# **Complete Summary**

#### **GUIDELINE TITLE**

Contraception during breastfeeding.

# **BIBLIOGRAPHIC SOURCE(S)**

Academy of Breastfeeding Medicine Protocol Committee. ABM clinical protocol #13: contraception during breastfeeding. Breastfeed Med 2006 Spring;1(1):43-51. [18 references] <a href="PubMed">PubMed</a>

## **GUIDELINE STATUS**

This is the current release of the guideline.

# **COMPLETE SUMMARY CONTENT**

SCOPE

**DISCLAIMER** 

METHODOLOGY - including Rating Scheme and Cost Analysis
RECOMMENDATIONS
EVIDENCE SUPPORTING THE RECOMMENDATIONS
BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS
CONTRAINDICATIONS
QUALIFYING STATEMENTS
IMPLEMENTATION OF THE GUIDELINE
INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT
CATEGORIES
IDENTIFYING INFORMATION AND AVAILABILITY

## SCOPE

# **DISEASE/CONDITION(S)**

Unintended pregnancy

# **GUIDELINE CATEGORY**

Counseling Evaluation Management Prevention Risk Assessment

#### **CLINICAL SPECIALTY**

Family Practice
Internal Medicine
Nursing
Obstetrics and Gynecology
Pediatrics
Preventive Medicine

## **INTENDED USERS**

Advanced Practice Nurses Allied Health Personnel Nurses Physician Assistants Physicians

## **GUIDELINE OBJECTIVE(S)**

To outline the contraceptive methods available for use during breastfeeding, and to provide additional background on the Lactational Amenorrhea Method (LAM) and its use

## **TARGET POPULATION**

Breastfeeding mothers

## INTERVENTIONS AND PRACTICES CONSIDERED

- 1. Assessment of criteria for the period of lowest pregnancy risk
- 2. Prenatal assessment of mother's choice for postpartum contraception
- 3. Assessment of likelihood of success with lactational amenorrhea method (LAM) as a method of family planning
- 4. Patient education on the correct use of LAM as a method of family planning
- 5. Discussion of alternative methods of contraception
  - Natural family planning
  - Barriers
  - Intrauterine devices (IUDs)
  - Progestin-only methods
  - Estrogen-containing contraceptives
- 6. Discussion of optimal child spacing

## **MAJOR OUTCOMES CONSIDERED**

- Incidence of unwanted pregnancy
- Effect of hormonal contraception on lactation, breast feeding

# **METHODOLOGY**

# METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

## **DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE**

An initial search of relevant published articles written in English in the past 20 years in the fields of medicine, psychiatry, psychology, and basic biological science is undertaken for a particular topic. Once the articles are gathered, the papers are evaluated for scientific accuracy and significance.

#### NUMBER OF SOURCE DOCUMENTS

Not stated

# METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus (Committee)
Weighting According to a Rating Scheme (Scheme Given)

### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

#### **Levels of Evidence**

- I Evidence obtained from at least one properly randomized controlled trial
- II-1 Evidence obtained from well-designed controlled trials without randomization
- II-2 Evidence obtained from well-designed cohort or case-control analytic studies, preferably from more than one center or research group
- II-3 Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments (such as the results of the introduction of penicillin treatment in the 1940s) could also be regarded as this type of evidence.
- III Opinions of respected authorities, based on clinical experience, descriptive studies and case reports; or reports of expert committees

# METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses Systematic Review with Evidence Tables

## **DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE**

An expert panel is identified and appointed to develop a draft protocol using evidence based methodology. An annotated bibliography (literature review), including salient gaps in the literature, are submitted by the expert panel to the Protocol Committee.

## METHODS USED TO FORMULATE THE RECOMMENDATIONS

**Expert Consensus** 

# DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

#### RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

## **COST ANALYSIS**

A formal cost analysis was not performed and published cost analyses were not reviewed.

#### METHOD OF GUIDELINE VALIDATION

External Peer Review Internal Peer Review

## **DESCRIPTION OF METHOD OF GUIDELINE VALIDATION**

Draft protocol is peer reviewed by individuals outside of lead author/expert panel, including specific review for international applicability. Protocol Committee's subgroup of international experts recommends appropriate international reviewers. Chair (co-chairs) institutes and facilitates process. Reviews submitted to committee Chair (co-chairs).

Draft protocol is submitted to The Academy of Breastfeeding Medicine (ABM) Board for review and approval. Comments for revision will be accepted for three weeks following submission. Chair (co-chairs) and protocol author(s) amends protocol as needed.

Following all revisions, protocol has final review by original author(s) to make final suggestions and ascertain whether to maintain lead authorship.

Final protocol is submitted to the Board of Directors of ABM for approval.

# RECOMMENDATIONS

## **MAJOR RECOMMENDATIONS**

# **General Principles**

Table. Principles for Consideration in Contraception During Lactation

| When helping a breastfeeding mother choose a method of family planning, consider her:        | In regards to:   |
|--|--|
| Breastfeeding patterns, status, and plans  | Issues concerning lactational amenorrhea method (LAM) and hormonal methods                       |
| 2. Child's age   | Issues concerning LAM, hormonal methods, intrauterine device (IUD) insertion, and barrier sizing |
| 3. Age   | Issues concerning hormonal methods   |
| 4. Previous contraceptive experience   | Social and use issues, as well as sensitivities  |
| 5. Husband's (partner's) opinions on various methods   | Social and use issues  |
| 6. Childbearing plans  | Spacing versus limiting methods  |
| 7. Health status   | Spacing versus limiting methods and hormonal methods   |
| 8. Accessibility of family planning methods, health care personnel, and socioeconomic status | Local access, availability issues, and affordability issues                                      |

# **Lactational Amenorrhea Method (LAM) of Postpartum Contraception**

# Method: What is LAM?

The Lactational Amenorrhea Method (LAM) is presented as an algorithm (see Figure 1 in the original guideline document) and includes three criteria for defining the period of lowest pregnancy risk. Furthermore, it advises the immediate commencement of other methods if any one of the three criteria is not met. Clinically, the mother is asked:

- Have you had a menstrual bleed?
- Are you giving any supplementary foods or fluids in addition to breastfeeding?
- Is your infant older than six months of age?

If she answers negatively to all three criteria, she meets the requirements for LAM efficacy. She should be advised to initiate another form of contraception if any of the above three questions are answered affirmatively to achieve adequate efficacy for birth spacing or fertility limitation. If the mother is interested in and qualifies for LAM, she is advised to ask herself the same three questions in an ongoing manner. It is advisable to ensure that she has her next method on hand, and initiates its use whenever her answer to any of the three questions changes. She should be advised to contact her health care professional immediately if she has any questions as to whether or not the method still applies.

# **Definitions for LAM Use**

To use LAM correctly, it is important that the patient understand each of the three criteria. Menses return, for the purposes of LAM use, is defined as any bleeding that occurs after 56 days postpartum that is perceived by the patient as a menses, or any two consecutive days of bleeding. Full or nearly full breastfeeding is shown in Figure 2 in the original guideline document, and includes exclusive, nearly exclusive, and some irregularly provided supplements, as long as they do not disrupt the frequency of feeds. This method of family planning is now used in more than 30 countries and has been included in the family planning and Maternal and Child Health policy in several countries. It has been widely accepted as a natural family planning method that demands no abstinence. It is used as an introductory method for the postpartum period, or for the woman who hesitates to use a commodity-based method. It has the added benefit of encouraging optimal breastfeeding behavior, providing synergistic support for primary health of the mother and the child.

# **Considerations for Physician Counseling and Method Use**

Postpartum contraception, like breastfeeding, should be discussed with patients during prenatal visits. The contraceptive choice a woman makes, with or without her partner's input, depends on factors such as previous experience with contraceptives, future childbearing plans, husband or partner's attitude, and her lactation status. If a patient is not comfortable with a method, she may use it ineffectively or not at all, even if she does not wish to become pregnant.

There are several common reasons why a woman may choose LAM: she may prefer a period of time without taking medicine or using any devices, she may prefer more time for selection of a long-term or permanent method, or she may wish to try something based on her natural physiology.

Frequent nursing and milk expression alters the hypothalamic pulsatility of gonadotropin releasing hormone (GnRH) production, which in turn mediates follicle stimulating and luteinizing hormones, so that effective ovulation is less likely to occur. Several milk expression studies confirmed that the hormonal response is not identical to breastfeeding, so if the milk expression is a regular occurrence, some of the physiological responses may be modified. This is not directly mediated by prolactin. A patient, who has had a spontaneous or induced abortion prior to 20 weeks, usually will have spontaneous ovulation that results in the secretory portion of the menstrual cycle leading to menses. The patient will usually ovulate before any vaginal bleeding. If she delivers at term and is fully breastfeeding, however, vaginal bleeding (once the 6 weeks of lochia has stopped) nearly always occurs prior to first adequate ovulation during the first 6 months. Once regular feeding begins, there is an increase in fertile first cycles. Ovulation in the non-lactating woman may occur as early as 3 weeks postpartum.

## **LAM Management Issues**

There are several suggested behaviors that would contribute to method success and duration.

- LAM is not meant for patients who are giving regular supplemental feedings.
- Women can use LAM while working if they pump their breasts and provide milk to the baby's caregiver during their absence. However, in one study

using this approach, the efficacy was about 95%, slightly lower, but not significantly different than efficacy in women not separated from their infants. Further research is needed on this issue; however, if this is the only method a woman is willing to accept and is well informed of the possibility of decreased efficacy, LAM should remain an option for women who are regularly separated from their infants.

- One set of studies found that exclusively breastfeeding women using LAM are more likely to be amenorrheic at 6 months than exclusively breastfeeding controls (84% vs. 69.7%, respectively). Women who use LAM actively, have a higher feeding frequency, and, hence, shorter inter-feeding intervals, than other exclusive breastfeeders (see Figure 4 in the original guideline document). However, even with short inter-feeding intervals, some women experience earlier menses return. While we do not know whether these cycles are adequate for conception, no other sign of imminent fertility return are evident. Therefore, whether or not breastfeeding continues to be frequent, another method must be used for birth spacing when menses return.
- Three studies have indicated that the efficacy of LAM can be maintained during the 6 to 12 month period, provided the mother who originally followed this method, continues to breastfeed before giving complementary foods at less than 4 hours intervals during the day and 6 hours intervals at night while remaining amenorrheic.

## **Transition to Other Methods**

When LAM no longer applies, or whenever a breastfeeding woman wishes to use an alternate family planning method, not all other methods have equal consequences for breastfeeding success. Therefore, alternative methods are presented ranked by increasing potential impact on breastfeeding success (see Table below). While not equally efficacious, the first choice methods are those that do not interfere with lactation. While studies show no major problems when progestin-only methods are introduced, the weight of anecdotal evidence, as well as the possible postpartum impact of progestins on prolactin, merits the second choice rating. Estrogen containing pills are known to reduce milk quantity. Optimal child spacing for maternal recovery, the support of lactation duration, and for child growth, development and survival may be influenced by particular demographics. A minimum of 18 months between births is recommended under all circumstances and at least three years or longer is recommended in developing countries.

# Table. Family Planning During Lactation: Minimizing Physiologic Impact on Breastfeeding

- First Choice Methods
  - LAM
  - Natural Family Planning
  - Barriers
  - Intrauterine Device (IUD)
- Second Choice Methods
  - Progestin-only methods
- Third Choice Methods
  - Estrogen containing contraceptives

## Issues In Counseling Selection of Contraceptives During Breastfeeding

# **Advantages and Disadvantages**

The issues to be considered in counseling a pregnant or postpartum woman concerning contraceptive choice for use during breastfeeding extend beyond issues of efficacy. She will also wish to ensure that the selected method is appropriate for breastfeeding expectations (as listed in "General Principles," above) in addition to the considerations for the non-lactating woman. The Table 3 in the original guideline document, titled "Use of Contraceptive Methods During Lactation: Advantages, Disadvantages and Impact on Lactation," provides useful information for counseling the lactating mother and is not generally considered in contraception handbooks.

# CLINICAL ALGORITHM(S)

A clinical algorithm for the lactational amenorrhea method (LAM) is provided in the original guideline document.

# **EVIDENCE SUPPORTING THE RECOMMENDATIONS**

#### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence supporting the recommendations is not specifically stated.

The recommendations were based primarily on a comprehensive review of the existing literature. In cases where the literature does not appear conclusive, recommendations were based on the consensus opinion of the group of experts.

# BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

#### **POTENTIAL BENEFITS**

- Appropriate use of contraception during breastfeeding
- Lactational amenorrhea method (LAM) has the added benefit of encouraging optimal breastfeeding behavior, providing synergistic support for primary health of the mother.

# **POTENTIAL HARMS**

Side effects associated with contraceptive use (see Table 3 in the original guideline document for disadvantages and side effects associated with various methods)

### **CONTRAINDICATIONS**

## **CONTRAINDICATIONS**

Copper intrauterine devices are contraindicated with Wilson's disease or copper allergy.

# **QUALIFYING STATEMENTS**

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A central goal of the Academy of Breastfeeding Medicine is the development of clinical protocols for managing common medical problems that may impact breastfeeding success. These protocols serve only as guidelines for the care of breastfeeding mothers and infants and do not delineate an exclusive course of treatment or serve as standards of medical care. Variations in treatment may be appropriate according to the needs of an individual patient.

# IMPLEMENTATION OF THE GUIDELINE

## **DESCRIPTION OF IMPLEMENTATION STRATEGY**

An implementation strategy was not provided.

#### **IMPLEMENTATION TOOLS**

Clinical Algorithm

For information about <u>availability</u>, see the "Availability of Companion Documents" and "Patient Resources" fields below.

# INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

## **IOM CARE NEED**

Staying Healthy

## **IOM DOMAIN**

Effectiveness Patient-centeredness

## **IDENTIFYING INFORMATION AND AVAILABILITY**

# **BIBLIOGRAPHIC SOURCE(S)**

Academy of Breastfeeding Medicine Protocol Committee. ABM clinical protocol #13: contraception during breastfeeding. Breastfeed Med 2006 Spring;1(1):43-51. [18 references] PubMed

### **ADAPTATION**

Not applicable: The guideline was not adapted from another source.

## **DATE RELEASED**

2005 (published 2006)

# **GUIDELINE DEVELOPER(S)**

Academy of Breastfeeding Medicine - Professional Association

# **SOURCE(S) OF FUNDING**

Academy of Breastfeeding Medicine

A grant from the Maternal and Child Health Bureau, US Department of Health and Human Services

#### **GUIDELINE COMMITTEE**

Academy of Breastfeeding Medicine Protocol Committee

# **COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE**

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## FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

None to report

## **GUIDELINE STATUS**

This is the current release of the guideline.

## **GUIDELINE AVAILABILITY**

Electronic copies: Available in Portable Document Format (PDF) from the <u>Academy of Breastfeeding Medicine Web site</u>.

Print copies: Available from the Academy of Breastfeeding Medicine, 140 Huguenot Street, 3rd floor, New Rochelle, New York 10801.

## **AVAILABILITY OF COMPANION DOCUMENTS**

The following is available:

• Procedure for protocol development and approval. Academy of Breastfeeding Medicine. 2007 Mar. 2 p.

Print copies: Available from the Academy of Breastfeeding Medicine, 140 Huguenot Street, 3rd floor, New Rochelle, New York 10801.

#### **PATIENT RESOURCES**

None available

#### **NGC STATUS**

This NGC summary was completed by ECRI Institute on November 14, 2007. The information was verified by the guideline developer on October 31, 2008.

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