GUIDELINE TITLE
Management of recurrent early pregnancy loss.

BIBLIOGRAPHIC SOURCE(S)

GUIDELINE STATUS
This is the current release of the guideline.


COMPLETE SUMMARY CONTENT

SCOPE
DISEASE/CONDITION(S)
Recurrent early pregnancy loss

GUIDE LINE CATEGORY
Counseling
Evaluation
Management
Prevention

CLINICAL SPECIALTY
Medical Genetics
Obstetrics and Gynecology

INTENDED USERS
Physicians

GUIDELINE OBJECTIVE(S)
- To aid practitioners in making decisions about appropriate obstetric and gynecologic care
- To provide the practitioner with a rational, modern approach to the management of recurrent pregnancy loss

TARGET POPULATION
Women with recurrent early (<15 weeks of gestation) pregnancy loss and their partners

INTERVENTIONS AND PRACTICES CONSIDERED
1. Testing for parental balanced chromosome abnormalities
2. Hysteroscopic evaluation and resection of uterine septum
3. Testing for lupus anticoagulant and antiphospholipid antibodies and treating with heparin and low-dose aspirin if test results are positive
4. Endometrial biopsy to confirm a diagnosis of luteal phase defect
5. Counseling couples with unexplained recurrent pregnancy loss regarding the potential for successful pregnancy without treatment

Note: The following interventions were considered but not recommended:
1. Mononuclear cell (leukocyte) immunization and intravenous immune globulin (IVIG)
2. Luteal phase support with progesterone
3. Cultures for bacteria or viruses
4. Tests for glucose intolerance, thyroid abnormalities, antibodies to infectious agents, antinuclear antibodies, antithyroid antibodies, paternal human leukocyte antigen status, and maternal antipaternal antibodies

MAJOR OUTCOMES CONSIDERED
The role of genetic abnormalities, hormonal and metabolic disorders, uterine anatomic abnormalities, infectious causes, environmental and
occupational factors, thrombophilia, and autoimmune disorders in recurrent pregnancy loss

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE
Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE
The MEDLINE database, the Cochrane Library, and American College of Obstetricians and Gynecologists (ACOG’s) own internal resources and documents were used to conduct a literature search to locate relevant articles published between January 1985 and October 2000. The search was restricted to articles published in the English language. Priority was given to articles reporting results of original research, although review articles and commentaries also were consulted. Abstracts of research presented at symposia and scientific conferences were not considered adequate for inclusion in this document.

Guidelines published by organizations or institutions such as the National Institutes of Health and the American College of Obstetricians and Gynecologists were reviewed, and additional studies were located by reviewing bibliographies of identified articles.

NUMBER OF SOURCE DOCUMENTS
Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE
Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE
Studies were reviewed and evaluated for quality according to the method outlined by the U.S. Preventive Services Task Force:

I Evidence obtained from at least one properly designed 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 also could be regarded as this type of evidence.

III Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees

METHODS USED TO ANALYZE THE EVIDENCE
Review of Published Meta-Analyses
Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE
Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS
Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS
Analysis of available evidence was given priority in formulating recommendations. When reliable research was not available, expert opinions from obstetrician-gynecologists were used. See also the “Rating Scheme for the Strength of Recommendations” field regarding Grade C recommendations.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS
Based on the highest level of evidence found in the data, recommendations are provided and graded according to the following categories:

Level A — Recommendations are based on good and consistent scientific evidence.
Level B — Recommendations are based on limited or inconsistent scientific evidence.
Level C — Recommendations are based primarily on consensus and expert opinion.

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

METHOD OF GUIDELINE VALIDATION
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION
Practice Bulletins are validated by two internal clinical review panels composed of practicing obstetrician-gynecologists, generalists and subspecialists. The final guidelines are also reviewed and approved by the American College of Obstetricians and Gynecologists (ACOG) Executive Board.
RECOMMENDATIONS

MAJOR RECOMMENDATIONS
The grades of evidence (I-III) and levels of recommendations (A-C) are defined at the end of "Major Recommendations" field.

The following recommendations are based on good and consistent scientific evidence (Level A):

- **Women with recurrent pregnancy loss** should be tested for lupus anticoagulant and anticardiolipin antibodies using standard assays. If test results are positive for the same antibody on two consecutive occasions 6 to 8 weeks apart, the patient should be treated with heparin and low dose aspirin during her next pregnancy attempt.

- **Mononuclear cell (leukocyte) immunization and intravenous immune globulin (IVIG)** are not effective in preventing recurrent pregnancy loss.

The following recommendations are based on limited or inconsistent scientific evidence (Level B):

- An association between the luteal phase defect and recurrent pregnancy loss is controversial. If a diagnosis of luteal phase defect is sought in a woman with recurrent pregnancy loss, it should be confirmed by endometrial biopsy.

- **Luteal phase support** with progesterone is of unproven efficacy.

The following recommendations are based primarily on consensus and expert opinion (Level C):

- **Couples with recurrent pregnancy loss** should be tested for parental balanced chromosome abnormalities.

- **Women with recurrent pregnancy loss and a uterine septum** should undergo hysteroscopic evaluation and resection.

- Cultures for bacteria or viruses and tests for glucose intolerance, thyroid abnormalities, antibodies to infectious agents, antinuclear antibodies, antithyroid antibodies, paternal human leukocyte antigen status, or maternal antipaternal antibodies are not beneficial and, therefore, are not recommended in the evaluation of otherwise normal women with recurrent pregnancy loss.

- **Couples with otherwise unexplained recurrent pregnancy loss** should be counseled regarding the potential for successful pregnancy without treatment.

Definitions:

Grades of Evidence

I Evidence obtained from at least one properly designed 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 also could be regarded as this type of evidence.

III Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees

Levels of Recommendation

Level A — Recommendations are based on good and consistent scientific evidence.

Level B — Recommendations are based on limited or inconsistent scientific evidence.

Level C — Recommendations are based primarily on consensus and expert opinion.

CLINICAL ALGORITHM(S)
None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS
The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS
Appropriate evaluation and management of women with recurrent early pregnancy loss

POTENTIAL HARMS
Not stated

QUALIFYING STATEMENTS
These guidelines should not be construed as dictating an exclusive course of treatment or procedure. Variations in practice may be warranted based
on the needs of the individual patient, resources, and limitations unique to the institution or type of practice.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY
An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED
- Getting Better
- Living with Illness
- Staying Healthy

IOM DOMAIN
- Effectiveness
- Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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

DATE RELEASED
2001 Feb

GUIDELINE DEVELOPER(S)
American College of Obstetricians and Gynecologists - Medical Specialty Society

SOURCE(S) OF FUNDING
American College of Obstetricians and Gynecologists (ACOG)

GUIDELINE COMMITTEE
American College of Obstetricians and Gynecologists (ACOG) Committee on Practice Bulletins-Obstetrics

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE
Not stated

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST
Not stated

GUIDELINE STATUS
This is the current release of the guideline.


GUIDELINE AVAILABILITY
Electronic copies: None available

Print copies: Available for purchase from the American College of Obstetricians and Gynecologists (ACOG) Distribution Center, PO Box 4500, Kearneysville, WV 25430-4500; telephone, 800-762-2264, ext. 192; e-mail, sales@acog.org. The ACOG Bookstore is available online at the ACOG Web site.

AVAILABILITY OF COMPANION DOCUMENTS
None available

PATIENT RESOURCES
None available

NGC STATUS
This NGC summary was completed by ECRI on September 22, 2004. The information was verified by the guideline developer on December 9, 2004.

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