “Kyuto-shin” was reported in five literatures.

In reference to the meridian points for moxibustion that were shown in 15 literatures, zhi yin (BL67) was used in 14 literatures, san yin jiao (SP6) in 9 literatures, and both points in 8 literatures. For other points, yongquan (KI1) was selected in one literature and taichong (KI4) in one literature. With an eye on the kinds of moxibustion for each point that are shown in 14 literatures, direct moxibustion in 6 literatures, roll moxa in 2, indirect moxibustion in 5, and mxibustion plasters in 1 were applied to zhi yin (BL67), whereas direct moxibustion in 3, indirect moxibustion in 5, and moxibustion plasters in 1 were administered to san yin jiao (SP6). No differences existed in the turn ratio depending on the points due to differences in the kind of moxibustion, except for direct moxibustion in one literature.

Relating to the eight literatures for acupuncture points for acupuncture treatment, San yin jiao (SP6) was selected in all the literatures, except for one that had no clear mention. Zhi yin (BL67) was selected only in two literatures. The use of filiform needles was reported in six, while intradermal needles were used in one.

The diameters of the needles and needling depths were reported in one literature. The effect of the treatment only with acupuncture had no

difference from that of acupuncture only or the combination treatment of acupuncture with moxibustion of 12 literatures (other than Arai's literature).

#### (4) Treatment frequency

The treatment frequency for both acupuncture and moxibustion was 7 times a week in 7 cases, and 1 (daily) to 3 times a week in 8 cases. At-home moxibustion was conducted in seven cases with details of direct moxibustion in 2 cases, indirect moxibustion in 4, and moxibustion plasters in 1.

#### (5) Excluded disorders and factors causing non-occurrence of the cepharic presentation.

The diseases excluded from the application of acupuncture and moxibustion were multiple pregnancy (3 cases), severe pregnancy (2 cases), placenta previa (2 cases), fetal anomaly (2 cases), hematological disorders (2 cases), uterine deformity (1 case), fibromyoma (1 case), and history of uterine surgery (1 case). As the factors non attributable to the turn to the head down position, uterus bicornis, small amounts of amniotic fluid (oligoamnion), uterine myoma, and loop of the umbilical cord were pointed.

#### (6) Adverse events

Out of the 16 literatures, 10 literatures reported no adverse events. No clear mentions were made in two literatures. One literature reported four cases of nausea. There were blisters and pigmentation in one literature, and blisters and reddening in one literature. And in one literature, there were no adverse events although the symptoms were claimed during the treatment period, such as the body becoming heavy and languid, feeling a fear as the abdomen felt heavily distended, worried as the baby (fetus) moved very actively, metrorrhagia (uterine bleeding) appearing, and tendency of threatened premature delivery.

## 4. Discussion

It was considered all over the world up until 1750s that the fetus was in a breech presentation position to the brink of delivery and turns into a cepharic presentation before labor starts. In these days, literatures were published for the first time reporting that the cepharic presentation was normal after five months of pregnancy (13), (14). For the reason, until these days, moxibustion had been administered to zhi yin (BL67) at the time of difficult labor (delivery).

As mentioned in "Introduction" above, for the first time in the world, Ishino (6) performed moxibustion treatment to expectant mothers in pregnancy, not at the time of delivery, for the purpose of turning around the fetuses in a breech presentation. He reported 80% of the turn ratio. Subsequently, in 1988 Hayashida (7) reported 89.9% of the turn ratio in the treatment of 584 cases with acupuncture and moxibustion. And in 1990s literatures relating to the turn ratio with acupuncture and moxibustion burgeoned.

Of the 16 Japanese literatures, only one literature was about a comparative study with the control group and most literatures were reports on case series studies. On the other hand, there were three (9)-(11) overseas RCT literatures, one of which was a Cardini's RCT, which has been criticized for the reason of insufficiency in the blind trial and placebo (15). However, it is difficult to conduct blind trials in acupuncture and moxibustion treatment. Although there were some trials using placebo needles, perfect tests like using drugs have not been realized so far, so it may be unreasonable to make a valuation only from this point. Moreover, Cardini conducted same trial in Italy as the first one he did with unfavorable results. Together with this issue, conducting RCTs for acupuncture and moxibustion treatment will be future tasks.

The turn ratio in 16 literatures ranged widely from 11.7% to 91.7%. Out of the 16, 12 literatures showed 72.2% or above, which is not low when compared with the turn ratio 3) of the external cephalic version. As the number of weeks from the start of treatment differs widely in these literatures from 20 weeks to 37 weeks and many cases of short terms (weeks) were included, a close look at the 10 literatures having the clear mention of 32 weeks to 35 weeks revealed 11.7% to 87.5% of the turn ratio after spontaneous turning around was taken into account. And eight literatures had the turn ratio of 61.4% or above.

In regard to the method of treatment, one literature showed the use of acupuncture only and all other 15 literatures indicated the use of moxibustion and the selection of zhi yin (BL67) – this may be an application of zhi yin (BL67) moxibustion usually performed for difficult labor since old days.

By the way, Arai 16) reported the turn ratio of 11.7%, extremely low compared with other literatures. There were five literatures, including Arai's, that reported 1-3 times of treatment at hospitals, instead of everyday at-home moxibustion. Of these, two cases used Kampo medicines together with antispasmodic agents for uterus and the other one case had intradermal needles inserted after moxibustion and left them in place for 3-4 days. On the contrary, Arai 16) set the frequency to “once in a week, or three times a week at most.” From what I gather, the quantities of stimuli and the dosage amounts, in other words the total treatment volume given to patients are smaller compared to the 15 literatures. On this point, Arai 16) also states in the part of Discussion in his literature that this will be a problem, “increasing the frequency of moxibustion may have the possibility of increasing the correction ratio,” and that the

number of stimulation applications and the amounts of stimuli, or “stimulation frequency” needs to be studied. This has shed light on one of the subjects to be discussed to ensure successful acupuncture and moxibustion treatment of breech presentations.

Bicornate uterus and deformity, uterine myoma, and loop of the umbilical cord have been pointed out as organic diseases that are considered to exert a negative influence on the turn ratio, and these are materials for security and effectiveness studies.

As to side effects, one literature reported complaints of nausea in four cases and two literatures reported blisters and pigmentation. One literature showed uterine bleeding during the treatment period, threatening premature delivery although there were no serious adverse events. Except for two literatures that had no descriptions of side effects, 14 literatures reported no serious adverse events. From this, it may be said that the methods of breech presentation treatment with acupuncture and moxibustion performed so far in Japan are safe.

## 5. Conclusion

Sixteen literatures on the breech presentation published after the war were analyzed the results are reported in this article.

## 6. References

- 1) TAKEDA Yoshihara, NAKAMURA Masao: Ninshin-chu no Kanri to Kotsuban-Kyosei-hou, Journal of Sanka to Fujinka (Obstetrics and Gynecology) 2005; 72 (4): 436-43.
- 2) MARUMO Genzo, et al.: Kotsubani ni taisuru Shitukyoui Shidou no Yuyousei, Obstetrical and Gynecological Therapy, vol.100 no.1 2010 / 1:99-103

- 3) Hofmeyr GJ, Kulier R: External cephalic version for breech presentation at term. The Cochrane Library, Issue 2, 2003, Oxford.
- 4) Hotton EK, Hofmeyr GJ, External cephalic version for breech presentation before term (Cochrane Review), Issue 2, 2006 Chichester, UK
- 5) ACOG committee, Obstet Gynecol. 2001; 98(6): 1189-90
- 6) YOSHIDA Koyo: Sanka Shikkan no Shindan, Chiryō Kanri Kotsubani Bunben, Perinatal Medicine, 2004; 34(7):1085-8.
- 7) ISHINO Nobuyasu: Ijyou-tai ni taisuru Saninkou Sekyu no Eikyou. Journal of The Japan Society for Oriental Medicine 1(3), 7, 1952.
- 8) HAYASHIDA Kazuo: Toyo Igaku to Kotsuban Kyousei, Toho Igaku, 1987; 34(2) : 196-206.
- 9) Francesco Cardini, et al. Moxibustion for Correction of Breech Presentation Randomized Controlled Trial, JAMA 1998; 280: 1580-5.
- 10) I. Neri, et al., Acupuncture plus moxibustion to resolve breech presentation: a randomized controlled study. ROMA: CIC Edizioni Internazionali, 2003; 58-61
- 11) Francesco Cardini, A randomized controlled trial of moxibustion for breech presentation, BJOG: an International Journal of Obstetrics and Gynaecology. 2005; (112): 783-7
- 12) KOIDO Yoshihiko, KATAI Shuichi: Kotsubani ni taisuru Shinkyu-chiryō no Nihon ni okeru EBM, Irasuto to Shashin de Manabu Sakago no Shinkyu Chiryō, written and edited by KATAI Shuichi, Ishiyaku Publishers, Inc 2009 Tokyo: 28-36
- 13) KAGAWA Genetsu (1700-1777), "Shigenshi San-ron" ("San-ron") (1765)
- 14) KAGAWA Genteki (1739-1779), "Sanron-yoku" (1775)
- 15) Ayman Ewies, Karl Olah, Moxibustion in Breech Version- A Descriptive Review , ACUPUNCTURE IN MEDICINE 2002; 20(1): 26-29
- 16) Tadashi Arai et al.: Is Acupuncture / moxibustion Effective for Correction of Breech Presentation? Acta Obst Gynaec Jpn Vol.53, No.8, pp1217-1220, 2001