The outline of “Japan Academy of Midwifery: Evidence-based guidelines for midwifery care in pregnancy and childbirth – 2016 edition”

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Abstract

In order to provide safe and comfortable care throughout the perinatal period, there must be a practical guideline, which midwives can follow. The Japan Academy of Midwifery published the “Evidence-based guidelines for midwifery care in pregnancy and childbirth – 2016 edition”, containing care policies for healthy low-risk women and newborns. In this 2016 edition, we added the new pregnancy section including 13 Clinical Question (CQ)s and the latest evidence was added to the existing 30 CQs in the intrapartum section of the “Evidence-based guidelines for midwifery care during childbirth – 2012 edition”.

This guideline describes and answers those clinical questions midwives face when caring for women. Recommendations we describe here are based on the latest evidence. Therefore, we believe this updated guideline reflects the best practice at this point in time. We hope this guideline will: 1) enable midwives to provide evidence-based practice and support women’s decision making, 2) assist midwifery students to recognize the importance of knowing the constantly advancing field, and 3) promote further research activities where evidence is needed. The aim of introducing this guideline in English is to: 1) introduce and distribute the guidelines, compiled by Japanese midwives, to other countries and 2) enable Japanese researchers to use the English version as a common understanding by referring to this guideline when submitting to international journals.

In this 2016 edition, a total of 43 CQs and the recommendations for care are introduced. Although the following six CQs are commonly utilized medical treatments in the field of obstetrics, these practices require obstetrician’s supervision. Therefore, we only described the evidence statements and not the recommendations: The following six CQs are: Intra-CQ1. Induction of labor; Intra-CQ2. Membrane sweeping; Intra-CQ7. Epidural anesthesia; Intra-CQ21. Episiotomy; Intra-CQ26. Perineal repair; and Intra-CQ28. Prophylactic uterotonic. Revisions in the recommendations from the 2012 edition are as follows: “Intra-CQ3. Is nipple or breast stimulation effective to induce labor?”; “Intra-CQ9. Is acupressure or acupuncture effective to relieve labor pain?” and “Intra-CQ14. Is acupressure or acupuncture effective to augment labor?”

This paper is composed of an excerpt from the “Evidence-based guidelines for midwifery care in pregnancy and childbirth – 2016 edition” and the recommendations described here are fully translated.

Key words: midwifery, guidelines, care policy, pregnancy, intrapartum

Introduction

In order to provide safe and comfortable care throughout the perinatal period, there must be a practical guideline, which midwives can follow. The Japan Academy of Midwifery (JAM) published the “Evidence-based guide-
lines for midwifery care in pregnancy and childbirth – 2016 edition” (Japan Academy of Midwifery, 2017), containing care policies for healthy low-risk women and newborns. In this 2016 edition, we added the new pregnancy section including 13 Clinical Question (CQs) and the latest evidence was added to the existing 30 CQs in the intrapartum section of the “Evidence-based guidelines for midwifery care during childbirth – 2012 edition” (Japan Academy of Midwifery, 2012; Guidelines Committee: Japan Academy of Midwifery, 2012a). One of the aims that JAM holds is: “To establish the standards of midwifery practice that function as the guidelines and to provide just and appropriate health care to all women” (The Japan Academy of Midwifery, 2012b). Therefore, publishing this guideline is an important mission for JAM.

The underlining idea throughout this guideline is Women-Centered Care (Horiuchi, et al. 2006) and Family Centered Care (Institute for Patient- and Family-Centered Care, 2007). Both of these concepts indicate the importance of providing information and helping the women’s, patient’s, and family’s decision making. Moreover, for midwives to be confident when providing midwifery care, they would want their service based on the best evidence available. From this perspective, this guideline will be fully utilized.

Based on the latest evidence, recommendations we describe here address clinical questions midwives face when caring for women. Therefore, we believe this updated guideline reflects the best practices at this point in time. We hope this guideline will: 1) enable midwives to provide evidence-based practice and support women’s decision making, 2) assist midwifery students to recognize the importance of knowing the constantly advancing field, and 3) promote further research activities where evidence is needed. The aim of introducing this guideline in English is to: 1) introduce and distribute the guidelines, compiled by Japanese midwives, to other countries and 2) enable Japanese researchers to use the English version as a common understanding by referring to this guideline when submitting to international journals.

This paper is composed of an excerpt from the “Evidence-based guidelines for midwifery care in pregnancy and childbirth – 2016 edition” (Japan Academy of Midwifery, 2017) and the recommendations described here are fully translated.

**Method**

**Extracting and determining the CQs.** The CQs we introduce in this paper were gathered from the voices of midwives attending the Conference of the Japan Academy of Midwifery. The options of the CQs were then discussed and decided according to ten members of the guideline committee.

**Searching for evidence.** We searched both English and Japanese articles to describe the evidences. For English articles we searched the Cochrane Library, PubMed, and guidelines from the National Institute for Health and Care Excellence (NICE). For Japanese articles we searched Igaku Chuo Zasshi (ICHUSHI), (Japan’s largest medical-literature database) and Medical Information Network Distribution Service (Minds), (an information service provided by Japan Council for Quality Health Care). We also referred to the following Japanese guidelines: the “Evidence-based guideline for safe and comfortable care in pregnancy and childbirth, 2013 edition (Pregnancy and childbirth guideline group 2013, Health Labour Sciences Research Grant, Ministry of Health, Labour and Welfare, 2013), and the “Guideline for obstetrical practice in Japan 2014” (Japan Society of Obstetrics and Gynecology / Japan Association of Obstetricians and Gynecologists, 2014). Search date was through September 2014.

**Reviewing articles and writing the recommendations.** Each member of the guideline committee was assigned CQs according to their expertise. All committee members discussed the contents after each member had reviewed the articles and wrote the recommendation and expository. Details of the articles were written in the expository and when the outcomes of the reviewed articles were deferred, it was discussed to reach member consensus. When the outcomes were contradictory, the recommendation was written as “may be one of the options of care” and details were explained in the expository. Before publication, the draft was opened for public comments and revisions were made.
Since we searched for the latest evidence, some recommendations and expository in the intrapartum section changed from the 2012 edition. For the “Intrapartum (Intra)-CQ 3. Is nipple or breast stimulation effective to induce labor?”; a few words of caution when implementing this care was added to the expository. For the “Intra-CQ9. Is acupressure or acupuncture effective to relieve labor pain?” and “Intra-CQ14. Is acupressure or acupuncture effective to augment labor?” since the evidence was not certain, the recommendations was changed to not strongly recommending the care.

Contents of the guideline

A total of 43 CQs, including 13 in the pregnancy section (Preg-CQ) and 30 in the intrapartum section (Intra-CQ), and the recommendations for each CQs are introduced. However, the following six CQs are medical treatments, which require obstetrician’s supervision: Intra-CQ1. Induction of labor; Intra-CQ2. Membrane sweeping; Intra-CQ7. Epidural anesthesia; Intra-CQ21. Episiotomy; Intra-CQ26. Perineal repair; and Intra-CQ28. Prophylactic uterotonic. Therefore, we only described the evidence statements but not the recommendations.

Clinical questions

Pregnancy section (13 CQs)

Preg-CQ1-1. How should we handle Intimate Partner Violence (IPV) during pregnancy? Preparing a safe environment for the woman so that she can disclose her IPV situation is recommended. Then conducting the IPV screening is recommended.

Preg-CQ1-2. How do we screen IPV? A reliable IPV screening tool should be answered by self-completion or by a computer.

Preg-CQ1-3. What is an effective intervention for women who are affected by IPV? To women who are affected by IPV or at risk of IPV, after confirming her intention, a cognitive behavioral therapy, supportive counseling, and home visits are recommended.

Preg-CQ2. What is effective to prevent perineal tears? For primiparas, inform them that conducting perineal massage from their 34th weeks of gestation, has a possibility of reducing perineal tears.

Preg-CQ3-1. The effect of iron supplementation during pregnancy. Iron supplementation to prevent iron deficiency anemia for healthy pregnant women is not recommended.

Preg-CQ3-2. The effect of folic acid during pregnancy. Taking folic acid from food and supplements in the amount of 0.4mg/day (no more than 1.0mg/day) for more than one month before being pregnant until the third month of pregnancy is recommended.

Preg-CQ3-3. Is there a need for vitamin supplementations (A, B1, B2, B6, B12, C, D, and E) during pregnancy? If women are healthy and are on regular diets, there is no need to take vitamin supplementations (A, B1, B2, B6, B12, C, D, and E).

Preg-CQ4-1. What is an effective way to reduce pelvic and back pain during pregnancy? Informing pregnant women that exercise has a possibility to reduce pelvic and back pain and is recommended.

Preg-CQ4-2. What is an effective way to improve symptoms with varicose vein and edema during pregnancy? There is a possibility that rutoside may improve varicose vein symptoms, but is not recommended in terms of side effects. As for edema, reflexology and immersion of the legs in warm water has a possibility of reducing the symptoms so this may be recommended as one of the options.

Preg-CQ5. What is effective to treat constipation during pregnancy? Dietary fiber intake is recommended to treat constipation during pregnancy. If there is no improvement, laxative use may be considered.

Preg-CQ6. What is an effective way to treat hemorrhoids during pregnancy? To treat constipation, which is a factor that worsens hemorrhoids, dietary fiber intake is recommended.

Preg-CQ7-1. Is a small amount of alcohol intake acceptable during pregnancy? Temperance is recommended to pregnant women.

Preg-CQ7-2. Should caffeine intake be refrained during pregnancy? No more than 300mg/day of caffeine intake should be recommended to pregnant women.
Intrapartum section (30 CQs)

Intra-CQ1. The effectiveness of induction for post due date. [Evidence statements] When comparing induction of labor and awaiting for spontaneous labor at 40 weeks or post-term for women without complications, women who were induced when over 41 weeks had a tendency of fewer meconium aspiration syndrome babies and fewer caesarean sections. However, there was not enough evidence to indicate that induction of labor is beneficial compared with awaiting spontaneous labor regardless of a favorable or unfavorable condition of the cervix. Although there is positive data showing that induction of labor is more favorable than awaiting spontaneous labor in the case of labor after 42 weeks, there is not enough evidence showing a definitive number of weeks signaling by when induction of labor should be conducted.

Intra-CQ2. Is membrane sweeping effective to induce labor? [Evidence statements] According to the systematic review (Boulvain, Stan & Irion, 2005) and referred to in the “NICE induction of labour”, membrane sweeping of women both primipara and multipara with an unfavorable cervix reduces both frequency of pregnancy continuing beyond 42 weeks and formal induction of labor. When limited to primiparas, membrane sweeping is expected to reduce the number of women not in labor or not delivered within 48 hours, not delivered within one week, and formal induction of labor. When limited to multiparas, there was no significant difference in formal induction of labor and no other outcomes were described. However, women receiving membrane sweeping reported significantly more discomfort and pain, and also reported bleeding and irregular contractions than those who did not receive membrane sweeping.

Intra-CQ3. Is nipple or breast stimulation effective to induce labor? Nipple or breast stimulation may be recommended as one of the non-medicated options to induce labor.

Intra-CQ4. Is acupressure or acupuncture effective to induce labor? Acupressure or acupuncture is not recommended to induce labor.

Intra-CQ5. What is the accurate way to check the fetal heart rate when women are admitted for labor? Using cardiotocography to check the normal fetal heart beat pattern is recommended when women are admitted for labor.

Intra-CQ6. Does intermittent Doppler auscultation and continuous monitoring during labor make a difference in the woman's and her newborn's outcomes? During the first stage of labor for low-risk pregnant women, intermittent Doppler auscultation (at least every 15 minutes for more than a minute, in the latent and active phase) is recommended. However, when labor moves into high-risk (meconium stained liquor, non-reassuring fetal status, fever in the mother, bleeding before delivery, and induction of labor), continuous monitoring using cardiotocography is recommended.

Intra-CQ7. The effect and risk of epidural anesthesia. [Evidence statements] According to the Randomized Controlled Trial (RCT) referred to in the NICE guideline and the Cochrane systematic review labor pain was effectively relieved by using epidural anesthesia. However, there was not enough evidence to show the effectiveness in shortening the first stage of labor and the caesarian section rate. Evidence showed that epidural anesthesia was associated with prolonged second stage of labor and the increase of instrumental delivery.

Intra-CQ8. Does warm water immersion during the first stage of labor relieve labor pain? Warm water immersion during the first stage of labor is effective to relieve labor pain.

Intra-CQ9. Is acupressure or acupuncture effective to relieve labor pain? Acupressure or acupuncture may be used as one of the care modalities to relieve labor pain but is not so strongly recommended.

Intra-CQ10. Should drinking and eating be restricted during labor? Women should not be restricted from drinking and eating during labor and should be free to do so.

Intra-CQ11. Does walking during the first stage of labor accelerate labor? Women should be recommended to be move freely in the upright position.

Intra-CQ12. Is amniotomy effective to augment abnormal labor progression due to weak labor pain? Amniotomy is not recommended to augment weak labor pain due to abnormal labor progression.

Intra-CQ13. Is an enema during the first stage of labor?
labor effective to augment labor? Enemas during the first stage of labor aimed to augment labor should not be recommended.

Intra-CQ14. Is acupressure or acupuncture effective to augment labor? Acupressure or acupuncture may be used as one of the care modalities to augment labor but is not so strongly recommended.

Intra-CQ15. Is vulva cleansing needed at the time of delivery? Cleaning the vulva using warm tap water at the time of delivery is recommended.

Intra-CQ16. Is supine position recommended during the second stage of labor? We should explain to women that there are a variety of options for positions during labor and each position has both advantages and disadvantages.

Intra-CQ17. Is manual fundal pressure (Kristeller maneuver) during the second stage of labor effective? Manual fundal pressure during the second stage of labor for normal vaginal delivery should not be recommended.

Intra-CQ18. Does perineal massage during the second stage of labor prevent perineal trauma? Perineal massage by medical staff should not be performed.

Intra-CQ19. Does applying warm compression to the perineum during the second stage of labor prevent perineal tears? Applying warm compression to the perineum during the second stage of labor is recommended as one of the options of care because it reduces the incidence of third- and fourth-degree perineal tears.

Intra-CQ20. Is hands-on technique needed to prevent perineal trauma? Hands-on technique is not always needed.

Intra-CQ21. Does routine episiotomy prevent perineal trauma and improve newborn's outcome? [Evidence statements] According to the systematic review (Carroli & Mignini, 2009), 75% of the women who were allocated to the routine episiotomy group actually had an episiotomy, whereas it was 28% in the restricted episiotomy policy group, which showed that restricted episiotomy policies clearly had lower rates of performing episiotomies. Women in the restricted episiotomy group showed less severe perineal trauma (RR 0.67 [95%CI 0.49, 0.91]), less suturing (RR 0.71 [95%CI 0.61, 0.81]), fewer healing complications (RR 0.69 [95%CI 0.56, 0.85]), and less perineal pain at discharge (RR 0.72 [95%CI 0.65, 0.81]). Regarding long-term effects, there were no significant differences in dyspareunia, urinary incontinence, and neonatal outcomes. Therefore, restrictive episiotomy has numerous benefits for women and the effect on the newborns did not differ. Moreover, the NICE guideline recommends, “Do not carry out a routine episiotomy during spontaneous vaginal birth. Perform an episiotomy if there is a clinical need, such as instrumental birth or suspected fetal compromise.”

Intra-CQ22. Is taking the hands and knees position effective to correct the fetus's abnormal rotation (occipitoposterior position of the vertex) during labor? Taking the hands and knees position during the second stage of labor has a tendency to correct the fetus’s abnormal rotation, so this could be one of the options of care.

Intra-CQ23. Is oropharyngeal and nasopharyngeal suctioning to newborns in normal delivery needed? If the newborn is “neither preterm, weak breathing/crying, nor indicating poor muscle tone”, suctioning of the oropharyngeal and nasopharyngeal is not needed.

Intra-CQ24. Do the outcomes of the infant differ between early cord clamping and delayed cord clamping? In Japan, delayed cord clamping is not recommended because this has a possibility of increasing the incidence of phototherapy.

Intra-CQ25. Is early skin-to-skin contact effective? Early skin-to-skin contact should be recommended to start within 30 minutes post birth, and last till the first two hours after birth or until the first breast feeding finishes. However, informed consent from the family is needed and the oxygen saturation monitor should be applied or a medical staff having neonatal resuscitation skills should be continuously observing the situation.

Intra-CQ26. Is suture needed to first- and second-degree perineal tears? [Evidence statements] A small RCT referred in the NICE guideline (intrapartum care), recommends that in case of first-degree perineal tears, the wounds should be sutured unless the skin edges are well opposed. The Cochrane systematic review (Elharmeel, Chaudhary & Tan, et al., 2011) included two RCTs. Although the results were not combined because
of the differences in outcomes, they reported that there is not enough evidence to conclude the necessity of suturing first- and second-degree perineal tears. However, researchers of a RCT (Lundquist, Olsson & Nissen, et al. 2000) including first- and second-degree perineal tears (no bleeding, edges of the tear face each other, and the depth and length of the laceration does not exceed 2×2cm), reported that there were no benefits from suturing and suturing had some harm; although, evidence was not found about the usage of clamps and methods other than suturing.

Intra-CQ27. Which is recommended in the third stage of labor: active management or expectant management? In case of low risk, expectant management is recommended when considering the advantages and disadvantages of both active management and expectant management of labor. However, in case there is an incidence of postpartum hemorrhage during labor, active management should be employed.

Intra-CQ28. What, when, and how is prophylactic uterotonic administration effective during the third stage of labor? [Evidence statements] When comparing prophylactic uterotonics during the third stage of labor and placebo, prophylactic oxytocin (5–10IU) significantly reduced the risk of postpartum hemorrhage greater than 1,000mL and greater than 500mL, reduced the mean blood loss during labor, and decreased the usage of therapeutic uterotonics. When comparing oral misoprostol (400–600µg) and placebo, this reduced blood transfusions. Comparing the administration of ergot alkaloids (0.2–0.5mg) with untreated, this reduced therapeutic uterotonics. Oxytocin is preferable to ergot alkaloids because ergot alkaloids are linked to the increase of manual removal of the placenta and high blood pressure when compared to oxytocin. Administering the prophylactic uterotonics, could be either before or after the delivery of the placenta because effects and side effects do not differ.

The effectiveness of administering oxytocin via umbilical cord is not identified. Although the effectiveness of intramuscular or intravenous prophylactic oxytocin usage was identified, there were no RCTs to indicate which is beneficial. In case of excessive postpartum hemorrhage, proceed according to the “Guidelines for management of critical bleeding in obstetrics 2016” (Japan Society of Obstetrics and Gynecology, Japan Association of Obstetricians and Gynecologists, Japan Society of Perinatal and Neonatal Medicine, Japanese Society of Anesthesiologists, The Japan Society of Transfusion Medicine and Cell Therapy, 2016).

Intra-CQ29-1. Does uterine massage after birth prevent hemorrhage when prophylactic uterotonics is not administered? Uterine massage is not recommended as preventive intervention against postpartum hemorrhage.

Intra-CQ29-2. Does uterine massage after birth prevent hemorrhage when prophylactic uterotonics is administered? Uterine massage is not recommended as preventive intervention against postpartum hemorrhage.

Conclusion

The Guidelines Committee of Japan Academy of Midwifery is now working on a national survey to assess both the guideline adoption and nature of implementation during clinical situations. In clinical situations where the recommendations cannot be provided, it is important to document the rationale. Therefore, these will be discussed for further investigation to fill the gap. We are also continuing to revise the guideline and are considering adding CQs for postpartum care until 2020.

All Japanese midwives are responsible to improve midwifery care based on evidence. This guideline will contribute to our profession.

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Conflict of Interest

The authors have no conflicts of interest to declare.

References


Japan Academy of Midwifery (2012b). The Japan Academy of Midwifery (JAM), Aims of JAM. http://square.umin.ac.jp/jam/english.html


日本助産学会 エビデンスに基づく助産ガイドライン
—妊娠期・分娩期2016の概要

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抄録

周産期を通じて安全で快適なケアを提供するには助産実践指針が必要である。日本助産学会は健康なローリスクの女性と新生児へのケア指針を示した「エビデンスに基づく助産ガイドライン—妊娠期・分娩期2016」を刊行した。この2016年版は2012年版に新たに妊娠期の臨床上の疑問（Clinical Question, 以下CQ）を13項目加え、既にある分娩期のCQ30項目には最新のエビデンスを加えた。

このガイドラインでは助産実践を行う上で日常助産師が遭遇しやすい臨床上の疑問に答え、ケアの指針を示している。推奨は最新のエビデンスに基づいているため、ここに示されている内容は現時点での“最良の実践”と考える。本ガイドラインに期待する役割は次の3つである：1)助産師がエビデンスに基づいたケアを実践し、女性の意思決定を支援するための指針としての役割、2)助産師を養成する教育機関において、日進月歩で進化していく研究を探索する意味を学び、知識やケアの質が改善している事実を学ぶ道具としての役割、3)研究が不足し充分なエビデンスが得られていない課題を認識し、研究活動を鼓舞していく役割。そして本稿においてガイドラインの英語を紹介する目的は次の通りである：1)日本の助産師が編纂したガイドラインを世界に紹介・発信すること、2)日本の研究者が英語で本ガイドラインを引用する際の共通認識として用いること。

2016年版では、合計43項目のCQに対して推奨を示しているが、次の6つに関しては産科領域で広く用いられているものの、医行為に関わるため推奨ではなく「エビデンスと解説」にとめている：CQ1分娩誘発、CQ2卵巣摘出、CQ7硬膜外麻酔、CQ21会陰切開、CQ26会陰縫合、CQ28予防的子宮収縮薬投与。2012年版から推奨が改訂されたCQは次の通りである：CQ3乳汁・乳頭刺激の分娩誘発効果、CQ9指圧、鍼灸療法の産痛緩和効果、CQ14指圧、鍼灸療法の陣痛抑制効果。
なお、本論文の一部は「エビデンスに基づく助産ガイドライン—妊娠期・分娩期2016」からの抜粋であり、推奨の部分は翻訳である。

キーワード：助産、ガイドライン、ケア指針、妊娠、分娩