

Practice Guidelines

for

New Mexico

Midwives

2008 Edition

DEDICATION

To women, the bearers and guardians of life.

We thank and praise those who love, inspire,

teach, and bless while walking this earth,

and also our dear foremothers

who did the same before us

and without whom we would not exist.

May we continue our great journey

in peace and prosperity together.

INTRODUCTION

This manual was first written many years ago by pioneering midwives in the state of New Mexico. These midwives envisioned a time where the art and science we practice would become a socially and legally sanctioned profession. Through the formalization of midwifery practice guidelines, they were able to take a giant step in the direction of that vision. Although midwifery still has not taken its necessary place within the health care profession, its practice and accessibility is even more essential to the liberation and freedom of women, of all peoples. This updated Practice Guidelines could not exist without the struggles and vision of those midwives.

Through this most recent revision process, the New Mexico Midwives Association and the State Board of Midwifery decided to take a different approach to the formalization of guidelines. Based on research into the way similar health care professions create guidelines, we planned to separate the original book or detailed “guidelines” into two separate and distinct publications:

1. New Mexico Midwives’ Practice Guidelines: a concise list of the legal parameters within which licensed midwives practice; and
2. Resource Guide for New Mexico Midwives: a detailed description of avenues for practice for midwives on a wide variety of topics. This Resource Guide is created to enable the midwife to have a handbook of suggestions for the management of both normal issues and complications as they arise in the course of care.

Due to legislation the division of Guidelines and Resource Guide cannot take effect at this time. For midwives of New Mexico to practice by current midwifery model of care this updated manual will serve as current guidelines of practice as of June 2008 until the above is completed by the state.

The Practice Guidelines for New Mexico Midwives includes six practice sections: well woman care, prenatal care, labor and birth care, birth of the placenta, postpartum care for mother, and newborn care. In addition, this book opens with a general information section in which issues of midwifery practice are explained.

It is to be expected that there will be overlapping topics among these sections. We have tried to place overlapping guidelines in the section where the situation may first occur. For example, placenta previa may first be diagnosed prenatally; therefore it appears in the prenatal section. All sexually transmitted infections are in the well woman section. Where treatment differs for pregnant women, this is noted. The phrase “natural therapies” is used throughout the Practice Guidelines. These therapies are not detailed as each midwife has many alternative health care modalities she uses (e.g. herbs, oils, homeopathic, emotional and spiritual)

We have tried to represent the art and science of midwifery in this Practice Guidelines. It reflects a philosophy that allows for the personalization of care and creativity of each midwife. We have also tried to represent the way midwives actually practice, as this Resource Guide encompasses our commitment to our clients and ourselves.

The continued creation of this Practice Guidelines has been a wonderful group endeavor which helped us discover and record our own abundance of wisdom and knowledge. May this Resource Guide serve as a rich resource for the holistic care we provide women and families.

PROCESS FOR REVISION

In order to continue to well serve women and families, this Practice Guidelines will need to be reviewed, updated, and periodically revised. We would like to ask for your input in this arduous task. So, when you are reading, using, or otherwise browsing through this great book, please take the time to jot down any ideas you may have on corrections, deletions or additions. Any grammatical errors may be brought to the immediate attention of the committee, as they may be changed without process. Any other, more detailed changes, however, need to be forwarded to the Practice Guidelines Revision Committee of the

New Mexico Midwives Association.

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All your suggestions will be taken under advisement as submitted at the annual meeting of the committee.

Thank you

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GENERAL INFORMATION

MIDWIFERY SCOPE OF PRACTICE

Licensed Midwifery care occurs independently within the healthcare system of the community, using appropriate resources for referrals to meet psychosocial, medical, economic, cultural, or family needs. Midwives may provide care for women of all ages. We offer holistic care that encompasses the needs of the well woman including the specific needs of the adolescent, pregnant, intrapartum, postpartum, peri- and post-menopausal woman. More specifically, the midwife's care includes

- A. ANTEPARTUM, INTRAPARTUM AND POSTPARTUM CARE
 - 1. Elicit an accurate medical history, identifying risk factors
 - 2. Perform appropriate physical examinations
 - 3. Perform routine antepartum laboratory work and order ultrasound as needed
 - 4. Perform complete pelvic examinations, including bimanual and speculum examination, collection of laboratory, specimens and clinical pelvimetry as indicated
 - 5. Diagnose minor conditions, such as uncomplicated upper respiratory infection (URI); asymptomatic bacteriuria or cystitis, and treat and/or consult
 - 6. Identify abnormal conditions and consult with physician
 - 7. Provide individual and group counseling and teaching
 - 8. Provide education for clients such as nutrition, childbirth, informed consent, newborn feeding, parenting skills and child development
 - 9. Manage the normal labor, birth and postpartum
 - a. Evaluate labor
 - b. Confirm rupture of membranes
 - c. Perform pelvic and cervical examinations
 - d. Assess the status of the woman/fetus during labor
 - e. Perform amniotomy when needed
 - f. Catheterize when needed
 - g. Initiate intravenous therapy as needed
 - h. Administer local anesthesia as needed
 - i. Perform and repair laceration and/or episiotomy as needed
 - j. Facilitate birth of infant and placenta
 - k. Administer anti-hemorrhagic medications as needed
 - l. Utilize natural therapies as needed
 - m. Facilitate family participation and bonding
 - n. Give woman and family postpartum instructions
 - o. Provide routine follow up of mother and newborn during the postpartum period
 - p. Manage common problems of the immediate postpartum period

10. Manage any complications of childbirth and transfer as needed
11. Support breastfeeding and its common problems
12. Perform final examination at completion of postpartum period
13. Provide family planning and sexual counseling
14. Provide community resources and referrals
15. In special situations, the midwife may manage, in collaboration with the appropriate care providers, care of woman who develop complications which is appropriate to the skills and knowledge of the particular midwife
16. Consult and refer as appropriate to other health care professionals

B. PEDIATRIC CARE

1. Manage care of the normal newborn
 - a. Provide routine follow-up for the newborn
 - b. Obtain an accurate history of the labor and birth
 - c. Perform physical assessment, including gestational age assessment of the healthy newborn
 - d. Identify deviations from normal in the newborn
 - e. Obtain labs as needed
 - f. Offer routine prophylaxis for the newborn's eyes
 - g. Offer anti-hemorrhagic prophylaxis for the newborn
 - h. Offer Newborn Metabolic and refer for Hearing Screening
 - i. File a birth certificate, request for social security number, and paternity statement as needed with the State
2. Manage emergency resuscitation
3. Provide guidance and counseling to parents regarding issues such as early childcare, feeding, safety, etc.
4. Midwives will recommend consultation with a family physician, pediatrician, or other health care provider

C. WELL WOMAN CARE

1. Provide periodic gynecologic exams, including
 - a. Perform physical exam, history and obtain appropriate lab work
 - b. Perform breast examinations, including instructions for self-examination by the client
 - c. Perform pelvic examinations and collect appropriate laboratory specimen. Diagnose and treat common gynecological problems
 - d. Educate and counsel on family planning issues and unexpected pregnancy
 - e. Fit and dispense birth control options as trained
 - f. Consult or refer for abnormal conditions as needed
 - g. Develop a comprehensive plan of care on issues such as nutrition, exercise, family violence, relaxation, emotional and spiritual health
 - h. Implement treatment for women and for other family members or sexual partners as appropriate
 - i. Provide needed counseling/and or teaching
2. Consult and refer as necessary to other health care professionals

CLIENT AND MIDWIFE RIGHTS AND RESPONSIBILITIES

Midwives and their clients share in both the joys and the responsibility of pregnancy, birth and postpartum and well woman care. A birth at home or in a birth center setting requires a high level of self awareness, respect, and responsibility on the part of the mother, her family and/or support system, and the midwife. Clients and midwives also have rights in the health care system.

- I. **CLIENT RIGHTS:** An ethical midwife will respect the personal rights of her clients, including
 - A. The right to be treated with respect, dignity and without prejudice
 - B. The right to informed consent concerning her care and to have access to relevant information upon which to base decisions
 - C. The right to freedom from coercion in decision making
 - D. The right to accept or decline treatment
 - E. The right to full disclosure of the costs of her care
 - F. The right to know who will participate in her care and to obtain additional consultation of her choice
 - G. The right not to be abandoned, neglected, or discharged from care without an opportunity to find other care, or appropriate closure
 - H. The right to absolute privacy except where this right is preempted by law
 - I. The right to timely access of her midwifery records

- II. **MIDWIFE RIGHTS:** A midwife recognizes the importance of respect for her own rights as care provider, including
 - A. The right to refuse care to clients with whom no midwife/client relationship has been established
 - B. The right to discharge clients from her care, provided adequate referral to other care is established
 - C. The right to receive honest, relevant information from clients upon which to base care
 - D. The right to receive reasonable compensation for services rendered

- III. **CLIENT RESPONSIBILITY:** A thorough commitment from the client and her family is necessary to ensure the safety and well-being of mother and baby. Most parents seeking a birth at home or in a birth center accept responsibility for their health, sharing information about changes and matters that may affect their pregnancy and birth. Maintaining communication is important in response to the particular needs a client may have during this special time of life. A client will:
- A. Care for her physical, emotional and spiritual health to the best of her ability.
 - B. Make a commitment to learn about her body, the changes that occur during pregnancy, the birth process, the postpartum period, and throughout her life cycle.
 - C. Work with the midwife to change or improve nutrition, health, and environment as needed.
 - D. Consider additional screening/tests or other health care provider visits as needed.
 - E. Communicate any concerns or changes that affect any aspect of her care.
 - F. Respect appointment schedule, changing times only when necessary and with suitable notification.
 - G. Discuss, sign and abide by a financial agreement.
 - H. Agree to a transport or transfer of care, if necessary, after all aspects are considered and discussed.

- IV. **MIDWIFE RESPONSIBILITY:** A midwife recognizes certain responsibilities including
- A. To serve as the guardian of normal birth
 - B. To honor confidentiality of information and details of the client's condition
 - C. To provide complete, accurate and relevant information to the client (and obtain a signed consent) so she can make informed choices regarding her health care
 - D. To remain responsible for the client when referring to another health care provider, until she is either discharged or formally transferred
 - E. To develop and utilize a safe and efficient mechanism for consultation, collaboration and referral
 - F. To continue professional development through ongoing evaluation of knowledge and skills and continuing education, including study of subjects relevant to midwifery practice
 - G. To know and comply with all legal requirements related to midwifery practice within the state of New Mexico
 - H. To maintain accountability for all midwifery care delivered under her supervision. Assignment and delegation of duties to other midwives or apprentices should be equal to their educational preparation and demonstrated proficiency
 - I. To accurately document the client's history, condition, physical progress and other vital information obtained during client care

- J. To file quarterly reports with the Maternal Child Health Office of the Department of Health
- K. To participate in Peer Review as a reviewer and/or a reviewee
- L. To be informed about and to implement safety and infection control methods for the protection of mothers, babies and their families as well as of the midwife, her family, other clients and staff
- M. To obtain a signed authorization to release midwifery and medical records for the purpose of insurance reimbursement, medical consultation or referral, or for the woman's own records

STATEMENT OF PHILOSOPHY

The Midwives Model of Care is based on the fact that pregnancy and birth are normal life processes.

The Midwives Model of Care includes:

- monitoring the physical, psychological, and social well-being of the mother throughout the childbearing cycle;
- providing the mother with individualized education, counseling, and prenatal care, continuous assistance during labor and birth, and postpartum support;
- minimizing technological interventions; and
- identifying and referring women who require obstetrical attention.

(adapted from the Midwifery Task Force, 1996)

As midwives, we believe the practice of midwifery to be distinct from the practice of medicine. We base our profession on a model of care which believes:

1. Each woman is unique and her care should be tailored to meet her individual needs.
2. Attending to a woman's emotional and spiritual needs is as important as providing adequate medical care.
3. Midwives are trained by other midwives, whether that training takes place in schools or through apprenticeships.
4. Midwives maintain a professional attitude and practice which promotes collegial and respectful relationships among all health care providers.
5. The relationship between midwife and client is collaborative.
6. Midwives support the inter-relationship of midwifery and communities.
7. Midwives promote the awareness of the connection between health of women, babies, and families; the environment; and the world communities.

MANA STATEMENT OF VALUES AND ETHICS

We, as midwives, have a responsibility to educate ourselves and others regarding our values and ethics and reflect them in our practices. Our exploration of ethical midwifery is a critical reflection on moral issues as they pertain to maternal/child health on every level. This statement is intended to provide guidance for professional conduct in the practice of midwifery, as well as for MANA's policy making, thereby promoting quality care for childbearing families. MANA recognizes this document as an open, ongoing articulation of our evolution regarding values and ethics.

First, we recognize that values often go unstated and yet our ethics (how we act), proceed directly from a foundation of values. Since what we hold precious, that is, what we value, infuses and informs our ethical decisions and actions, the Midwives' Alliance of North America wished explicitly to affirm our values as follows:¹

- I. Woman as an Individual with Unique Value and Worth:
 - A. We value women and their creative, life-affirming and life-giving powers which find expressions in a diversity of ways
 - B. We value a woman's right to make choices regarding all aspects of her life.

- II. Mother and Baby as Whole:
 - A. We value the openness of the pregnant woman and her unborn child – an inseparable and interdependent whole.
 - B. We value the birth experience as a right of passage: the sentient and sensitive nature of the newborn; and the right of each baby to be born in a caring and loving manner without separation from mother and family.
 - C. We value the integrity of a woman's body to be totally supported in their efforts to achieve a natural, spontaneous vaginal birth.
 - D. We value the breastfeeding relationship as the ideal way of nourishing and nurturing the newborn.

- III. The Nature of Birth:
 - A. We value the essential mystery of birth.²
 - B. We value pregnancy and birth as natural processes that technology will never supplant.³
 - C. We value the integrity of life's experiences; the physical, emotional, mental, psychological and spiritual components of a process are inseparable.
 - D. We value pregnancy and birth as personal, intimate, internal,⁴ sexual and social events to be shared in the environment and with the attendants a woman chooses.
 - E. We value the learning experiences of life and birth.
 - F. We value pregnancy and birth as processes which have lifelong impact on a woman's self esteem, her health, her ability to nurture, and her personal growth.

IV. The Art of Midwifery:

- A. We value our right to practice the art of midwifery. We value our work as an ancient vocation of women which has existed as long as humans have lived on earth.
- B. We value expertise which incorporates academic knowledge, clinical skill, intuitive judgment and spiritual awareness.⁵
- C. We value all forms of midwifery education and acknowledge the ongoing wisdom of apprenticeship as the original model for training midwives.
- D. We value the all of nurturing the intrinsic normalcy of birth and recognize that each woman and baby has parameters of well-being unique unto themselves.
- E. We value the empowerment of women in all aspects of life and particularly as that strength is realized during pregnancy, birth and thereafter. We value the art of encouraging the open expression of that strength so women can birth unhindered and confident in their abilities and in our support
- F. We value skills which support a complicated pregnancy or birth to move toward a state of greater well-being or to be brought to the most healing conclusion possible. We value the art of letting go.⁶
- G. We value the acceptance of death as a possible outcome of birth. We value our focus as supporting life rather than avoiding death.⁷
- H. We value standing for what we believe in the face of social and political oppression.

V. Woman as Mother:

- A. We value a mother's intuitive knowledge of herself and her baby before, during and after birth.⁸
- B. We value a woman's innate ability to nurture her pregnancy and birth her baby; the power and beauty of her body as it grows and the awesome strength summoned in labor.
- C. We value the mother as the only direct care provider for her unborn child.⁹
- D. We value supporting women in a non-judgmental way, whatever their state of physical, emotional, social or spiritual health. We value the broadening of available resources whenever possible so that the desired goals of health, happiness and personal growth are realized according to their needs and perceptions.
- E. We value the right of each woman to choose a care giver appropriate to her needs and compatible with her belief systems.
- F. We value pregnancy and birth as rites of passage integral to a woman's evolution into mothering.
- G. We value the potential of partners, family and community to support women in all aspects of birth and mothering.¹⁰

VI. The Nature of Relationship:

- A. We value relationship. The quality, integrity, equality and uniqueness of our interactions inform - and critique our choices and decisions.
- B. We value honesty in relationship.
- C. We value caring for women to the best of our ability without prejudice against their age, race, religion, culture, sexual orientation, physical abilities, or socioeconomic background.
- D. We value the concept of personal responsibility and the right of individuals to make choices regarding what they deem best for themselves. We value the right to true informed choice, not merely informed consent to what we think is best.
- E. We value our relationship to a process larger than ourselves, recognizing that birth is something we can seek to learn from and know, but never control.
- F. We value humility in our work.
- G. We value the recognition of our own limits and limitations.
- H. We value direct access to information readily understood by all.
- I. We value sharing information and our understanding about birth experiences, skills, and knowledge.
- J. We value the midwifery community as a support system and an essential place of learning and sisterhood.
- K. We value diversity among midwives; recognizing that it broadens our collective resources and challenges us to work for greater understanding of birth and each other.
- L. We value mutual trust and respect, which grows from a realization of all of the above. Making decisions and acting ethically: These values reflect our feelings regarding how we frame midwifery in our hearts and minds

However, due to the broad range of geographic, religious, cultural, political, educational, and personal backgrounds among our membership, how we act based on these values will be very individual. Acting ethically is a complex merging of our values and these background influences combined with the relationship we have to others who may be involved in the process taking place. We call upon all these resources when deciding how to respond in the moment to each situation.

We acknowledge the limitations of ethical codes which present a list of rules which must be followed, recognizing that such a code may interfere with, rather than enhance our ability to make choices. To apply such rules we must have moral integrity, an ability to make judgments, and we must have adequate information; with all of these an appeal to a code becomes superfluous. Furthermore, when we set up rigid ethical codes we may begin to cease considering the transformations we go through as a result of our choices as well as negate our wish to foster truly diversified practice. Rules are not something we can appeal to when all else fails. However, this is the illusion fostered by traditional codes of ethics. ¹¹ MANA's support of individual's moral integrity grows out of an understanding that there cannot possibly be one right answer for all situations.

We acknowledge the following basic concepts and believe that ethical judgments can be made with these thoughts in mind:

Moral agency and integrity are born within the heart of each individual. Judgments are fundamentally based on awareness and understanding of ourselves and others and are primarily derived from ones' own sense of moral integrity with reference to clearly articulated values. Becoming aware and increasing our understanding are ongoing processes facilitated by our efforts at personal growth on every level. The wisdom gained by this process cannot be taught or dictated but one can learn to realize, experience and evaluate it. The choices one can or will actually make may be limited by the oppressive nature of the medical, legal or cultural framework in which we live. The more our values conflict with those of the dominant culture, the more risky it becomes to act truly in accord with our values. The pregnant women and midwife are both individual moral agents unique unto themselves, having independent value and worth.

We support both midwives and the women and families we serve to follow and make known the dictates of our own conscience as our relationship begins, evolves and especially when decisions must be made which impact us or the care being provided. It is up to us to work out a mutually satisfactory relationship when and if that is possible.

It is useful to understand the two basic theories upon which moral judgments and decision making processes are based. These processes become particularly important when one considers that in our profession, a given woman's rights may not be absolute in all cases, or that in certain situations the woman may not be considered autonomous or competent to make her own decision.

One of the main theories of ethics states that one should look to the consequences of the act (ie. the outcome) and not the act itself to determine if it is appropriate care. This point of view looks for the greatest good for the greatest number. The other primary ethical theory states that one should look to the act itself (e.g. type of care provided) and if it is right, then this could override the net outcome. This is a more process oriented, feminist perspective. Midwives weave these two perspectives in the process of making decisions in their practice. Since the outcome of pregnancy is ultimately an unknown and is always unknowable, it is inevitable that in certain circumstances our best decisions in the moment will lead to consequences we could not foresee.

In summary, acting ethically is facilitated by:

- Carefully defining our values.
- Weighing the values in consideration with those of the community of midwives, families, and culture in which we find ourselves.
- Acting in accord with our values to the best of our ability as the situation demands.
- Engaging in on-going self-examination and evaluation.

There are both individual and social implications to any decision making process. The actual roles and oppressive aspects of a society are never exact, and therefore conflicts may arise, and we must weigh which choices or obligations take precedence over others.

There are inevitably times when resolution does not occur and we cannot make peace with any course of action or may feel conflicted about a choice already made. The community of women, both midwives and those we serve, will provide a fruitful resource for continued moral support and guidance.

Notes:

1. The membership largely agrees with the values that follow. However, some may word them differently or may leave out a few. This document is written to prompt personal reflection and clarification not to represent Absolute opinions.
2. Mystery is defined as something that has not or cannot be explained or understood; the quality or state of being incomprehensible or inexplicable; a tenet which cannot be understood in terms of human reason.
3. Supplant means to supersede by force or cunning; to take the place of.
4. In this context internal refers to the fact that birth happens within the body and psyche of the woman. Ultimately she and only she can give birth.
5. An expert is one whose knowledge and skill is specialized and profound, especially as the result of practical experience.
6. This addresses our desire for an uncomplicated birth whenever possible and recognizes that there are times when it is not possible. For example, due to problems with the birth, a woman may be least traumatized to have a surgical delivery. If a spontaneous vaginal birth is not possible, then we let go of that goal in order to achieve the possibility of a healthy mother and baby. Likewise, the situation where parents choose to allow a very ill, premature or deformed infant to die in their arms rather than being subjected to multiple surgeries, separations and ICU stays. This too, is a letting go of the normal for the most healing choice possible within the framework of the parent's ethics given the circumstances. What is most healing will, of course, vary from individual to individual.
7. We place the emphasis of our care on supporting life (preventive measures, good nutrition, emotional health, etc.) and not pathology, diagnosis, treatment of problems, and heroic solutions in an attempt to preserve life at any cost of quality.
8. This addresses the medical model's tendency to ignore a woman's sense of well-being or danger in many aspects of health care, but particularly in regard to her pregnancy.
9. This acknowledges that the thrust, of our care centers on the mother, her health, her well-being, her nutrition, her habits, her emotional balance and, in turn, the baby benefits. This view is diametrically opposed to the medical model which often attempts to care for the fetus/baby while dismissing or even excluding the mother.
10. While partners, other family members, and a woman's larger community can and often do provide her with vital support, in using the word potential we wish to acknowledge that many women find themselves pregnant and mothering in abusive or otherwise unsafe environments.
11. Hoagland, Sarah, paraphrased from her book, "Lesbian Ethics."

Bibliography:

Cross, Star, MANA Ethics Chair, 1989, unpublished draft of Ethics code.

Daly, Mary, Gynecology: The Metaethics of Radical Feminism, Beacon Press, Boston, MA 1978.

Hoaglaod, Sarah Lucia, Lesbian Ethics: Toward New Value, Institute of Lesbian Studies, Pale Alto. CA. 1988.

Johnson, Sonia, Going Out of Our Minds: The Metaphysics of Liberation, Crossing Press, Freedom, CA 1987

CLIENT EDUCATION

Education is an essential part of midwifery practice. The midwife is a supportive teacher and guide. She promotes understanding of physical, emotional, and social changes brought about by pregnancy and parenting as well as throughout the cycles of a woman's life. The midwife encourages her client's involvement in her own health care.

Education during pregnancy and well woman care are based on models of self-care including natural therapies. Education may include explanation of changes and needs related to pregnancy and childbirth, anticipatory guidance, short-term counseling, crisis intervention, and referral to other services. Women and their families who take responsibility for their part in improving pregnancies, births, and well woman cycles participate in a process that supports truly preventive health care.

It is impossible to write exhaustive plans of client education because real learning requires that each client be assessed individually for her educational needs. Tailoring education to client interests and needs follows the principles of personalized midwifery care. Certainly, education will evolve as new information along with continued experience becomes available to midwives.

The following components should be part of clients' education in their care:

1. Nutrition: prenatal, during lactation, and well woman
2. Exercise and activity
3. Sexuality during pregnancy and early postpartum, well woman and peri/post-menopausal
4. Fertility counseling/Family planning/contraception
5. Options for unplanned pregnancy
6. Drugs/smoking/alcohol/work-place environmental hazards during pregnancy or well woman
7. Family relationships/dysfunction/violence
8. Child development and family integration
9. Routine well woman schedule
10. Well woman testing
11. Prenatal visit schedule
12. Maternal changes and common experiences/discomforts
13. Fetal development
14. Routine and special prenatal and newborn testing
15. Normal labor, birth and postpartum, newborn
16. Preparation for giving birth in the selected birth site, including sibling preparation and comfort measures
17. Essentials of newborn care
18. Danger signs of pregnancy, birth, and newborn
19. Complications of pregnancy, labor, birth, postpartum, and newborn

20. Emergency plans
21. Breastfeeding and bonding
22. Loss and grief

MEDIATION

In any relationship, disagreements may arise. If unresolved, disagreements can become problematic for individuals, professionals, clients and the community. Disputes may arise between individual midwives, between midwives and clients, between midwives and student midwives, and between committees and groups. These issues and concerns can ultimately harm not only the individuals involved but the whole of the midwifery and birth communities. Mediation is a mature, healthful, and positive way of dealing with disputes. This process is created for building integrity, self development and confidence, and a strong midwifery community. The process is one of growth and reclamation of power and mutual resolution, not reprimanding or punitive.

- I. If disagreement or dispute occurs, individuals must attempt to deal with those concerns with each party involved.
- II. Put efforts to resolve concerns and responses by other parties in writing.
- III. If all parties are unwilling or unable to resolve issues, consider a confidential mediation process. The process can help develop a better understanding of issues and relationships in a neutral setting (see mediation process below).

MEDIATION PROCESS

- I. Mediation is a voluntary, confidential method of working through concerns or issues of two or more parties with an outside, uninvolved, third party. It involves listening to and striving to understand each others concerns. This is essentially done with cooperation, trust, and a collaborative decision making process. The purpose of this process is to work constructively to:
 - A. Improve situations
 - B. Create better working relationships
 - C. Resolve differences
 - D. Resolve legal issues, breach of contracts, wrong doings, etc.

Failure in this process can be due to being locked in adversarial positions, or negative and abusive patterns. Completion of mediation may be completed in one meeting, but may require up to 2 to 4 meetings.

- II. A mediator is a facilitator, not an advocate or counselor. They will assist in negotiating changes or resolutions that are mutually acceptable. A mediator can be chosen in two ways:
 - A. Another midwife, association or community member trained for this purpose (not personally involved with negotiating parties).
 - B. A paid professional mediator

- III. Steps to initiate mediation:
 - A. One or both parties approach mediator via phone, letter, or in person
 - B. Mediator will approach second party via phone, letter, or in person to explain mediation concerns and request voluntary participation
 - 1. If one party is in disagreement with a mediation process, then mediator will do all possible to elicit voluntary participation
 - 2. If second party will not agree to voluntary participation, mediation is not an option.
 - a. Redefine severity of issues
 - b. Determine importance of resolving issues
 - c. If still feel resolution is necessary, see section below “if agreements unsuccessful.”
 - 3. Initial interview set up
 - 4. Voluntary participation by all parties confirmed
 - 5. Mediation process explained to all parties
- IV. Mediation Process
 - A. Come together in joint session with all parties
 - 1. Introductions
 - 2. Mediation process reviewed
 - 3. Ground rules explained
 - 4. All parties agree to participate
 - 5. Define the issues:
 - a. Each party makes opening remarks about how each perceives the issues
 - b. Each party describes the situation from her point of view
 - c. Mediator helps involved persons identify all issues they need to resolve in order to improve and/or clarify areas of differences
 - B. Processing the issues
 - 1. Each party has a private session with mediator
 - 2. Mediator helps each party clarify and simplify individual needs
 - 3. Mediator attempts to clarify understanding of other party’s feelings and point of view
 - 4. Mediator helps create a clearer understanding of the similarities and differences in their views, and concerns which will be helpful for resolution and/or positive changes
 - 5. Identify possible alternatives to resolve the issues
 - C. Resolving the issues
 - 1. In a joint session, each party presents suggestions for solutions to issues.
 - a. Prioritize issues, e.g. most urgent to least urgent; easiest to most difficult
 - b. Summarize issues and negotiations
 - 2. Explore areas of compromise

3. Make decisions about specific points in agreement, duties, obligations, and expectations
- D. Making an agreement
1. Restate verbally all points of agreement
 2. Put into writing agreement in detail
 3. All parties, including mediator sign agreement, each receive copies
 4. Verbal acknowledgement of agreements may be acceptable to all parties for simple issues
 5. Schedule future review if indicated
 6. Congratulate all parties on their participation and work accomplished
- E. Agreements unacceptable or unsuccessful
1. Consider another mode of resolution:
 - a. Professional mediation
 - b. Co-mediation
 - c. Counseling
 - d. Bringing issues to NMMA
 - e. Bringing issues to State Midwifery Board
 2. Do nothing else
 3. Consider legal options

SAFETY AND INFECTION CONTROL

OSHA, the Occupational Safety and Health Administration, publishes rules and guidelines which, if followed, will assist in maintaining safety in the work environment and protection from blood-borne pathogens and toxic chemicals. Midwives in New Mexico are required to comply with these standards. Rule, Section 1910.1030 of the Federal Register, see www.osha.gov/SLTC/bloodbornepathogens

Individual requirements include

- I. A written exposure control plan: including but not limited to:
 - A. Exposure determination
 - B. Methods of implementation such as:
 1. Standard precautions
 - a. Hand-washing and clean-up facilities
 - b. Clean-up activities
 - c. Engineering control equipment
 - d. Personal protective equipment
 - e. Appropriate transportation and handling of blood, hazardous waste and infectious wastes
 - f. Labeling
 2. Training
 3. Record keeping
- II. Fire safety in a birth center or midwives' office to include but not limited to:
 - A. Fire extinguishers
 - B. Minimum of two exits
 - C. Plan of building and exit routes labeled
 - D. Written plan in case of fire
 - E. Practice fire drills
- III. Disaster Plan (may adopt your community's disaster plan)
- IV. Automobile Safety
 - A. Pregnant women should wear their seat belts. The lap belt is placed below the enlarged abdomen and the shoulder harness should be worn.
 - B. Infants should always be transported in a car seat, placed on the back seat, rearward facing, up to 20 pounds.
- V. Client rights and responsibilities, including but not limited to:
 - A. Confidentiality of client records and Informed consent
 1. Keep records in office in locked, fire-proof file cabinet
 2. Obtain release for chart

SEXUALLY TRANSMITTED INFECTIONS PREVENTION GUIDELINES

Prevention and control of sexually transmitted infections (STI) is based on four concepts:

1. Education on means of reducing risk of transmission
2. Detection of asymptomatic individuals and those who are symptomatic but unlikely to seek treatment services
3. Effective diagnosis and treatment
4. Evaluation, treatment and counseling of sex partners

Midwives as health care providers have a role in the prevention of STIs. In addition to interrupting transmission by treating (or referring for treatment) those with STIs, midwives should provide client education and counseling and may participate in identifying, treating and/or referring infected partners. Public Health authorities should be notified as appropriate, reporting as required per the New Mexico Department of Health Regulations Governing the Control of Disease and Conditions of Public Health Significance. (NMAC 7.4.3) (See attached list of reportable infections in the State of New Mexico)

Effective evaluation of a client's risk of STIs requires that accurate and complete information be elicited from the client. When risks have been identified, then appropriate prevention messages can be delivered. Counseling skills of respect, compassion, and a non-judgmental attitude are essential to the effective delivery of prevention information. Prevention messages should be tailored to the patient, with consideration given to her individual needs and risks.

TRANSFER or DISCONTINUATION OF CARE BY THE MIDWIFE

For the midwife, the primary goal in any birth is to have a healthy, safe outcome. This is true whether her practice setting is at home, in a birth center, or in a hospital. There are times when the out-of-hospital setting is no longer safe or desirable and transfer of care is appropriate. These times can occur during the antepartum, intrapartum, postpartum, or interconception. Reasons for transfer can be psychosocial or physiological. In any event, it is the legal and ethical obligation of the midwife to transfer or discontinue care in a sensitive, respectful, and efficient manner.

"Risking a client out" is not an easy task. When transfer of care occurs, every effort must be made to assist the woman in locating a suitable health care provider. Upon consent, all pertinent records should be given to the woman or to the new provider in a timely manner to facilitate and promote continuous care. If the transfer occurs intrapartally, the midwife should accompany the client to the hospital and remain with her until the case is transferred or resolved, as appropriate. The New Mexico Midwifery Practice Guidelines provides a detailed list of when transfer of care and consultation for care should occur.

On occasion, it is also necessary to discontinue a client/midwife relationship for other pertinent reasons. Some indications from the client are:

1. Irresponsibility, unwillingness to change habits
2. Lack of compliance within necessary time frame
3. Dishonesty, intentional breach of contract
4. Unstable or dangerous home environment
5. Immaturity, questionable emotional status
6. Refusal to agree to necessary specified testing, emergency medical care or transport
7. Unresolved conflicts or personality differences between client and midwife
8. Not honoring financial contract/commitment

The midwife is not ethically, morally or legally bound to keep a client if it is not in the best interest of both parties. This is a difficult decision to make and should be done with integrity.

In the event of discontinuation or transfer of care:

1. Set a date.
2. Notify the client in person if possible and/or send notification by certified mail.
3. Document in chart.
4. Give referrals to other care providers.

5. Upon written consent, a copy of the chart is mailed or given to the woman or the new health care provider, in a timely manner.
6. Client makes payment to date for services rendered. Refer to financial contract between client and midwife and reimburse client if applicable.

Midwifery care is known as "the extra mile" care. Time and effort spent with a client is meant to support the client's awareness of herself as a woman and/or mother. It is difficult to let go of a relationship. However, a midwife must remember that the purpose of these boundaries is for the safety and protection of all involved.

WELL WOMAN CARE

WELL WOMAN CARE SCHEDULE

Midwives are able to independently assume responsibility for the care of the woman seeking gynecological and well woman care.

I. INITIAL EVALUATION

A. History taking

1. Family history
 - a. Cardiac disease and hypertension
 - b. Diabetes
 - c. Cancers - breast, colon, etc.
 - d. Thyroid abnormalities
 - e. Alcohol and drug use
 - f. Mental illness
 - g. Congenital abnormalities
 - h. History of twins
2. Lifestyle history
 - a. Smoking
 - b. Alcohol and drug use
 - c. Diet and or eating disorders
 - d. Exercise, sleep patterns, stress management
 - e. Support systems
 - f. Family violence, sexual assault
 - g. Work
3. Menstrual history
 - a. Age at menarche
 - b. Frequency, duration, amount, character
 - c. Dysmenorrhea
 - d. Dysfunctional uterine bleeding
 - e. Toxic shock syndrome
 - f. PMS
 - g. Perimenopausal symptoms
4. General health
 - a. Acute
 - b. Chronic
5. Sexual history
 - a. Nature
 - b. Frequency
 - c. Satisfaction
 - d. Problems
 - e. Bleeding and pain
 - f. Number of partners currently, over lifetime
 - g. Risk for STI

6. Contraceptive history
 - a. Present method
 - i. Type
 - ii. Satisfaction
 - iii. Side effects
 - iv. Consistency of use
 - v. Length of time used
 - b. Previous methods
 - i. Types
 - ii. Duration of use for each
 - iii. Side effects
 - iv. Reasons for discontinuing
 - v. Compliance
7. Obstetric history
 - a. Blood type
 - b. Gravida and parity
 - c. Date of all births
 - d. Obstetrical problems during previous pregnancies, births, and postpartum
 - e. Spontaneous or induced abortions
8. Gynecologic history
 - a. Infertility
 - b. Infections
 - c. DES exposure
 - d. STIs
 - e. PID
 - f. Cysts
 - g. Endometriosis
 - h. Pelvic relaxation
 - i. Cystocele
 - ii. Rectocele
 - iii. Uterine prolapse
 - i. Vaginal integrity
 - j. Polyps
 - k. Breast masses
 - l. Breast exam frequency
 - m. Myomas
 - n. Abnormal cervical cancer screening and treatment
 - o. Surgery
 - p. Cancer/biopsies
9. History of current complaint, if present

- B. Physical Examination as Indicated
 - 1. Complete physical exam for risk screening
 - 2. Review of systems
 - 3. Breast examination
 - 4. Pelvic examination
 - 5. Rectal exam
- C. Laboratory Work as Indicated
 - 1. Collection of blood for relevant tests, such as
 - a. CBC
 - b. Type and Rh, antibody screen
 - c. Hepatitis B and C
 - d. HIV
 - e. Thyroid, FSH, or other hormonal levels
 - f. Cholesterol
 - 2. Collection of gynecological specimens, such as:
 - a. Cervical Cancer Screening (Pap, Thin Prep)
 - b. Gonorrhea
 - c. Chlamydia
 - d. Viral and bacterial cultures
 - 3. Collection of other appropriate specimens, including those needed from partners or family members, such as:
 - a. Throat
 - b. Urine
 - 4. Collection of specimens for microscopic examination
 - 5. Pregnancy testing
 - 6. TB skin testing

II. ASSESSMENT

- A. Data interpretation and problem identification
 - 1. Rule out presence of current gynecological disorders
 - a. Tumors/masses of the reproductive system
 - b. Lesions of the reproductive system
 - c. Infestations
 - d. Fistulas
 - e. Uterine anomalies
 - f. Pelvic relaxation
 - g. Vaginal foreign body
 - h. Polyps/cysts
 - i. Other disorders
 - j. Gynecologic infections, such as:
 - i. Candida
 - ii. Chlamydia
 - iii. Trichomoniasis
 - iv. Syphilis
 - v. HPV
 - vi. Herpes

- vii. Gonorrhea
 - viii. Bacterial vaginosis
 - ix. Group B strep
- 2. Rule out presence of other infectious disease processes:
 - a. UTI
 - b. TB
 - c. HIV
 - d. Upper respiratory infections
 - e. Other viral and/or bacterial infections
- 3. Anticipate potential problems which may be precipitated by present problems
- 4. Determine need for consult/referral
- 5. Evaluate need for immediate intervention, consultation, or referral

III. MANAGEMENT

- A. Develop comprehensive plan of care
 - 1. Teach and counsel for health enhancement, such as:
 - a. Nutrition and exercise
 - b. Gynecologic disorders
 - c. Breast health/monthly exam
 - d. Contraception
 - e. Conception
 - f. Decision-making about unplanned and/or unwanted pregnancy
 - g. Psychosocial issues
 - h. Current condition and plan of care
 - i. Natural therapies
 - j. Conditions relative to general health
 - 2. Provide referrals to community, social services and other practitioners
- B. Implement plan of care
 - 1. Follow through with protocols for treatment of current condition
 - 2. Use natural treatment as indicated
 - 3. Schedule follow-up to re-evaluate condition, treatment, and need for referral at appropriate intervals.

WELL WOMAN CARE INTERCONCEPTIONAL AND POSTPARTUM

- I. DEFINITION
Care for the interconceptional woman, from 6 weeks to 18 months postpartum

- II. SPECIAL NEEDS
 - A. May be trying to reintegrate into the work force
 - B. May have increased nutritional needs due to breastfeeding
 - C. May be making psychosocial adjustments to new roles
 - D. May be having trouble obtaining enough rest and exercise
 - E. May be having trouble making sexual readjustment
 - F. May be seeking contraceptive education/products

- III. MANAGEMENT
 - A. Counseling
 - B. Teaching
 - C. Appropriate referrals

- IV. OTHER NEEDS: See "Well Woman Care Schedule"

ADNEXAL MASS

I. DEFINITION

A pathological enlargement, such as a follicular cyst, dermoid cyst, ectopic pregnancy, abscess, endometriomas, polycystic ovaries, benign or malignant tumor.

II. SIGNS & SYMPTOMS

Unilateral pelvic pain, swelling, heaviness, bloating, low back pain, pain with intercourse, defecation, or menstruation. Mass may be tender or non-tender.

A. If torsion or rupture:

1. Signs and symptoms of shock
2. Acute, severe abdominal pain, may be intermittent

B. Bimanual Exam:

1. Palpation of adnexal mass or enlargement, usually unilateral
2. Possibly tender to palpation

C. Lab:

1. Negative pregnancy test
2. Ultrasound if needed

IV. MANAGEMENT

A. Premenopausal women:

1. Note size, consistency, location, mobility and tenderness
2. If 5-6 centimeters, or less, smooth and non-tender, observe and follow up with client every 2 weeks for 2 months. Most cysts will spontaneously resolve.
3. Provide for symptomatic relief
4. Consider natural therapies
5. Consider ultrasound to determine size/differential diagnosis, and lab work
6. Refer if painful, infection is present, or if mass is larger than 5-6cms

B. Postmenopausal women:

1. Much greater likelihood of malignancy
2. Consider ultrasound
3. Labs (CA 125)
4. Refer for diagnosis and treatment

AMENORRHEA

I. DEFINITION

- A. Primary Amenorrhea: has never had a menstrual period
- B. Secondary Amenorrhea: absence of menstrual periods for 6 months in a woman who previously had regular periods or for 12 months in a woman who previously had irregular periods.
- C. Can be further defined as False Amenorrhea when the flow is obstructed at level of the cervix, vagina or vulva and True amenorrhea due to pathological or physiological causes.

II. ETIOLOGY

- A. Physiological
 - 1. Normal until menarche; usually menses is established by age 16-18
 - 2. Pregnancy
 - 3. Lactation
 - 4. Menopause
- B. Pathological
 - 1. Disturbances of the hypothalamus
 - a. Disease or injury in the region of the midbrain
 - b. Cerebral cortex influences
 - c. Drugs
 - 2. Pituitary
 - a. Tumors in or near pituitary gland
 - b. Disease of anterior pituitary
 - 3. Ovarian
 - a. Underproduction of estrogen and progesterone
 - b. Continuous production of estrogen and progesterone
 - c. Overproduction of androgens
 - d. Polycystic ovary syndrome
 - 4. Uterine
 - a. Congenitally absent or blocked uterus
 - b. Uterus removed
 - c. Uterus underdeveloped
 - d. Uterus damaged
 - 5. Other Endocrine diseases
 - a. Thyroid
 - b. Pancreas
 - c. Adrenal Cortex
 - 6. General Constitutional Upset and Disease
 - a. Any acute illness
 - b. Chronic Diseases

7. Nutrition
 - a. Malabsorption syndromes
 - b. Starvation
 - c. Anorexia nervosa/bulimia
 - d. Obesity
8. Environmental Changes
 - a. Climate
 - b. Occupation
 - c. Living Conditions
 - d. Worry
 - e. Overexertion/exercise
 - f. Stress/abuse
9. Psychological Imbalances

III. SIGNS AND SYMPTOMS

- A. No menstruation
- B. May have pain

IV. MANAGEMENT

- A. Exclude
 1. Systemic disease
 2. Gross endocrine dysfunction
 3. Cryptomenorrhea-hidden periods
 4. Galactorrhea
 5. Polycystic ovaries
- B. If before menarche
 1. Rule out pregnancy and other physiologic causes
 2. Counsel on management of
 - a. Nutrition
 - b. Exercise
 - c. Stress
 3. Suggest waiting until 16-18 years of age
- C. Primary or secondary amenorrhea
 1. Perform full clinical history and examination
 2. Pregnancy Test
 3. Rule out
 - a. Pituitary tumor
 - b. Glycosuria
 - c. Hormonal malfunctions
 - d. Chromosomal abnormalities
 - e. Streak gonads, testes, small ovarian tumors, polycystic ovaries
 4. Consider referral to other health care professionals
 5. Consider natural therapies
- D. If possibly menopausal, see Menopause Guideline

ANAPHYLAXIS

I. DEFINITION

An acute, life-threatening allergic reaction

II. ETIOLOGY

Allergic reaction to ingested, inhaled, injected, or absorbed substances to which the individual has become sensitized.

A. Medications associated with anaphylactic shock

1. Antibiotics; e.g., Penicillin, Ampicillin, etc.
2. Foreign serum; e.g., RhoGam, Blood, etc.
3. Anesthetics; e.g., Lidocaine, Xylocaine, etc.
4. Hormones; e.g., Methergine, Pitocin, etc.
5. Antiseptics: e.g., Iodine
6. Immunizations: e.g., Flu (egg allergy)

B. Other; e.g., insect bites/stings, foods, latex, environmental exposures/chemical substances, etc.

III. SIGNS & SYMPTOMS

- A. Apprehension, agitation
- B. Hives, swelling of affected extremity
- C. Wheezing, coughing, difficulty breathing
- D. Dizziness, fainting
- E. Possible dilated pupils
- F. Sudden hypotension
- G. Shock
- H. Cardiac arrest

IV. MANAGEMENT

- A. Activate emergency medical system (EMS)
- B. Be prepared to maintain an airway
- C. Start IV of Normal Saline
- D. In cases of local reaction, administer 25mg to 50mg Diphenhydramine, (Benadryl) orally
- E. In cases of systemic reaction, immediately administer aqueous epinephrine 1:1000, .3ml to 1.0ml subcutaneously or intramuscular. May repeat at 5 to 10 minute intervals three times.
- F. Treat for shock, elevate legs, and keep warm.
- G. Monitor vital signs and respiratory status throughout management.
- H. Administer oxygen throughout management.
- I. EMS may need to intubate or administer antihistamines or steroids.

- V. NOTE: To avoid anaphylaxis, note any abnormal reaction to drugs, anesthetics, food, etc. on front of chart. Before administering any medication, ask again about previous allergic reactions.

ANEMIA

I. DEFINITION

Lower than normal concentration of hemoglobin or red blood cells in blood. In itself, not a diagnosis, but a symptom of an underlying disorder resulting in insufficient red cell production. Different types of anemia include

- A. Normal physiologic anemia of pregnancy
- B. Iron deficiency anemia (nutritional)
- C. Megaloblastic anemia (folic acid deficiency)
- D. Anemia resulting from blood loss
- E. Anemia associated with infection
- F. Acquired hemolytic anemia (toxic or congenital conditions, enzyme deficiency)
- G. Aplastic or hypoplastic anemia (deficient cell-formation in bone marrow)
- H. Sickle cell disease (crescent and sickle shaped red blood cells, more common in those of African descent)
- I. Thalassemia (hemoglobin synthesis deficiency, more common in those of African or Mediterranean descent)
- J. Pernicious anemia (B12 deficiency)

II. PREDISPOSING FACTORS

- A. History of anemia
- B. Prior or current inadequate diet, including pica
- C. History of closely spaced pregnancies
- D. Between 28-32 weeks gestation
- E. Current lactation
- F. History of heavy menses, other heavy blood loss, or chronic long term blood loss
- G. Inherited, e.g., sickle cell anemia
- H. Infection

III. SIGNS AND SYMPTOMS

- A. Fatigue, weakness, malaise, drowsiness
- B. Dizziness, dyspnea
- C. Skin pallor
- D. Headaches
- E. Sore or ulcerated tongue
- F. Poor appetite, nausea, vomiting
- G. Pica
- H. Pallor (conjunctiva, nail beds, mucous membranes)
- I. Heart murmur, tachycardia, or palpitations
- J. Increased pain perception

- K. Lab values indicating anemia:
 - 1. Mild: Hct 30%-35%, Hgb less than 12 gr/dl
 - 2. Severe: Hct less than 30%, Hgb less than 10 gr/dl

IV. MANAGEMENT

- A. Mild
 - 1. Diet history and nutritional counseling with emphasis on iron rich foods, increased protein and fluid intake
 - 2. Suggest iron supplementation with 500 mg Vitamin C, buffered or sustained release.
 - 3. Consider folic acid supplementation, 800-1200 mcgs as indicated
 - 4. Consider natural therapies
 - 5. Recheck labs in one month
 - 6. If unresponsive to iron therapy, see treatment for severe anemia
- B. Severe
 - 1. Careful diet history with nutritional counseling in foods rich in protein, iron and B12
 - 2. Supplemental iron with divided doses of 60 – 80 mg for a total daily dose of 200 mg elemental iron with buffered or time release Vitamin C
 - 3. Consider additional lab evaluations
 - a. CBC with morphology
 - b. Total iron and TIBC (total iron binding capacity)
 - c. Stool for ova and parasites
 - d. Sickle cell prep if appropriate
 - e. Serum iron and folate and B12 levels
 - f. Reticulocyte count
 - 4. If unresolved in late in pregnancy
 - a. All of the above
 - b. Consult

BARTHOLINITIS

I. DEFINITION

Inflammation and enlargement of Bartholin's ducts and glands, leading to cyst formation which can become secondarily infected. Occasionally the infection persists in a chronic form with periodic exacerbations and abscess formation. The gland can become permanently enlarged/fibrotic and can be felt as a hard, tender lump.

II. ETIOLOGY

- A. May be caused by gonococcal infection
- B. Other causes
 - 1. E. coli
 - 2. Staphylococcus
 - 3. Streptococcus faecalis
 - 4. Trichomonas vaginalis
 - 5. Other pyogenic organisms

III. SIGNS & SYMPTOMS

- A. Local discomfort
- B. Severe pain or heat in the presence of abscess
- C. Tender swelling beneath the posterior part of the labium majus extending inward to the base of the labium minus
- D. Overlying skin is reddened
- E. Surrounding tissues may be indurated and/or edematous
- F. The position of the swelling is diagnostic

IV. MANAGEMENT

- A. Bed rest
- B. Sitz baths
- C. Consider natural therapies
- D. Pain relief measures
- E. Consult if not responsive
- F. If abscess formation is certain, consult for treatment

CANDIDIASIS MONILIAL VAGINITIS

I. DEFINITION

Inflammation of the vagina due to a fungal infection by *Candida Albicans*

II. ETIOLOGY

- A. pH changes due to pregnancy
- B. Diabetes
- C. Use of antibiotics
- D. High progesterin levels, due to use of birth control pills, etc.
- E. Diet high in simple sugars
- F. Stress, fatigue
- G. Sexual contact with infected partner
- H. Tight/synthetic underwear
- I. Compromised immune system

III. OTHER LOCATIONS OF CANDIDA INFECTIONS

- A. Neonatal thrush
- B. Candidiasis of the nipples of breastfeeding mothers whose infants have thrush
- C. May become systemic/chronic

IV. SIGNS & SYMPTOMS

- A. Thick, white, cottage cheese–like vaginal discharge
- B. Itching and burning of the labia and vulva
- C. Painful intercourse
- D. Burning upon urination
- E. Yeasty odor
- F. Red, inflamed vulva
- G. Red, sore, scaly, itchy breasts
- H. White plaques/patches of curdy discharge seen upon speculum exam, or in an infant's mouth (thrush)
- I. KOH wet mount of discharge shows presence of spores and hyphae
- J. Can be asymptomatic
- H. Bimanual exam should not elicit pain and tenderness in uncomplicated vaginitis.

V. MANAGEMENT

- A. Educate about hygiene and nutritional causes
- B. Consider saline wet mount to rule out *Trichomonas*
- C. Consider urinalysis to rule out UTI, glycosuria, increased bacteria
- D. Consider natural therapies
- E. Consider over-the-counter antifungal, topical preparations
- F. If no improvement after above treatments, consult physician

- VI. PREVENTIVE ADVICE
 - A. Eliminate simple sugars and improve quality of diet
 - B. Maintain good personal hygiene
 - 1. Thorough hand washing
 - 2. Wipe perineum front to back
 - 3. Daily bathing
 - 4. Frequent cleansing of perineum
 - 5. Use clean, unused wash cloths and towels each time
 - 6. Frequent changing of sweaty, wet garments
 - 7. Use of high temperature in washing clothing
 - C. Avoid chemical irritants, e.g.
 - 1. Feminine deodorant sprays
 - 2. Scented toilet paper
 - 3. Perfumed soaps
 - 4. Perfumed douches
 - 5. Scented sanitary pads and tampons
 - D. Wear only cotton underwear; avoid tight-fitting clothes, girdles, pantyhose
 - E. Go without underwear whenever possible
 - F. Advise male sexual partner to use condoms for intercourse until infection is resolved
 - G. Explain possible relationship between vaginitis and life stress, consider teaching or referring for stress management
 - H. Explain relationship for lactating woman, thrush development in the newborn, and preventive measures

CERVICAL CANCER SCREENING

I. DEFINITION

Screening women through cellular sampling that can show cancerous, pre-cancerous, and infectious conditions of the cervix and vagina. Two methods of testing currently exist

- A. Papanicolaou (Pap) Test – consists of scraping the outermost layer of cervical and vaginal cells with a cytology brush (or q-tip in pregnancy), and wooden spatula. These cells are then smeared on a slide, fixed with a cytology solution for analysis.
- B. Thin Prep Test – consists of a circular brushing of the outermost layer of cells. These cells are then rinsed in a collection solution and sent to the lab for dispersal onto a slide for analysis. Although more expensive, the thin prep has increased accuracy for both diagnosis of cervical cancer and HPV.

II. SCHEDULING

A. Well Woman Care

As of 2007, cervical cancer screening recommendations have changed. Due to advances in the understanding of the role HPV plays in cervical cancer and the more accurate testing for HPV, there is a move to separate the actual cervical cancer screening as the central part of yearly care.

- 1. Cervical cancer screening is generally recommended every year for women within 3 years of becoming sexually active or by age 21.
- 2. At age 30 or above, low risk women may need screening only every 2 or 3 years after two or three consecutive negative screenings.
- 3. High risk women may need colposcopy screening depending on their previous results.
- 4. HPV testing is recommended with each cervical cancer screening of women age 30 or older with a screening result of ASCUS (see HPV information).

B. Pregnant Women

- 1. Cervical cancer screening is recommended for all pregnant women during the first 14 weeks due to an increased rate of growth of abnormal cells in pregnancy. However, there is an increased risk of getting an inadequate specimen during pregnancy due to normal cervical changes. In particular, the endocervical component (or squamocolumnar junction) may not be identifiable in pregnancy. This is the area of testing for cervical cancer.
- 2. If previous normal testing was done within a year, can wait until the postpartum period for screening.

3. If unable to obtain cervical cancer screening in the first trimester, still recommended to do later in pregnancy for those woman who may only get care for themselves in pregnancy and to rule out infections.
4. Colposcopy is recommended once during pregnancy dependant on results.

C. Postpartum Women

1. Cervical cancer screening is recommended at the six to eight weeks postpartum appointment if no endocervical component was identified in the pregnancy screening.
2. If pregnancy screening is done before or during first trimester and identifies an endocervical component, can wait until a year or three for follow-up screening (depending on prior results and age).

III. RESULTS

A. Definition

1. Squamous abnormalities:
 - a. Atypical squamous cells of undetermined significance: A.S.C.U.S.: due to infection, inflammation, atrophy, repair, IUD, etc.
 - b. Squamous intraepithelial lesion:

New	Old	Old terms
LSIL	CIN 1	mild dysplasia
LSIL or HSIL	CIN 2	moderate dysplasia
HSIL	CIN 3	severe dysplasia or carcinoma in situ

- i. Old term is cervical dysplasia or cervical intraepithelial neoplasia (CIN)
- ii. New term is squamous intraepithelial lesion (SIL) encompasses all epithelial abnormalities that are precursors to invasive squamous cell carcinoma. SIL is a perversion of squamous cell maturation and differentiation. The squamous cell covering of the cervix is replaced by primitive columnar cell epithelium with non-differentiated growth and maturation. The disease begins at the squamocolumnar junction in the epithelium of the transformation zone. The degree of severity is judged by the proportion of epithelial thickness with deranged maturation. It is a continuum of abnormality from mild to moderate to severe to carcinoma in situ. Carcinoma in situ represents a full thickness

of abnormal cells with no differentiation or maturation.

- c. Invasive cancer of the cervix, vagina, or vulva: The abnormal growth and maturation has spread to other areas. (The more severe the dysplasia, the more likely and quickly the lesion is to progress to invasive squamous cell cancer.)
- 2. Glandular cell abnormalities
 - a. Endometrial cells, cytologically benign in a post-menopausal woman
 - b. Atypical glandular cells of undetermined significance: A.G.C.U.S.
 - c. Adenocarcinoma: possible site of origin include endocervical, endometrial, and extrauterine

IV. RISK FACTORS FOR ABNORMAL CELLULAR CHANGES

- A. Hormonal
- B. Early age of sexual activity
- C. Early childbearing
- D. Multiple sexual partners
- E. Low socioeconomic status
- F. African American and Latina
- G. "High risk" male partner
- H. STIs
- I. Immune status
- J. Cigarette smoking/"passive smoke." Toxic metabolites of cigarettes are greatly concentrated in cervical mucous.
- K. Folate deficiency
- L. DES exposure (larger T-zone) - not proven
- M. Human Papilloma Virus infection: Biggest risk factor for lower genital tract; may be necessary for the development of SIL. (more of a co-factor than a cause.)

V. SIGNS AND SYMPTOMS

- A. May be asymptomatic
- B. Increased discharge; may be normal-appearing, mucopurulent, or blood-stained
- C. Contact bleeding (e.g., with coitus or defecation)
- D. Infertility
- E. Backache
- F. Pelvic discomfort
- G. Bright red area continuous with endocervix with clearly defined outer edge visualized
- H. Abnormal Pap smear or Thin Prep results:
 - 1. Pap smears have a 10%-30% false negative for SIL; Thin Preps improve on Pap smear accuracy
 - a. Sampling errors account for 60%

- b. Screening errors for 40%
- c. Up to 50% of invasive cancer may be erroneously read as "atypical," "inflammatory," or "unsatisfactory"

VI. THE BETHESDA SYSTEM

Redefined nomenclature for reporting abnormalities. Each Pap smear should indicate

- A. Statement on Adequacy of Specimen:
 - 1. Satisfactory for evaluation
 - 2. Satisfactory but limited by . . .
 - 3. Unsatisfactory (with reason)
- B. General categorization of the diagnosis:
 - 1. Normal
 - 2. Other
- C. Descriptive diagnosis:
 - 1. Benign cellular changes
 - 2. Infection
 - 3. Reactive changes (repair, atrophy, inflammation, IUD)
 - 4. Epithelial cell abnormalities
 - a. Squamous abnormalities:
 - i. A.S.C.U.S. (atypical squamous cells of undetermined significance)
 - aa. Unqualified
 - bb. Reactive process favored
 - cc. Premalignant, malignant process favored
 - ii. Low-grade squamous intraepithelial lesion (LSIL)
 - iii. High-grade squamous intraepithelial lesions (HSIL)
 - iv. Squamous cell carcinoma
 - b. Glandular cell abnormalities:
 - i. Endometrial cells, cytologically benign in a post-menopausal woman
 - ii. A.G.C.U.S.
 - iii. Adenocarcinoma
- D. Need for further evaluation
 - 1. Squamous cell abnormalities (HPV is ASCUS)
 - 2. Glandular cell abnormalities
 - 3. Suggestive complaints
 - 4. DES exposure
 - 5. High-risk history

VII. MANAGEMENT

- A. Educate as to risk factors and possible management
- B. Follow interim guidelines as described below; consult as appropriate to co-manage care
- C. Use natural therapies

- D. SIL in pregnancy: pregnancy should not delay or alter the evaluation of an abnormal cervix with regard to the use of cytology alone versus cytology with colposcopy and directed biopsies except:
 - 1. Endocervical curettage is never performed in pregnancy.
 - 2. Biopsies are entirely acceptable and safe; however, due to the increase in bleeding, these are kept to a minimum.
 - 3. If dysplasia is confirmed and the colposcopy cannot rule out invasive cancer, a cone biopsy is not performed. Repeat evaluation every 4-6 weeks if high grade.
 - 4. Conization in pregnancy is rarely indicated.

VIII. INTERIM GUIDELINES (from Bethesda) for the management of abnormal cervical cytology (1994)

- A. A.S.C.U.S.
 - 1. Depends on HPV results
 - 2. Treat any specific cause, repeat in 6 months.
 - 3. If post-menopausal not on hormone replacement therapy, course of topical estrogen with repeat Pap
 - 4. If favors neoplastic process, treat as LSIL
 - 5. High risk patients consider colposcopy
- B. LSIL
 - 1. Pap smear every 4-6 months for 2 years until 3 consecutive, negative, satisfactory results
 - 2. Colposcopy, directed biopsies, etc., if Pap schedule is unrealistic or if otherwise warranted
- C. HSIL
 - 1. Colposcopic evaluation of transformation zone with directed biopsies
 - 2. Ablative procedures as necessary: cryotherapy and laser vaporization (this destruction of the surface epithelium will cure dysplasia in most cases)
NOTE:
 - a. Cryotherapy is low cost and favored when the dysplasia is less than CIN 3 and/or covers less than 3 quadrants of the transformation zone
 - b. Laser vaporization can treat vulvar warts simultaneously
 - c. Ablation is not appropriate if invasive cancer has not been ruled out based on colposcopy, as it will not treat invasive cancer
- D. Glandular cell abnormalities
 - 1. May imply neoplasia of endometrium or endocervical glandular epithelium, manage with colposcopy
 - 2. Adenocarcinoma of cervix requires colposcopy
 - 3. Both conditions require further evaluation as soon as possible
 - 4. Adenocarcinoma in situ usually requires cone biopsy

5. Management of other AGCUS not established, individualize to history and physical exam
- E. Carcinoma in Situ
- Excision procedures
1. Loop excision procedures
 - a. Loop electrosurgical procedures (LEEP)
 - b. Large loop excision of the transformation zone (LLETZ)
 2. Laser conization
 3. Cold knife conization
 4. These are appropriate whenever invasive cancer has not been ruled out with reasonable certainty by colposcopic exam
 5. Hysterectomy to treat SIL or invasive cancer, as appropriate

Classification/Bethesda Conversion System

Old Class System	New Bethesda System	Old Verbal Classification	Old CIN Classification	New CIN Classification	Management / Consult
Class I	Within Normal Limits - to include reactive and reparative changes	Negative	Within Normal Limits - to include reactive and reparative changes	Within Normal Limits - to include reactive and reparative changes	Routine Follow-up
Class II	Atypical squamous (glandular) cells of undetermined significance.	Atypical	Atypical consistent with: _____	Atypical consistent with: _____	Repeat Pap or colposcopy if high grade or malignant lesion suspected. Do HPV DNA testing if over 30.
Class III	Low-grade squamous intraepithelial lesion (SIL) CIN-1 and HPV related lesions	Mild to moderate dysplasia	CIN Grade I	Low Grade CIN	Colposcopy, biopsies and endocervical curettage (in non-pregnant clients).
Class IV	High-grade squamous intraepithelial lesion (SIL) (CIN Grade 2-3)	Severe dysplasia carcinoma in situ	CIN Grade 2 – 3	High Grade CIN	Colposcopy, biopsies and endocervical curettage (in non-pregnant clients).
Class V	Malignant Lesions	Invasive Cancer	Consistent with invasive cancer	Consistent with invasive cancer	Colposcopy, biopsies and endocervical curettage (in non-pregnant clients). Search for other sites of origin

CERVICITIS

I. DEFINITION

Inflammation of the cervix characterized by irritation or erosion of the cervical surface

II. ETIOLOGY

Inflammation due to vaginal or cervical infections, cervical lacerations, instrumentation, foreign objects and malignancy. If untreated can lead to ascending infections and problems in conceiving or during pregnancy. Can be caused by such organisms as Chlamydia, Gonorrhea, Trichomonas, Herpes simplex, Staph, Strep, Bacteria Vaginosis, Enterococcus.

III. SIGNS AND SYMPTOMS

- A. May be asymptomatic
- B. Irritating/purulent vaginal discharge
- C. Dyspareunia
- D. Spotting after sexual intercourse or douching
- E. Dysuria
- F. Pelvic pain
- G. Fever, nausea
- H. Pelvic exam
 - 1. Cervix edematous, red and friable
 - 2. Mucopurulent discharge
 - 3. May be Nabothian cysts on cervix
 - 4. Bimanual exam should NOT elicit pain and tenderness
- I. Cervical cancer screening with atypia, infection, or mild dysplasia
- J. Gonorrhea/Chlamydia culture positive
- K. KOH and saline wet mount positive

IV. MANAGEMENT

- A. Remove/treat irritants
- B. Labs
 - 1. Cervical cancer screening
 - 2. Gonorrhea/Chlamydia, Herpes culture
 - 3. KOH and saline wet mount
- C. If infection present treat as appropriate or refer
- D. If cervix erosion recurrent and severe, or if positive cervical cancer screen, refer for more diagnostics (e.g., colposcopy and biopsy)
- E. Consider natural therapies
- F. If cultures test positive for infection, treat partner
- G. Educate client
 - 1. Causes of cervicitis
 - 2. Prevention of vaginal infections, e.g., good genital hygiene

3. Importance of regular cervical cancer screenings
 4. Pelvic rest while treating
 5. Discuss pregnancy related risks
- H. Follow-up depends on severity of condition

CHLAMYDIA

I. DEFINITION

A sexually transmitted infection, caused by Chlamydia Trachomatis infection, often asymptomatic, may be characterized by inflammation of the cervix resulting in a mucopurulent vaginal discharge.

II. ETIOLOGY

Transmitted through unprotected sexual activity. Transmitted to newborns through maternal infection during birth.

III. SEQUELAE

- A. Pelvic inflammatory disease
- B. Ectopic pregnancy
- C. Salpingitis
- D. Endocervicitis
- E. Cystitis
- F. Postpartum infection
- G. Infertility
- H. Premature rupture of membranes
- I. Preterm labor and birth
- J. Frequently coexists with gonorrhea
- K. May result in Chlamydia ophthalmic infection in the newborn
- L. May result in newborn Chlamydial pneumonia, onset from 1 to 3 months

IV. SIGNS & SYMPTOMS

- A. Often asymptomatic
- B. Purulent vaginal discharge
- C. Abdominal or low back pain
- D. Pain or bleeding during or after sex
- E. Dysuria
- F. Temperature normal to moderately elevated (98–101 F)
- G. Speculum exam: mucopurulent discharge at cervical os, cervix edematous and friable
- H. Positive Chlamydia test
- I. More than 10 WBCs per high-power field seen on wet prep slide

V. MANAGEMENT

- A. Obtain Chlamydia and Gonorrhea culture, cervical cancer screen and other testing to rule out other infections
- B. Consult for antibiotic therapy
- C. Counsel client about the importance of finishing the entire course of antibiotics
- D. Refer all sexual partners for treatment

- E. Counsel on the use of condoms and safe sex techniques until the infection has cleared
- F. Follow-up to include repeat Chlamydia test of cure 6 weeks after treatment is complete
- G. Provide educational material
- H. Consider natural therapies
- I. Counsel for decreased immunity to other STIs
- J. Notify Public Health Department

ENDOMETRIOSIS

I. DEFINITION

A proliferation of endometrium in any site other than the uterine mucosa itself, often manifesting by multiple and scattered lesions. It occurs in two forms: in the uterine wall and in extra-uterine organs and tissues. It typically proliferates when the ovaries are active and atrophies after menopause. Both glands and stroma must be present in the lesion to justify the designation.

II. ETIOLOGY

Unknown but theories include

- A. Retrograde Menstruation Theory: Endometrial cells are pushed backward through fallopian tubes into abdomen.
- B. Embryonic Tissue Theory: Endometrial tissue was present abnormally when woman was an embryo and becomes active later in reproductive life.
- C. Genetic Theory: Endometriosis may be hereditary.
- D. Lymphatic Distribution Theory: Endometrial material gets distributed throughout the body via the lymphatic system.
- E. Immune System Dysfunction: Endometriosis may be classified as part of a larger immune system disorder.
- F. Environmental Influences: Toxins in the environment, which effect reproductive hormones and immune system response may contribute to the development of endometriosis.

III. SIGNS AND SYMPTOMS:

- A. Pain
 - 1. Just before or with period
 - 2. During ovulation
 - 3. In the bowel during menstruation
 - 4. When urinating
 - 5. During or after intercourse
 - 6. In the lower back region
- B. Diarrhea
- C. Constipation
- D. Abdominal bloating
- E. Heavy periods
- F. Irregular bleeding
- G. Constant tiredness

IV. DIAGNOSIS

If a woman has pelvic pain, one possible cause will be endometriosis. However, definite diagnosis is only possible with the direct observation of the misplaced endometrium, which can be done only with laparoscopy. Sometimes tissue samples are taken to confirm diagnosis.

V. MANAGEMENT

A. Consider natural treatments:

1. Dietary changes: Relief may come from eliminating certain things from the diet, such as caffeine, sugar, alcohol, dairy, red meat, and processed foods.
2. Vitamins and herbs
 - a. Evening Primrose Oil: This is an essential fatty acid that is associated with prostaglandin production. It is theorized that women with endometriosis have an imbalance of prostaglandins.
 - b. B Complex vitamins: These vitamins have been scientifically linked to the breakdown of estrogen. They have also reportedly improved emotional symptoms.
 - c. Chinese herbal remedies: Specific remedies prescribed by a DOM may provide relief.
 - d. Vitamin E and Selenium: When taken together, these have been reported to decrease endometriosis related inflammation. There are mixed feelings by specialists about the use of Vitamin E because it boosts production of estrogen.
3. Acupuncture/Acupressure
4. Mayan uterine massage
5. Stress Reduction Techniques such as:
 - a. Yoga
 - b. Biofeedback
 - c. Meditation
 - d. Regular exercise

B. Consult with other healthcare practitioners. Treatments include:

1. Allopathic medicine: Ibuprofen 400 to 800 mg every 6 hours is often helpful
2. Medical Treatment: Hormonal treatments generally attempt to mimic the state of pregnancy by postponing ovulation and thereby controlling the production of estrogen.
3. Surgical Treatment: Endometriosis can be removed by excision, laser ablation, vaporization, or coagulation. Surgery can usually be performed on an outpatient basis by laparoscopy. While surgery is not considered to be a cure, it may provide extended pain relief.

FERTILITY COUNSELING

I. INITIAL HISTORY TAKING

- A. Menstrual
- B. Sexual
- C. Contraceptive
- D. Gynecologic
- E. Obstetric
- F. Breastfeeding
- G. General health and nutrition

II. ASSESSMENT

- A. Discuss fertility goals
 - 1. Pregnancy prevention
 - a. Natural methods
 - b. Natural family planning
 - c. Barrier methods
 - i. Condoms, male and female
 - ii. Cervical cap
 - iii. Diaphragm
 - iv. Chemical barriers such as spermicidal foams, creams, jellies, suppositories, film
 - d. Hormonal methods
 - i. Pills
 - ii. Patch
 - iii. Cervical ring
 - iv. Injectables
 - v. Emergency contraception
 - vi. Others as they become available
 - e. Intrauterine devices
 - f. Sterilization, male and female
 - 2. Pregnancy promotion
 - 1. Begin folic acid supplementation, nutrition, lifestyle changes
 - 2. Natural methods
 - 3. Natural family planning
 - 4. Medical methods

III. COUNSELING AND TEACHING

- A. How the body works: female and male reproductive systems
- B. Assessing fertility
- C. General health: physical, nutritional, emotional, spiritual
- D. Sexual wellness
- E. Emotions and sexuality
- F. Educational preparation, parenting classes, contraception education

- G. Proper use of the chosen method, comparative effectiveness of each method, contraindications and side effects
- IV. MANAGEMENT
- A. Facilitate obtaining preferred method with accompanying teaching
 - B. Provide consult if necessary
 - C. Obtain appropriate labs
 - D. Follow-up
 - 1. Discuss effectiveness and satisfaction
 - a. Side effects
 - b. Problems
 - c. Other
 - 2. Obtain labs as necessary
 - 3. Consult as necessary

GONORRHEA

I. DEFINITION

A contagious sexually transmitted infection, due to *Neisseria Gonorrhoea*, a gram negative bacterium, most commonly causing an inflammation of the mucous membrane lining of the genital organs.

II. ETIOLOGY

Transmitted through unprotected sexual activity

III. SEQUELAE

- A. Pelvic inflammatory disease
- B. Can cause neonatal blindness as a result of being contracted while passing through the infected vaginal canal during birth
- C. Can be spread to other mucous membranes by other sexual activity

IV. SIGNS AND SYMPTOMS

- A. May be asymptomatic
- B. Urinary frequency
- C. Dysuria
- D. Involuntary loss of urine
- E. Purulent vaginal discharge
- F. Reddened, irritated, itchy genitalia
- G. Anorectal discomfort or burning
- H. Abdominal pain or cramping
- I. Sore throat (after oro-genital contact)
- J. Purulent greenish-yellow discharge
- K. Possible swelling of Bartholin's glands
- L. Edema, redness, excoriation of the vulva
- M. Positive culture (throat culture if indicated)

V. MANAGEMENT

- A. Obtain Gonorrhoea and Chlamydia cultures
- B. Consider testing to rule out other STIs
- C. Consider gram stain
- D. Consult for treatment
- E. Notify Public Health Department
- F. Provide education for partners.
- G. Advise client that treatment is required for all sexual contacts
- H. Advise use of condoms until all post-treatment tests are negative
- I. Instruct client in methods for prevention of spreading infection and the need for effective genital hygiene
- J. Consider natural therapies
- K. Follow up with test of cure 6 weeks after treatment is completed

HEPATITIS

DEFINITION

An inflammation of the liver caused by viral or bacterial infections, continuous exposure to alcohol, drugs, or toxic chemicals; contact with infected blood or other bodily fluids; or through contaminated food or water. There are various different hepatitis infections isolated and defined by the causative agent, mode of transmission, and etiology.

HEPATITIS A

I. DEFINITION

A virus that lives in the intestinal tract and is transmitted through food and water. Shedding of the virus in the stool begins approximately 2 weeks before onset of clinical symptoms and usually persists for only a week or two after onset. An acute illness, usually resolves without treatment. Symptoms persist 10 to 15 days and usually resolved by 1 – 2 months.

II. SYMPTOMS

- A. Nausea
- B. Fatigue
- C. Jaundice
- D. Loss of appetite
- E. Flu-like symptoms
- F. Onset often with marked vomiting, abdominal pain, and fever
- G. May be sub-clinical

III. MANAGEMENT

- A. Educate clients as to risks while traveling, including hygiene, water and food preparation
- B. Educate about possible prevention and treatment options
- C. If active, consider natural therapies for symptoms relief
- D. Consider labs to rule out other hepatic conditions
- E. If pregnant, educate on risks of preterm labor if acute, severe infection in third trimester. There is no evidence that Hepatitis A causes birth defects or is transmitted from the mother to fetus.
- F. Management in pregnancy focuses on relief of symptoms.
- G. Consider consult if symptoms are severe.
- H. Report to Public Health Department if acute

HEPATITIS B

I. DEFINITION

A virus that lives in blood and body fluids that can be transmitted through unprotected sex, sharing needles, and by maternal fetal transmission. Hepatitis B is most commonly transmitted by contact with infected body fluids. Incubation is between 1 and 6 months. A person can be a sub-clinical carrier, or have an acute or chronic infection which may lead to liver cirrhosis or hepato-cellular carcinoma.

II. SYMPTOMS

- A. No symptoms
- B. Flu-like symptoms (nausea, vomiting, headache, malaise)
- C. Fulminating illness
- D. Fever
- E. Jaundice
- F. Hepatomegaly
- G. Pain in right flank
- H. Positive antibodies to Hepatitis B

III. MANAGEMENT

- A. Hepatitis panel to determine virus type, acute versus chronic
- B. Liver function labs
- C. Educate to risks and transmission
- D. Consider natural therapies
- E. Treat for symptom relief
- F. Consider consult
- G. Report to Public Health Department
- H. If pregnant:
 - 1. Management same
 - 2. Consider hyperimmune globulin within 24 hours of birth infant.
 - 3. Follow with a series of injections of vaccine during the first and second weeks of life, at 1 month, 3 months, and 6 months.

HEPATITIS C

I. DEFINITION

A virus that is transmitted through in blood and body fluids. Most infections will progress to a chronic stage resulting in liver damage.

II. SYMPTOMS

- A. May be asymptomatic until there is evidence of liver damage
- B. Flu-like symptoms (nausea, vomiting, headache, malaise)
- C. Fulminating illness
- D. Fever
- E. Jaundice
- F. Hepatomegaly
- G. Pain in right flank
- H. Positive antibodies to Hepatitis C

III. MANAGEMENT

- A. If high-risk or pregnant, consider repeated Hepatitis C antibody testing or viral RNA testing as may be delayed several months.
- B. May be transmitted to fetus if acute or chronic in third trimester (no reports of prematurity, or fetal or neonatal abnormalities).
- C. Consult for treatment, and educate that relapse is possible (standard treatment is interferon, which is not advised in pregnancy).
- D. Educate regarding risks and modes of transmission.
- E. Consider natural therapies.
- F. Report to Public Health Department

HERPES

I. DEFINITION

An acute and chronic viral infection characterized by thin-walled, watery vesicles or blisters, primarily seen on the mucous surface of the cervix, vagina, vulva or perineum although can be present elsewhere. Most cases are caused by the Herpes Simplex Type II Virus (HSV-2), although genital lesions may be caused by HSV-1 which is normally responsible for oral lesions (cold sores) and which may be contracted through oral sex. Herpes can occur as a primary or a recurrent infection.

II. ETIOLOGY

- A. Transmitted through sexual contact
- B. Can be spread to other parts of the body

III. FETAL SEQUELAE

- A. Can be transmitted to neonate during vaginal delivery
 - 1. Severe CNS damage
 - 2. Severe ocular damage
 - 3. Neonatal death
- B. Signs and symptoms (incubation occurs from 2 to 12 days, most commonly presents at end of first week):
 - 1. Skin lesions
 - 2. Cough
 - 3. Rapid breathing
 - 4. Painful breathing
 - 5. Jaundice
 - 6. Seizures
 - 7. Lethargy
 - 8. Poor feeding
 - 9. Febrile
 - 10. Irritability
 - 11. Swollen anterior fontanel
 - 12. Stiffness in legs
 - 13. Sepsis
- C. Transmitted to fetus in pregnancy during primary infection
 - 1. TORCH sequelae
 - 2. Spontaneous abortion
 - 3. Fetal death

III. SIGNS AND SYMPTOMS

- A. Primary infection
 - 1. Low grade fever with aching and malaise

2. Swollen inguinal lymph nodes
 3. Vulva may appear red, edematous and excoriated
 4. Painful, fluid-filled vesicles appear
- B. Recurrent infection
1. Prodromal symptoms of burning, tingling, pain at site where lesions will appear
 2. Painful, multiple, fluid-filled vesicles or ulcerations with exudate
 3. Difficulty in urination
 4. Pain on intercourse
 5. Watery discharge from vesicles
 6. Vaginal bleeding

IV. MANAGEMENT

- A. Labs
1. Viral and bacterial smears from lesions to identify organism
 2. Rule out syphilis
 3. Gonorrhea, Chlamydia and cervical cancer screening tests from both cervix and lesion
 4. Consider type specific blood tests to confirm HSV infection. Tests for specific glycoproteins G1 (HSV-1) and G2 (HSV-2). These tests are not 100% sensitive or specific, and are more useful in confirming a clinical diagnosis or for women who are asymptomatic.
- B. For primary herpetic infection
1. Examine and confirm appearance of lesions
 2. Culture lesions
 3. Suggest comfort measures and offer emotional support
 4. Counsel about diet, supplements and natural therapies
 5. If pregnant, educate client about risks of herpes. Risk to the fetus is greatest with primary infections occurring in the first and third trimesters.
 6. Educate about physical, psychosocial, emotional, and stress related causes for reoccurrence.
 7. Offer consult for anti-viral therapy.
- C. For active recurrent infection
1. Examine and confirm appearance of lesions, offer culture
 2. Counsel about comfort measures, offer support
 3. Counsel about diet, supplements, natural remedies to encourage rapid healing
 4. If pregnant, educate client about risks of herpes.
 5. Educate about physical, psychosocial, and emotional causes for reoccurrence.
 6. Consult for anti-viral therapy.
- D. For asymptomatic client with history of herpetic lesions
1. Counsel and educate regarding:
 - a. Situations which increase chance of recurrence

- b. Importance of reporting signs and symptoms of recurrence
 - c. Prevention of recurrence:
 - i. Stress management
 - ii. Diet and supplements
 - iii. Good genital hygiene
 - iv. Natural therapies
 - v. Use of prophylactics with sexual partner
 - d. If pregnant
 - i. Counsel about availability of antiviral medication for suppressive treatment to decrease incidence or reoccurrence
 - ii. Vaginal birth is recommended if no lesions
 - iii. Educate about cesarean birth if outbreak occurs in labor
- E. In labor
- 1. Determine if lesions are present.
 - 2. If no lesions present, continue with vaginal birth.
 - 3. If lesions present:
 - a. Note location of lesions.
 - b. Consider sterile visual exam of cervix.
 - c. If lesions located in genital area refer
 - d. If lesions located in non-genital area, continue with vaginal birth. Cover lesions with an occlusive dressing prior to birth.
 - e. If rupture of membranes and lesions in genital area, refer for immediate cesarean (recommended that cesareans be done within 4 hours of rupture to prevent transmission).

HUMAN IMMUNODEFICIENCY VIRUS (HIV)

I. DEFINITION

A retrovirus that may cause Acquired Immune Deficiency Syndrome (AIDS): a gradual, systemic collapse of the immune system that may manifest in a variety of ways.

II. ETIOLOGY

Transmitted by sexual contact or through contact with infected blood or bodily fluids. Can be passively transmitted to her fetus. Infants born to seropositive mothers may become infected. HIV can be transmitted through breastfeeding.

III. EDUCATION

All clients should be educated regarding HIV/AIDS:

- A. Modes of transmission of HIV and methods of prevention.
- B. Risk factors and risk behaviors.
- C. Information and locations of both confidential and anonymous testing and implications of both positive and negative results.

IV. HIV TESTING

- A. HIV antibody testing begins with a sensitive screening test such as the enzyme-linked immunosorbent assay (ELISA) or a rapid assay.
- B. If positive, a second test, the Western Blot or immunofluorescence assay (IFA), is done to confirm.
- C. If positive to both, the person is considered HIV positive and capable of transmitting the virus to another person.
- D. HIV antibody is detectable in 95% of people within 6 months of infection.
- E. A negative antibody test cannot rule out infection that occurred <6 months before the test. If high risk behavior or incident has occurred within that time period, a second HIV test should be done 3 to 6 months afterwards.
- F. Testing is voluntary and done with full knowledge and cooperation of the client. Specific recommendations for testing by the CDC are as follows
 1. In April 2003, the state of New Mexico amended the HIV law to say that pregnant women were exempt from the HIV informed consent laws. A strategy, referred to as “testing with patient notification and right of refusal,” states that pregnant women are to be informed that testing is a part of routine prenatal care, unless she chooses to refuse the test. Therefore, if pregnant, testing is part of standard tests unless a waiver is signed.
 2. Positive screens must be confirmed by a more specific test (see above).
 3. Persons with HIV must receive medical and psychosocial evaluation and monitoring services or be referred for those services.

- G. Types of testing
 - 1. Anonymous testing means the clients name and information is kept totally anonymous. They are given a number at testing time and results are given to the client based on that identification number. Her name is never connected with that test result.
 - 2. Confidential testing is done with a person's name attached to the results. The results are kept confidential in the same way as any other medical information. However positive confidential tests are reported to the New Mexico Public Health Department for follow-up and statistical purposes.

V. MANAGEMENT

- A. Test result negative
 - 1. Continue care as normal
 - 2. Discuss risk factors, safer sex practices, as part of client education
 - 3. Recommend retesting as appropriate
- B. Test result positive
 - 1. Verify that all confirmatory tests have been done
 - 2. Discuss decreasing transmission risks to others
 - 3. Refer to local facilities for continuing medical care and psychosocial counseling
 - 4. Report to Public Health Department
 - 5. If pregnant under category as needing primary care by physician
 - a. Educate on risks of perinatal transmission
 - b. Educate on methods of decreasing risk of prenatal transmission

HUMAN PAPILOMA VIRUS (HPV) (GENITAL WARTS)

I. DEFINITION

A sexually transmitted infection, Human Papilloma Virus is now understood to be the primary causative agent of cervical cancer. A number of strains have been identified which can cause cervical cancer (16 and 18). Other strains of the virus that appear as raised cauliflower shaped warts. Lesions occur most commonly on the posterior part of the introitus and labia minora; they may also appear or spread to other parts of the vulva, perineum or anus and occasionally are seen on the vaginal walls and cervix. The virus can be present in body even without presence of warts.

II. ETIOLOGY

Primary mode of transmission is sexual contact.

III. SIGNS & SYMPTOMS

- A. Cervical cancer screening positive for HPV
- B. Pedunculated, raised fleshy lesions, pink to red in color, moist and soft to palpation
- C. Large lesions appear in cauliflower-like masses or clusters
- D. Abnormal discharge from vagina with associated infection
- E. Positive acetic acid solution test

IV. MANAGEMENT

- A. Labs
 - 1. For women age 30 or older cervical cancer screen exam with reflex testing if ASCUS (see cervical cancer screening). For women under the age of 21, over 50 % have HPV and of which 91% will resolve on their own in 3 years – routine HPV testing for teens is not recommended.
 - 2. If cervical cancer screening results LSIL or greater, HPV is probably present and HPV testing not necessary.
 - 3. Acetic acid test
 - 4. Culture for suspected secondary infections
 - 5. Saline and KOH wet preps if vaginal discharge present
 - 6. Rule out syphilis (see syphilis guidelines)
- B. For client without lesions but positive HPV and cytological changes
 - 1. Educate regarding:
 - a. Nature of HPV as sexually transmitted
 - b. Use of condoms during sexual intercourse to decrease risk of transmission
 - c. Incidence of the risk of progression to cervical cancer
 - 2. Refer for colposcopy for abnormal screening if 30 or over

- C. For client with genital warts
 - 1. Educate regarding:
 - a. Nature of HPV as sexually transmitted
 - b. Incidence of risk of progression to cervical cancer
 - c. Use of condoms during sexual intercourse to decrease risk of transmission
 - d. Sexual partner will need treatment if they have lesions
 - e. Good perineal hygiene and sitz baths
 - f. Loose clothing and cotton underwear
 - g. Psychosocial and sexual issues
 - 2. The common treatment is topically applied Podophyllin
 - 3. Consult for cauterization, cryotherapy or laser treatments if lesion is large, or upon request
 - 4. All large areas of genital warts should be biopsied for neoplasia
 - 5. If pregnant:
 - a. Podophyllin is contraindicated due to teratogenicity
 - b. Consider consult with other healthcare providers as appropriate
 - c. If lesions are present at birth:
 - i. Avoid tearing or cutting, as they may bleed excessively
 - ii. Educate client of risk to newborn for developing vocal cord polyps within 6 months of birth
 - iii. Consider follow-up with pediatrician
- D. Educate regarding HPV vaccination

INFECTIONS OF THE LOWER GENITAL TRACT

BACTERIAL VAGINOSIS

I. DEFINITION

A vaginal infection caused by one or more types of gram negative bacteria (e.g. *Haemophilus vaginalis*, *Gardnerella vaginalis*, and *Corynebacterium vaginalis*) or other causative agents (e.g., *Mycoplasma*). It is characterized by a malodorous vaginal discharge, with occasional irritation and itching, but may be asymptomatic. During pregnancy, bacterial vaginosis has been associated with adverse pregnancy outcomes (e.g., premature rupture of membranes, preterm labor, preterm birth, endometritis, and post-operative wound infections).

II. ETIOLOGY

May be transmitted through sexual intercourse, although normally present in the vaginas of many women. Times of stress and changes in diet or environment can precipitate an onset of symptoms requiring treatment.

III. SIGNS AND SYMPTOMS

- A. Many infected women are asymptomatic
- B. Symptomatic:
 - 1. Increased chalky or gray–green vaginal discharge
 - 2. Discharge has offensive "fishy" odor
 - 3. Speculum exam reveals mild to moderate amounts of white or gray–green discharge
 - 4. Cervix and vagina do not usually appear irritated
 - 5. Palpation of pelvic organs should not elicit pain or tenderness
- C. Saline wet mount reveals "clue cells"
- D. KOH prep: positive "whiff test" or fishy odor present when 10% KOH is added to slide
- E. Elevated pH of vaginal discharge >4.5

IV. MANAGEMENT

- A. Suggest natural therapies
- B. Arrange consult as appropriate
- C. Offer symptomatic relief measures e.g. douche, sitz baths
- D. Do labs as appropriate
 - 1. Wet mount to rule out Trichomoniasis
 - 2. Cervical cancer screen, Gonorrhea, Chlamydia screening
 - 3. Urinalysis to rule out increased bacteria
- E. Client education
 - 1. Sexual partners may need treatment for persistent infections
 - 2. Advise complete pelvic rest for 24 hours after insertion of vaginal medication

3. Teach good perineal hygiene
 4. Educate about prevention and transmission of organism
 5. Educate about good nutrition and stress management
 6. Educate about pros and cons of antibiotic use
- G. Schedule follow-up visit to repeat labs in 2 weeks to evaluate effectiveness of treatments

TRICHOMONIASIS

I. DEFINITION

An infection caused by the flagellated, one-celled protozoan, *Trichomoniasis vaginalis*. It is characterized by itching and inflammation of the vagina, vulva, lower urinary tract, and Skene glands. *Trichomoniasis* infections generally exhibit a profuse vaginal discharge that is malodorous, frothy, and yellowish green.

II. ETIOLOGY

Sexually transmitted

III. SIGNS AND SYMPTOMS

- A. May be asymptomatic
- B. Strawberry appearance of upper vagina and cervix
- C. Copious, frothy, yellowish green discharge
- D. Itching and burning
- E. Pain on urination
- F. Pain on intercourse
- G. Inflamed labia, vulva, and Skene glands
- H. Friable cervix
- I. Wet smear using normal saline is positive for mobile *Trichomoniasis* with a negative whiff test

IV. MANAGEMENT

- A. Offer symptomatic relief measures such as douche, sitz baths
- B. Do Labs as appropriate
 1. Wet mount to rule out bacterial vaginosis
 2. KOH smear to rule out bacterial vaginosis
 3. Cervical cancer screen, Gonorrhea, Chlamydia screening
 4. Urinalysis to rule out increased bacteria
- C. Schedule follow-up visit to repeat labs in 2 weeks to evaluate effectiveness of treatments
- D. Suggest natural therapies
- E. Arrange consult as appropriate

- F. Client education
1. Partner may need treatment for persistent infections
 2. Advise complete pelvic rest for 24 hours after insertion of vaginal medication
 3. Advise regarding good perineal hygiene
 4. Educate about prevention and transmission of organism
 5. Educate about good nutrition and stress management
 6. Recommend treatment while pregnant

MENOPAUSE

I. DEFINITION

A milestone in a woman's life. A new journey of a holistic cessation of menstruation which proceeds complete cessation of ovarian function. A continuum of processes of perimenopause through menopause, which is defined as one year of no menstruation.

II. ETIOLOGY

- A. This is a profound time in a woman's life. Some experience a smooth transition and others may experience difficulty and discomfort.
- B. Aging is a process, like pregnancy and birth
- C. Age of onset dependant on genetic, racial, and health factors
- D. Occurring between ages 35–55
- E. Gradual changes in cycles over several months or years
 - 1. Reduction in amount
 - 2. Reduction in frequency
 - 3. Increase in frequency
 - 4. A flooding, steady flow, erratic flow of menstrual blood and/or clotting up to a month or more, followed by cessation
- F. Premature
 - 1. Removal of ovaries through surgery
 - 2. Radiation, chemotherapy, congenital anomaly
 - 3. Other health, nutritional, emotional factors

III. SIGNS AND SYMPTOMS

- A. Reduction in bleeding over several months or years
- B. Atrophy of genitalia and breasts due to decrease in glandular activity leading to dyspareunia
- C. Alteration in pituitary, thyroid and adrenal function
- D. Mood swings and emotional changes
- E. Depression
- F. Change in physical appearance
 - 1. Change in fat deposition from hips and breasts to shoulders and waist
 - 2. Increase in facial hair
- G. Increase in appetite
- H. Decrease in caloric requirements
- I. Increase in plasma levels of calcium and potassium
- J. Increase in risk of osteoporosis
- K. Increase in hot flushes
- L. Poor sleep patterns
- M. Poor memory
- N. Increase in cardiovascular problems

- O. Prolapse
 - 1. Bladder
 - 2. Cervix
 - 3. Uterus
- P. Bladder problems
 - 1. Reduced ability to control urine flow
 - 2. Reduced bladder capacity
- Q. Aches and pains due to estrogen deficiency
- R. Increased risk of coronary thrombosis

IV. MANAGEMENT

- A. Encourage women to
 - 1. Honor her own self discovery
 - 2. Renewal of interest in life and its meaning for her
 - 3. Be in touch with herself
- B. Nurture healthfully inside and out
- C. Rule out existing disease as a basis of any complaints
- D. Obtain accurate history
 - 1. Medical
 - 2. Gynecological
 - 3. Obstetric
 - 4. Nutrition
 - 5. Psychosocial
- E. Educate woman about the natural process of menopause and the possible need for
 - 1. Proper nutrition
 - 2. Exercise, pelvic floor exercise
 - 3. Rest
 - 4. Boosting the immune system
 - 5. Vitamins and minerals
 - 6. Lubricants during sex
 - 7. Natural therapies
 - 8. Health measures for exposure to teratogens and sun
- F. Physical exam
- G. Labs which would address chief complaint
- H. Ultrasound if necessary
- I. Counsel about emotional, spiritual, psychosocial issues; sexual satisfaction; support
- J. Implement plan for prevention of osteoporosis and other related conditions
- K. Offer referral to other health care providers
- L. Follow-up yearly, or as indicated, for cervical cancer screening and breast exams

METRORRHAGIA

I. DEFINITION

Uterine bleeding of any amount which is acyclical, which occurs irregularly or continuously.

II. ETIOLOGY

- A. Profound alteration in ovarian rhythm
- B. Surface lesion
- C. Benign or malignant growth with ulceration
- D. Abortion
- E. Ectopic pregnancy
- F. Endocrine disorders
- G. Uterine anomalies
- H. Local injury or foreign bodies
- I. Displacements
- J. Infection
- K. Subinvolution
- L. Birth control
- M. Perimenopause
- N. Unknown

III. SIGNS AND SYMPTOMS

- A. Acyclical uterine bleeding
- B. Irregular uterine bleeding
- C. Continuous uterine bleeding

IV. MANAGEMENT

- A. Confirm source and type of bleeding
 - 1. Rule out bleeding from cervix and lower genital tract
 - 2. Rule out bleeding from anus and urethra
 - 3. Rule out pregnancy, miscarriage, ectopic or molar pregnancy
 - 4. Rule out cysts, fibroids, endometriosis or other benign or malignant growths
 - 5. May be a functional disturbance which resolves spontaneously
 - 6. After menopause, rule out cancer
- B. Keep chart of record of all bleeding during 3-4 months
- C. Look for history of hemorrhagic tendency, nose bleeds, bruising, etc.
- D. Do complete physical exam
- E. Consider ultrasound and appropriate labs (TSH, PRL)
- F. Nature of cause will determine treatment
- G. Offer referrals to other health care providers (e.g. for endometrial biopsy)
- H. Consider natural therapies
- I. Determine need for counseling and further education

PELVIC INFLAMMATORY DISEASE (PID)

I. DEFINITION

Inflammation of the pelvic cavity involving fallopian tubes, ovaries, pelvic peritoneum, vascular system, or connective tissue. Infection may involve one structure or entire pelvis, acute or chronic. Usually results from Gonorrhea or Chlamydia infection.

II. ETIOLOGY

- A. Exposure to sexually transmitted infections
- B. Recent history of abortion or D & C
- C. Uterine or cervical neoplasms
- D. History of peritonitis
- E. Impaired immunity

III. SEQUELAE

- A. Ectopic pregnancy (occurs in 1 in 26 pregnancies after PID)
- B. Infertility due to tubal occlusion
- C. Chronic pain

IV. SIGNS & SYMPTOMS

- A. Acute
 - 1. Lower abdominal and pelvic pain and cramping, severe, bilateral, non-radiating
 - 2. Fever, chills, nausea, vomiting, fatigue
 - 3. Menstrual disturbances: heavy, foul smelling, prolonged, spotting, or dysmenorrhea
 - 4. Malodorous, purulent vaginal discharge
 - 5. Possible back and/or leg pain
- B. Chronic
 - 1. Possibly asymptomatic
 - 2. Low grade fever
 - 3. Painful menstruation
 - 4. Bleeding after intercourse
 - 5. Low back ache
 - 6. Dysuria, constipation, tiredness
 - 7. Mild to moderate dull, intermittent abdominal pain and cramping
- C. Vital signs
 - 1. Fever low-grade to high
 - 2. Elevated pulse
 - 3. Respirations normal to elevated
- D. Abdominal exam
 - 1. Severe tenderness in lower quadrants
 - 2. Adnexal fullness or masses possible

3. Abdominal rigidity possible
4. Bowel sounds may be decreased or absent
- E. Pelvic exam
 1. Purulent vaginal or cervical discharge
 2. Discharge from urethra or Skene's glands possible
 3. Bi-manual exam elicits exquisite tenderness of cervix and uterus
NOTE: When chronic or subacute PID is present, physical exam findings may be minimal.
- F. Labs
 1. WBCs usually elevated, decreased hematocrit may suggest blood loss
 2. Positive for STI or other infectious organism

V. MANAGEMENT

- A. Pregnancy test, rule out ectopic pregnancy
- B. Labs
 1. Cervical cancer screen and Gonorrhea, endocervical and rectal cultures
 2. CBC
 3. STI and syphilis screens
 4. Clean catch urinalysis especially if dysuria present
- C. Consult for appropriate treatment and/or referral
- D. If infection is severe, hospitalization is indicated for immediate and vigorous antibiotic therapy
- E. Follow up with retest as indicated
- F. Education regarding:
 1. Importance of treatment of all sexual partners
 2. Prevention of re-infection, emphasis on good perineal hygiene, avoid use of tampons
 3. Abstinence from intercourse for 1 week following treatment with use of condoms until cultures is negative
 4. Bed rest, good diet, increased fluid intake
 5. Possible infertility
- G. Provide emotional support
- H. Consider natural therapies

PELVIC RELAXATIONS

UTERINE PROLAPSE/ CYSTOCELE/ URETHROCELE/ RECTOCELE/ ENTEROCELE

I. DEFINITIONS

- A. Uterine Prolapse: downward displacement of the uterus
 1. First degree: any minor degree of descent with the cervix remaining inside the vagina
 2. Second degree: cervix protrudes through the vaginal introitus
 3. Third degree: comprises prolapse of the entire uterus outside the vulva
- B. Cystocele: Bulging of the upper (cervical) end of the anterior vaginal wall
 1. First degree: slight bulging
 2. Second degree: bulging reaches the vaginal orifice
 3. Third degree: bulging extends past the introitus
 4. Frequently accompanies uterine prolapse
- C. Urethrocele: The distal (vulvar) end of the anterior vaginal wall bulges downward into the vagina and outward toward the introitus.
- D. Rectocele: Evidenced by bulging upward at the lower (vulvar) end of the posterior vaginal wall into the vagina and outward toward the introitus. Graded in the same manner as a cystocele.
- E. Enterocele: Prolapse of the upper (cervical) end of the posterior vaginal wall. It is almost always associated with herniation of the cul-de-sac of Douglas and may contain loops of bowel. This should be differentiated from a rectocele as it is a more serious condition.

II. SEQUELAE

- A. Uterine prolapse can result in
 1. Sexual dissatisfaction
 2. Dyspareunia
 3. Heaviness or dragging sensation in pelvic area
- B. Cystocele/urethrocele can cause
 1. Urinary incontinence due to loss of the posterior urethrovesical angle
 2. Urinary frequency
 3. Urinary retention and stasis
 4. Urinary tract infections (UTI)
 5. Dyspareunia
- C. Rectocele/Enterocele can cause
 1. Difficulty with bowel elimination
 2. Pelvic discomfort

III. SIGNS & SYMPTOMS

- A. Dyspareunia
- B. Sensation of pressure or fullness
- C. Sexual dissatisfaction
- D. Stress incontinence
- E. Urinary tract infections
- F. History of painful menstrual flow
- G. Difficulty with bowel elimination
- H. Presence of relaxation with pelvic examination; bulging vaginal wall through the introitus
- I. Anal incontinence
- J. Difficulty wiping clean after a bowel movement
- K. Inability to completely empty rectum
- L. Minor degrees may be asymptomatic

IV. MANAGEMENT

- A. Education as to the causes, physiology, and consequences one can expect from pelvic relaxations. Evaluate for pelvic muscle relaxation in pregnancy as indicated, at well woman exams, and at the six week postpartum visit
- B. Prevention is best; e.g., work with the laboring woman to prevent prolonged second stage and avoid prolonged forceful breath-holding pushing
- C. Encourage pelvic floor exercises
- D. Consider the use of natural remedies to strengthen and tone tissues
- E. Teach the woman how to splint (digitally hold back) a rectocele
- F. Use of a ring pessary
- G. Refer for consultation or possible surgical repair if serious symptomatic relaxation or with hernia with an enterocele
- H. Schedule follow up

PREMENSTRUAL SYNDROME

I. DEFINITION

Premenstrual syndrome (PMS) is a common cyclical hormonal disorder that may manifest with physical or emotional signs or symptoms. The symptoms usually start 10–14 days before the menstrual flow, getting worse until the onset of the flow or shortly thereafter, then gradually lessening. Symptoms range from mild to debilitating and may interfere with daily activities and personal relationships. PMS is followed by a period entirely free of symptoms.

II. ETIOLOGY

- A. Approximately 40 percent of all women suffer from PMS, and 2 to 3 percent of those suffer from severe symptoms
- B. Associated with maternal history
- C. Hormonally related
- D. May be related to allergies, vitamin deficiencies
- E. More common in relation to other life stresses
- F. Increases depending on diet, caffeine intake, hypoglycemia
- G. Underweight
- H. Overweight
- I. Related to lack of exercise
- J. Other medical conditions including endocrine disorders, heart disease, hypertension

III. SIGNS AND SYMPTOMS

- A. Irritability, anxiety, depression, hostility, mood swings
- B. Migraine, headache, dizziness, fainting
- C. Boils, acne, allergies, sore throat, joint pain, insomnia
- D. Bloating, water retention
- E. Weight gain, constipation, cramps, cystitis
- F. Backache
- G. Breast tenderness
- H. Sugar craving
- I. Clumsiness, poor coordination, accidents
- J. Depression
- K. Individual signs and symptoms exist

IV. MANAGEMENT

- A. Educate as to the possible causes, help identify the symptoms
- B. Teach the use of a monthly cycle diary or journal to document feelings, things that are happening, diet, and signs and symptoms
- C. Provide nutritional counseling
- D. Consider natural therapies
- E. Offer consult to support groups, community resources

- F. Encourage exercise, yoga, etc. as appropriate
- G. Follow up at regularly scheduled intervals as appropriate

SYPHILIS

I. DEFINITION

An infectious systemic disease caused by the spirochete *Treponema Pallidum* and characterized initially in the Primary Stage by a painless lesion or chancre of the skin or mucous membranes which can appear within ten days to three months, but usually appears within 2 to 6 weeks, lasts about 4 weeks and disappears. The Secondary Stage follows approximately 6 weeks later with chronic systemic symptoms. Infection can occur without chancre. Increased risk of acquiring HIV infection.

II. ETIOLOGY

- A. Transmitted by direct contact with exudates
 - 1. Saliva
 - 2. Semen
 - 3. Blood
 - 4. Vaginal discharge
- B. Transmitted by sexual contact
- C. Acquired congenitally in utero

III. SIGNS & SYMPTOMS

- A. Primary Stage
 - 1. May be asymptomatic
 - 2. Is contagious
 - 3. Painless lesion present on the vagina, perineum, cervix, penis, mouth or anal area
 - 4. Chancre appears oval, ulcerated and indurated with purulent discharge
 - 5. Bilateral inguinal lymph nodes enlarged
 - 6. If untreated, one third will go into late chronic stage
- B. Secondary Stage – is also contagious, symptoms can come and go over 1 to 2 years
 - 1. Slight fever
 - 2. Contagious
 - 3. Weight loss
 - 4. Malaise and headaches
 - 5. Chronic sore throat and hoarseness
 - 6. Symmetrical non-tender rash, commonly on palms and soles which appears 3 to 6 weeks after chancre and heals after several weeks or months
 - 7. Condylomata lata: flat, wart-like plaques with gray exudate may be present on vulva
 - 8. Possible enlargement of liver and spleen
 - 9. Possible acute arthritis

- C. Latent Stage – dormant with no symptoms; can go on for years.
- D. Tertiary or Late Stage
 - 1. Heart abnormalities
 - 2. Mental disorders
 - 3. Blindness
 - 4. Neurological disorders
 - 5. Death

IV. MANAGEMENT

- A. Labs
 - 1. Screen for Syphilis (whichever testing is most current)
 - 2. Dark field microscopy confirms presence of *Treponema Pallidum* in Primary Stage
 - 3. HIV and other STI screening
- B. Refer for antibiotic treatment
- C. Report all cases to Public Health Department
- D. Stress necessity of treating all sexual contacts for at least the last three months
- E. Instruct client to use condoms during intercourse for 1 month following treatment
- F. Consider natural therapies
- G. Counsel about hygiene, mode of transmission, sexuality, psychosocial issues
- H. Follow-up should be repeated at 3, 6 and 12 months after treatment until a ratio of 1:2 is reached

V. RISKS OF SYPHILIS IN PREGNANCY

- A. Miscarriage
- B. Stillbirth
- C. Neonatal death
- D. Congenital syphilis, symptoms appearing at birth or 3 to months of age

URINARY TRACT INFECTIONS (UTI)

ASYMPTOMATIC BACTERIURIA

I. DEFINITION

Actively multiplying bacteria in the urinary tract without symptoms. Untreated may progress to cystitis or pyelonephritis and, in pregnancy, may lead to preterm labor.

II. ETIOLOGY

- A. Usually caused by ascending gram negative bacteria, most commonly E. Coli
- B. UTI in pregnancy may be precipitated by normal physiological changes of pregnancy
- C. Emotional and stress factors contribute to UTIs

III. SIGNS & SYMPTOMS

- A. Client reports no symptoms
- B. Urinalysis results
 - 1. 100,000 or more bacteria
 - 2. Hematuria
 - 3. Leukocytes
 - 4. Nitrites
 - 5. Albumin
 - 6. High specific gravity
 - 7. High WBCs, RBCs

IV. MANAGEMENT

- A. Consider natural therapies
- B. Increase fluids
- C. Re-assess after 7–10 days of treatment or at any time if symptoms appear
- D. Consult as appropriate
- E. If allopathic treatment given, consider natural remedies to support normal flora

CYSTITIS

I. DEFINITION

Infection confined to the bladder

II. SIGNS & SYMPTOMS

- A. Urinary frequency and urgency
- B. Dysuria

- C. Oliguria
- D. Pain after urination
- E. Suprapubic pain
- F. Back pain
- G. Fever
- H. Vomiting
- I. Hot flashes
- J. Urinalysis results:
 - 1. Colony count of 100,000 or more bacteria
 - 2. Hematuria
 - 3. Leukocytes
 - 4. Nitrites
 - 5. Albumin
 - 6. High specific gravity
 - 7. High WBCs, RBCs, etc.

III. MANAGEMENT

- A. Educate client about:
 - 1. Natural therapies
 - 2. Hydration, at least 4 quarts/day
 - 3. Good hygiene
 - 4. Empty bladder before and after intercourse
 - 5. Provide nutritional counseling
- B. Perform culture and sensitivity as appropriate
- C. Consult for treatment as appropriate
- D. Follow-up evaluation and repeat urinalysis when treatment completed

PYELONEPHRITIS

I. DEFINITION

Infection of the kidney(s). This is a serious complication as it may lead to septicemia and chronic pyelonephritis, and to premature labor in pregnancy.

II. ETIOLOGY

- A. Ascending bacteria from the bladder
- B. Untreated asymptomatic bacteriuria
- C. Inflammation from renal stones

III. SIGNS & SYMPTOMS

- A. CVA tenderness, often unilateral (right)
- B. Fever, chills, hot flashes, temperature over 100.4 F
- C. Anorexia, nausea, vomiting
- D. Dysuria, urinary frequency and urgency
- E. Hematuria
- F. Elevated WBCs in blood; bacteria, WBCs, cast in urine

IV. OTHER CONDITIONS TO CONSIDER

- A. Kidney stones
- B. Placental abruption
- C. Infarcted fibroid
- D. Uterine infection (usually postpartum)
- E. With right-sided kidney infection, rule out appendicitis or biliary colic

V. MANAGEMENT

- A. Rule out above conditions
- B. Consult physician
- C. Prepare client for assessment, probable need for IV therapy, antibiotics and hospitalization
- D. Consider natural therapies in conjunction with allopathic treatment

UTERINE FIBROIDS

I. DEFINITION

Benign tumor of the uterus composed primarily of smooth muscle and connective tissue. Also referred to as a leiomyomas or myomas.

II. ETIOLOGY

- A. Cause unknown
- B. Originate in myometrium
- C. Usually multiple
- D. May be located immediately beneath endometrial or decidual surface of uterine cavity, immediately beneath uterine serosa, or confined to the myometrium
- E. Sometimes hormone responsive: known to increase in size with estrogen therapy and during pregnancy, and to decrease in size or disappear following menopause

II. SEQUELAE

- A. Anemia
- B. Infection
- C. Intestinal obstruction
- D. Genitourinary anomalies (e.g., urethral deviation/compression)
- E. Miscarriage
- F. Preterm labor
- G. Placental abruption
- H. Uterine inertia, which may lead to
 - 1. Obstructed labor
 - 2. Postpartum hemorrhage
- I. Fetal malpresentation
- J. Obstruction of birth canal
- K. Retained placenta

IV. SIGNS AND SYMPTOMS

- A. Often asymptomatic
- B. Abnormal bleeding
 - 1. Menorrhagia
 - 2. Premenstrual spotting
 - 3. Prolonged light staining after menses
- C. Abdominal pain, may radiate to back, lower extremities
- D. Heaviness or bearing-down feeling in pelvic area
- E. Constipation
- F. Urinary retention
- G. Intermittent incontinence
- H. Serosanguinous vaginal discharge

- I. Dyspareunia
- J. Infertility
- K. Enlarged abdomen
- L. Lower extremity edema
- M. Normal uterine contour distorted by one or more smooth, spherical, firm masses
- N. Fever
- O. Vaginal/cervical bleeding
- P. Low HCT
- Q. Elevated leukocytes
- R. Ultrasound reveals fibroid

V. MANAGEMENT

Usually no treatment required particularly if no symptoms or in post-menopausal woman

- A. In non-pregnant woman
 1. Consult to physician for diagnosis, evaluation, treatment
 2. Consider natural therapies
 3. Recommend follow-up visit every 6 months
- B. In pregnant woman: Expectant management usually successful; myomectomy usually contraindicated
 1. Consult to physician for diagnosis, evaluation, collaborative management plan
 2. Consider natural treatments
 3. If myomectomy indicated refer for surgery 5-6 months after delivery
 4. Anticipate
 - a. Fetal malpresentation
 - b. Obstructed labor
 - c. Postpartum hemorrhage

VARICOSITIES

I. DEFINITION

Dilated, tortuous superficial veins most commonly occurring in the legs and vulva which can be associated with deep vein thrombosis.

II. ETIOLOGY

- A. Heredity
- B. Weakness of veins
- C. Prolonged standing
- D. Increased venous pressure caused by enlarging uterus of pregnancy inhibiting venous return
- E. Relaxation of walls and valves of veins caused by increased progesterone levels of pregnancy

III. SIGNS AND SYMPTOMS

- A. Often asymptomatic
- B. Pain and/or heaviness in affected area
- C. Edema
- D. Itching
- E. Eczema
- F. Ulceration

IV. MANAGEMENT

- A. Avoid restrictive clothing
 - B. Use support hose or elastic bandages to provide support
 - C. Avoid prolonged standing
 - D. Rest with legs elevated several times a day
 - E. Avoid crossing legs while sitting
 - F. Maintain good body posture
 - G. Exercise regularly
 - H. Consider natural therapies
- I. Dietary changes

PRENATAL CARE

New Mexico Licensed Midwives' Practice Guidelines

This following overview will become the New Mexico Midwives' Practice Guidelines in the near future when the State Board of Midwifery, State Board of Pharmacology, and the Department of Health complete their revision process.

Licensed midwives are autonomous practitioners providing well woman, prenatal, birth, postpartum, and newborn care. Licensed midwives practice both the art and science of midwifery, caring for families who want a midwifery model for their care. Licensed midwives attend births in all settings. Licensed midwives provide holistic, woman and family-centered care. As independent practitioners, licensed midwives work in collaboration with the entire health care network to provide care for clients including, but not limited to, ordering lab work, ultrasounds, non-stress tests, biophysical profiles, newborn screenings, obtaining consultation for medication and follow-up care, and insurance billing. (See also New Mexico Department of Health Rule 16 NMAC 11.3).

Licensed midwives perform skills and procedures necessary to provide safe care during the childbearing cycle. These skills and procedures are defined by the North American Registry of Midwives, the Midwives Association of North America, the World Health Organization and New Mexico Department of Health.

Licensed midwives follow evidence-based standards of care that are rooted in a midwifery model of normal, natural pregnancy and birth. These standards evolve based on changing community standards, national and international principles, new research, and recommendations by experts in the field. These standards include offering testing throughout for pregnant women throughout the prenatal period, and for babies throughout the immediate postpartum period.

Testing includes the following:

Initial prenatal exam:

- Urinalysis
- Blood type, factor, and antibody screen
- Syphilis
- CBC
- Rubella titer
- Hepatitis B screens
- Glucose screening as indicated (refer to diabetes screening protocol)
- Question and inform clients as to their risks of HIV/AIDS and other STIs and available diagnostic testing
- Consider other blood tests as indicated (e.g. TSH, varicella titer, toxoplasmosis, tuberculosis, etc.)
- Gonorrhea screen
- Chlamydia screen
- Cervical cancer screening

Additional Testing Based on Risk or Gestational Age

- Advise and inform all clients of available genetic screening tests, e.g., chorionic villi sampling, amniocentesis, maternal serum alpha-fetoprotein at 15 - 20 weeks), cystic fibrosis testing
- Diabetes screen at 28 weeks
- Hemoglobin/hematocrit at 28 and 36 weeks
- If Rh negative, counsel on prenatal RhoGam and repeat AST at 28 weeks. Administer antenatal RhoGam at 28 weeks if AST is negative. If RhoGam is refused at 28 weeks, repeat AST at 36 weeks.
- GBS screening at 35-37 weeks

Treatment and Testing for Newborn

- Antibiotic eye prophylaxis
- Vitamin K
- Hepatitis B Vaccine
- If mother Rh Negative, newborn blood type and factor
- Newborn Metabolic screening
- Newborn Hearing screening
- Referral to infant health care practitioner

Licensed midwives believe that women are the primary decision-makers for their own and their babies' health care option. As such, licensed midwives support women's informed choices regarding decisions to test and receive treatments or to decline such testing and treatment.

As independent health care practitioners, midwives may carry and administer the following medications as needed for safe practice:

This section is under review by Board of Midwifery, Board of Pharmacology and the Department of Health

Antibiotics

Anti-hemorrhagic agents (Oxytocin, Methergine, Misoprostil)

Contraceptives (condoms, cervical caps, diaphragms, IUDs, hormonal contraceptives)

Epinephrine

Folic acid

Hepatitis B Ig

Hydroxyzine (Visteril)

Iron

IV solutions, tubing, and other equipment

Local anesthetics for suturing

Neonatal eye prophylaxis (Erythromycin)

Oxygen

Phonogram (Promethazine)

Rh factor (D) Immune Globulin (RhoGam, Rhophyllac)

Rubella vaccine
Sterile water for injection
Suture materials
Syringes
Vitamin K
Vitamins
Other medications under physician order

The following represent conditions which require primary care by a physician or nurse-midwife or factors which require consultation, co-management, referral, or transfer of care.

PART I: Conditions Which Require Primary Care by a Physician or Nurse-Midwife

- A. Chronic Medical Conditions
 1. Cardiac disease (Class II or greater)
 2. Diabetes Mellitus that is not diet controlled
 3. Hemoglobinopathies
 4. Renal disease (chronic, diagnosed, not UTI)
 5. History of pulmonary embolism, thrombophlebitis, DVT on medication therapy
 6. Any chronic condition not well controlled (e.g. hyperthyroidism, seizures, lupus)
 7. Active tuberculosis, active Syphilis, active Gonorrhea, active Hepatitis B, C, or non-A other, and AIDS
- B. Current Pregnancy Related Conditions
 1. Severe pre-eclampsia, HELLP Syndrome, eclampsia
 2. Placenta previa at onset of labor
 3. Gestational diabetes not controlled by diet
 4. Multiple gestation
 5. Contracts primary genital herpes simplex in first trimester
 6. Premature labor (<37 weeks gestation verified EDD by dates, ultrasound assessment and/or physical exam)
 7. Placental abruption
 8. Fetus in any presentation other than vertex at onset of labor
- C. Previous Obstetrical History
 1. Previous Rh sensitization
 2. Previous cesarean with vertical uterine incision
 3. Two or more low transverse uterine cesareans

PART II: Conditions Which Require Consultation

- A. Prenatal Factors
 1. Seizure disorder currently on medication
 2. Essential hypertension
 3. Positive HIV status
 4. Thrombophlebitis
 5. Vomiting unresponsive to treatment

6. Rubella contracted in first or second trimester
 7. Maternal anemia (Hgb <10, Hct <30%) unresponsive to treatment
 8. Oligohydramnios (documented)
 9. Polyhydramnios (documented)
 10. Premature rupture of membranes <37 weeks
 11. Post term >42 weeks gestation (verified EDD by dates, ultrasound assessment and/or physical exam)
 12. Intrauterine growth restriction (documented)
 13. Rh sensitization in current pregnancy
 14. Thrombocytopenia
 15. Serious maternal viral/bacterial infection at term unresponsive to treatment
 16. Evidence of worsening signs and symptoms of mild pre-eclampsia
 17. Gestational diabetes (documented)
 18. UTI not responsive to treatment
 19. Continued vaginal bleeding before onset of labor with or without pain
 20. Signs of fetal distress or demise
 21. Documented fetal anomalies
 22. Teratogenic exposure
 23. Current severe psychiatric condition requiring medication within a 6-month period prior to pregnancy
 24. Current drug or alcohol abuse or dependency
 25. Persistent fever
 26. History of uterine surgery, other than cesarean section
 27. History of inverted uterus
- B. Labor and Birth Factors
1. Prolonged rupture of membranes (> 24 hours) with no progress of labor
 2. Signs of maternal compromise or exhaustion
 3. Signs and symptoms of maternal infection
 4. Maternal fever of 100.4 for over 4 hours
 5. Severe headache, visual disturbances, epigastric pain
 6. Significant meconium stained fluid when birth is not imminent
 7. Severe bleeding prior to or during birth
 8. Maternal respiratory distress
 9. Persistent or recurrent fetal heart tones below 100 or above 160 or late decelerations when birth is not imminent, or other non-reassuring fetal heart rate patterns
 10. Retained placenta with signs of maternal compromise
 11. Mother desires consult or transfer
- C. Postpartum Factors
1. Maternal hemorrhage not responsive to interventions, with deteriorating vital signs
 2. Fourth degree perineal laceration
 3. Signs of infection not responsive to treatment

4. Hematoma increasing in size, or increasing in pain with signs of maternal compromise
 5. Uterine inversion or prolapse
- D. Newborn Risk Factors Requiring Immediate Transfer
1. Neonatal distress not responsive to interventions
 2. Seizures
- E. Newborn Risk Factors Requiring Consultation
1. Fails to urinate or move bowels within 24 hours
 2. Less than three vessels in umbilical cord
 3. Low birth weight (less than 2500 g)
 4. Obvious anomaly or injury
 5. Respiratory distress or abnormal respiratory patterns
 6. Cardiac irregularities
 7. Prolonged pale, cyanotic or gray color
 8. Abnormal cry
 9. Jaundice within 24 hours of birth
 10. Lethargy
 11. Edema
 12. Signs of hypoglycemia
 13. Seizures
 14. Abnormal facial structure
 15. Abnormal body temperature
 16. Poor feeding
 17. Hyperbilirubinemia

PRENATAL CARE SCHEDULE

- I. INITIAL PRENATAL VISIT may include, but is not limited to, the following
 - A. Personal information
 - B. Obtain informed consent (see New Mexico Midwifery Regulations)
 - C. Obtain medical, obstetrical, family, dietary, health and social history
 - D. History of current pregnancy
 - E. EDD
 - F. Perform physical exam
 - G. Obtain necessary vaginal specimens, such as:
 1. Gonorrhea screen
 2. Chlamydia
 3. Cervical cancer screening
 - H. Obtain blood draw for prenatal laboratory tests or sign waiver if declining any of the following:
 1. Blood type, factor, and antibody screen
 2. Syphilis
 3. CBC
 4. Rubella titer
 5. Hepatitis screens as indicated
 6. Glucose screening as indicated (refer to diabetes screening protocol)
 7. Consider other blood tests as indicated (e.g., TSH, varicella titer, toxoplasmosis, tuberculosis)
 - I. Obtain a sample for urinalysis as appropriate
 - J. Advise and inform all clients of available genetic screening tests, (e.g., nuchal translucency chorionic villi sampling, amniocentesis, maternal serum alpha-fetoprotein, cystic fibrosis testing)
 - K. Question and inform clients as to their risks of HIV/AIDS and other STIs and available diagnostic testing
 - L. Instruct to avoid environmental and household hazards and exposures such as cat feces, raw meat, x-rays, chemicals, etc.
 - M. Instruct and educate on avoidance of alcohol, cigarettes, and drug exposure
 - N. Do family violence assessment
 - O. Advise regarding nutrition and supplements, exercise, childbirth education, and the normal physiological changes of pregnancy
 - P. Inform of available community resources
 - Q. Advise of warning signs of pregnancy complications and how and when to contact midwife
 - R. Establish prenatal care schedule
 - S. Schedule next appointment

II. FOLLOW UP PRENATAL VISITS

- A. These visits shall include the following:
 - 1. Obtain maternal vital signs and FHTs
 - 2. Check for weight gain, presence of edema
 - 3. Dipstick urine for protein and glucose
 - 4. Perform abdominal palpation for fundal height and fetal position
 - 5. Perform nutritional assessment and counseling
 - 6. Answer questions, address concerns
 - 7. Follow-up for risk factors
- B. Frequency of visits, if everything is normal, is once a month until 28 weeks, every 2 weeks until 36 weeks, then every week until birth.
 - 1. Maternal serum alpha-fetoprotein test is offered at 15 - 20 weeks
 - 2. Diabetes screen is offered at 28 weeks
 - 3. Hemoglobin/hematocrit are offered at 28 and 36 weeks
 - 4. If Rh negative, counsel on prenatal RhoGam and repeat AST at 28 weeks
 - a. If RhoGam is refused at 28 weeks, repeat AST at 36 weeks
 - b. If antenatal RhoGam is administered at 28 weeks, do not repeat AST at 36 weeks
 - c. Refer to physician if screen is positive
 - 5. Offer GBS screening at 35-37 weeks
- C. Birth preparation visit is scheduled by 37 weeks.
 - 1. Encourage all persons planning to attend birth to be present
 - 2. If homebirth is planned, have visit in the client's home
 - 3. Allow time for collaboration on a birth plan
 - 4. Assess home environment for preparedness
 - 5. Discuss management and plan for emergencies
 - 6. Review when and how to contact midwife
 - 7. Discuss breastfeeding and postpartum care and support
 - 8. Discuss newborn care issues

VAGINAL BIRTH AFTER CESAREAN INFORMATION AND CARE SCHEDULE

PHILOSOPHY

The New Mexico Midwives Association believes women desiring vaginal birth after cesarean (VBAC) should have the opportunity to deliver out of the hospital after carefully considering the risks and benefits.

- I Eligibility for Out-of-Hospital VBAC
 - A. History of only one previous cesarean at least eighteen months prior to the EDD of the current pregnancy, or last birth was a successful VBAC
 - B. Records documenting low transverse uterine incision without extension, or proof of subsequent VBAC
 - C. Placental location documented by ultrasound to be not previa nor low and anterior
 - D. Birth location provides for a transport time no longer than 30 minutes from problem recognition to arrival at hospital with surgical and pediatric services

- II Antepartum Care
 - A. Review history and records of previous cesarean birth
 - B. Document previous or subsequent vaginal deliveries
 - C. Record discussion of risks vs. benefits of trial of labor and possible alternatives
 - D. Document provision of relevant information and/or education for the special concerns of VBAC mothers and families; refer to appropriate support groups where available
 - E. Provide for third trimester ultrasound for documentation of placental location unless previously documented
 - F. Discuss the potential of an antepartum uterine rupture which can also occur, often late in the third trimester, although less frequently than in labor
 - G. Explain and discuss “The New Mexico Midwives Association Informed Consent for Out-Of-Hospital VBAC” and obtain appropriate signatures
 - H. Perform assessment and prenatal work-up as provided for all mothers

- III Intrapartum Care
 - A. Mothers in labor will be monitored as described under Labor and Birth Care Schedule
 - B. If mother has never delivered vaginally, assess progress by nulliparous criteria
 - C. If mother has delivered vaginally, assess progress by multiparous criteria
 - D. Consider placement of a saline lock upon confirming active labor

- E. Continually assess for symptoms of uterine rupture.
 1. The most common, and sometimes only, sign of uterine rupture is a non-reassuring fetal heart rate pattern
 2. FHT decelerations or abnormal pattern
 3. Sudden, severe, tearing; unusual pain
 4. Frank, bright red bleeding
 5. Loss of uterine contractions or tonus
 6. Signs or symptoms of shock
 7. Uncontrolled postpartum bleeding

- IV Indications for transfer to hospital
 - A. Mother's request
 - B. Signs/symptoms of uterine rupture
 - C. Any other usual indications for transfer

- V Risks of Pregnancy and Birth After Cesarean Section
 - A. Uterine Rupture: In some instances, the uterus may rupture, or tear open, at the site of the scar, which may cause neurological injury or death to the baby, cause maternal hemorrhage, or death to the mother. The risk of uterine rupture in spontaneous labor with a single low transverse uterine scar is 0.4 to 0.8% (1,2). The risk is three times higher when the birth interval is 18 months or less (3). Vaginal births after two or more cesareans have a three-to-four fold increase - 1.7 to 3% - (1) in uterine rupture over those who have had only one previous cesarean. The risk of uterine rupture when the last birth was a successful VBAC is 0.2% (1, 2).
 - B. Placenta Problems: Pregnancies after a cesarean birth have an increased risk of the placenta being implanted over the uterine scar, accreta, increta or percreta. This can lead to serious problems with placental delivery, including hemorrhage and significant risk of maternal death. An ultrasound performed in the third trimester of pregnancy can determine placental location, but may not be foolproof in predicting all placental problems.

- VI Risks of Hospital Options
 - A. Hospital VBAC These medical procedures, at times used during hospital births, have been shown to increase the risk of uterine rupture:
 1. Pitocin induction or augmentation
 2. Use of Misoprostil or Prostaglandins
 3. Epidural anesthesia
 - B. Elective Repeat Cesarean Section

The risks of an emergency cesarean for an unsuccessful VBAC are higher than the risks of a planned cesarean delivery. However, surgical deliveries carry the following risks as compared to vaginal births:

 1. Higher maternal mortality rate
 2. Higher risk of maternal infection

3. Increased risk of anesthesia complications
4. Increased risk of respiratory distress for the infant

VII Informed Consent for Out-Of-Hospital VBAC

In order to undertake an out-of-hospital VBAC, the mother must sign the New Mexico Midwives Association Informed Consent for Out-Of-Hospital VBAC, stating that she agrees to and fully takes responsibility for the risks.

NEW MEXICO MIDWIVES ASSOCIATION
INFORMED CONSENT FOR OUT-OF-HOSPITAL
VAGINAL BIRTH AFTER CESAREAN (VBAC)

Client is to initial each paragraph

I have been told the risks of having a vaginal birth after a cesarean birth (VBAC), for both me and my baby. I understand the special risk is that my uterus could tear open in labor. (The medical word for this is “uterine rupture”) The risk of my uterus tearing open is greater for me than it is for a woman who has never had a cesarean birth. This is because the place where my uterus was cut open could tear open again.

I understand that my uterus could tear open whether I have my baby in a hospital, at home, or in a birth center.

If my uterus tears open, my baby could have brain damage for the rest of his or her life, or I could bleed very heavily, or both could happen. My baby could die, I could die, or both of us could die.

If my uterus tears open, I will need to have a cesarean to deliver my baby and stop the bleeding. For the least damage to my baby and/or me, the cesarean needs to be done quickly. If I am having my baby at home or in a birth center, the time it takes to travel to the hospital for a cesarean may cause more damage than if I were having my baby at a hospital and able to have an immediate cesarean.

I might need a cesarean for other reasons, even if my uterus does not tear open. If I do have a cesarean I am more likely to have problems like infection and heavy bleeding than if I had planned a scheduled repeat cesarean birth.

I understand that I could choose to have a planned repeat cesarean instead of a planned VBAC. I have been told the risks of VBAC and of having a repeat cesarean birth.

If my midwife decides at any time that my baby or I need to go to a hospital, I will go to the hospital even if I disagree. Also, I understand that if I decide to go to a hospital at any time, my midwife will go with me to the hospital even if she does not think I need to go.

I have read the New Mexico Midwives Association “Vaginal Birth After Cesarean Information and Care Schedule”, and discussed it with my midwife. _____

I have read, and I understand, the above information, as well as the New Mexico Midwives Association “Vaginal Birth After Cesarean Information and Care Schedule”. All my questions about VBAC have been answered and I understand the answers.

I confirm that:

I have had only one cesarean birth; _____
or that I have had at least one vaginal birth since I had a cesarean birth. _____
(Initial the one that applies to you, or both if they are both true.)

My medical records say the cut was made across the lower part of my uterus. I understand that the cut in my uterus may have been made in a different place or direction from the cut in my skin. _____

There will be at least 18 months from the date of my cesarean to the due date of this pregnancy. _____

I will have an ultrasound in the last three months of my pregnancy to find out if the placenta is in a dangerous position. _____

I will have my birth within a 30 minute distance from a hospital where a cesarean could be done, and pediatric care could be provided to my baby. _____

I understand all of the special risks of a VBAC birth and the risks of having a VBAC at home or at a birth center, and I choose to plan a home or birth center VBAC birth.

Date: _____ Signature: _____

Date: _____ Midwife _____

ANTEPARTUM BLEEDING

BLEEDING IN PREGNANCY LESS THEN 20 WEEKS

I. DEFINITION

Any bleeding from the vagina during the first half of pregnancy

II. ETIOLOGY

A. Break-through bleeding due to implantation

B. Threatened or actual abortion

C. Cervical lesions

1. Polyps

2. Erosion

3. Carcinoma

D. Hydatidiform mole

E. Ectopic pregnancy

F. Trauma

G. Recent sexual intercourse

H. Hemorrhoids

I. Infection of reproductive tract

III. SIGNS AND SYMPTOMS

A. Irregular vaginal spotting or bleeding

B. Lower abdominal pain, cramping, pelvic tenderness

C. History or signs of

1. Vaginitis

2. Cervicitis

3. Ectopic pregnancy

4. Abnormal cytology

5. DES exposure

6. Hemorrhoids

7. Over-exertion

8. Recent sexual intercourse

9. Recent cervical exam including cervical cancer screening

D. Speculum exam reveals

1. Products of conception or uterine bleeding

2. Cervical erosion, polyps

3. Pelvic tenderness elicited by examiner

IV. MANAGEMENT

A. Gentle speculum exam/bimanual exam to determine source of bleeding

B. If indicated, do vaginal/cervical cultures for

1. Abnormal cervical cancer screen

2. Chlamydia

3. Gonorrhea
4. Group B Strep
5. Vaginitis, cervicitis, etc.
- C. FHTs or ultrasound is indicated to confirm pregnancy unless other source of bleeding is identified
- D. Quantitative HCG, repeat in 48 hours if indicated
- E. CBC
- F. Urine culture
- G. If client is Rh negative, screen for antibodies if more than 6 weeks pregnant, and consider RhoGam
- H. If no cervical dilation or products of conception and no evidence of cervicitis or vaginitis
 1. Educate/inform client of possible sequelae with bleeding
 2. Consider bed rest
 3. Consider pelvic rest/no douching
 4. Consider alternative treatment/natural remedies
 5. Instruct client to contact midwife if bleeding persists or increases or if she passes products of conception
 6. Evaluate tissue/clots
- I. Consult if suspected ectopic or molar pregnancy, heavy bleeding with or without severe pain, or suspected SAB requiring D&C.

BLEEDING IN PREGNANCY GREATER THAN 20 WEEKS

- I. DEFINITION

Any bleeding from the vagina during the second half of pregnancy
- II. ETIOLOGY
 - A. Abruptio placenta
 - B. Placenta previa
 - C. Vasa Previa
 - D. Contractions/onset of labor
 - E. Reproductive tract infections
 - F. Cervical lesions
 - G. Trauma
- III. SIGNS AND SYMPTOMS
 - A. Same as 1st 20 weeks of pregnancy
 - B. History of contractions
 - C. Uterine tenderness/pain localized or general
 - D. Hypertonic uterus

- E. Absence of FHTs/fetal movement
 - F. Evidence of hypovolemic shock
- IV. MANAGEMENT
- A. If suspected abruption, do vital signs, FHTs, transfer
 - B. If suspected previa has not been ruled out by previous ultrasound, DO NOT do vaginal exam, transfer
 - C. Evaluate for presence of labor
 - 1. Cervical exam as indicated
 - 2. Consult and transfer for premature labor if indicated
 - D. Ultrasound as indicated
 - E. Speculum exam if cervical inspection indicated
 - F. As indicated, do necessary labs as in "Bleeding in Pregnancy Less Than 20 Weeks"
 - G. Treat for hypovolemic shock if indicated
 - H. If mother RH negative, offer RhoGam as indicated

COMMON DISCOMFORTS OF PREGNANCY

The following discomforts/problems are attributed to the physiological and emotional changes during the first, second, and third trimesters of pregnancy.

CONSTIPATION

- I. DEFINITION
Dry, difficult bowel movements
- II. ETIOLOGY
 - A. Increase in progesterone
 - B. Decreased fluid intake
 - C. Lack of leafy, green vegetables or fiber in diet
 - D. Vitamins, iron supplementation, other medications
- III. SIGNS & SYMPTOMS
 - A. Difficult, dry, painful, or infrequent bowel movements
 - B. Impacted fecal matter
- IV. MANAGEMENT
 - A. Rule out fissures or lower bowel abnormalities
 - B. Increase clear fluids to 3 quarts daily
 - C. Educate about nutrition and exercise
 1. Increase fresh fruits and vegetables
 2. Add prunes or prune juice
 3. Add roughage and increase fiber-rich foods
 - D. Consider natural therapies

HEARTBURN

- I. DEFINITION
A burning sensation or pain in lower esophagus
- II. ETIOLOGY
Usually caused by reflux of gastric contents into the lower esophagus due to upward compression and displacement of the stomach by the uterus in combination with relaxation of the cardiac sphincter.
- III. SIGNS & SYMPTOMS
 - A. A continual burning/pain in throat or upper chest
 - B. May be accompanied or followed by nausea and/or vomiting

IV. MANAGEMENT

- A. Frequent small meals
- B. Decrease spicy/greasy foods
- C. Avoid eating immediately prior to bedtime and lying down
- D. Papaya tablets or digestive enzymes and teas
- E. Separate fluids and fruits from meals by 1/2 hour each
- F. Consider other natural therapies
- G. Consider over the counter medications such as Tums

HEMORRHOIDS

I. DEFINITION

An enlarged vein in the mucous membrane inside or just outside the rectum that causes pain, itching, discomfort, and bleeding

II. ETIOLOGY

- A. Standing or sitting for long periods
- B. Constipation
- C. Straining with defecation
- D. Pregnancy
- E. Prolonged forceful pushing with second stage of labor
- F. Trauma

III. SIGNS & SYMPTOMS

- A. Itching
- B. Pain and/or burning
- C. Swelling
- D. Fresh rectal bleeding
- E. Observation of dilated anal veins

IV. MANAGEMENT

- A. Prevention
 - 1. Teach methods for and importance of avoiding constipation
 - 2. Avoid straining during defecation
 - 3. Increase fluids and fiber
 - 4. Careful second stage management
- B. Relief measures may include
 - 1. Ice packs
 - 2. Sitz baths
 - 3. Topical herbal ointments
 - 4. Witch hazel compresses
 - 5. Epsom or sea salt compresses
 - 6. Topical analgesic ointments
 - 7. Castor oil applied directly

8. Other natural remedies
 9. Gently reinsert hemorrhoids while doing Kegel exercises
 10. Pelvic floor exercises
- C. Consult if excessively painful or intractable

INSOMNIA

I. DEFINITION

Inability to sleep or to remain asleep

II. ETIOLOGY

- A. Physical
 1. Urinary frequency
 2. Poor venous return
 3. Diet
 4. Hormonal changes
 5. Active baby
 6. Other pregnancy discomforts
- B. Emotional
 1. Concerns or fears
 2. Tension

III. MANAGEMENT

- A. Decrease/eliminate caffeine consumption and improve dietary habits
- B. Exercise during the day
- C. Relaxation, deep breathing, naps as necessary
- D. Bathe or shower before bedtime
- E. Hot milk, herbal teas, or other natural therapies

LEG CRAMPS

I. DEFINITION

Muscle spasms in legs

II. ETIOLOGY

- A. Pressure of baby on vessels/nerves to legs
- B. Abnormal serum calcium, magnesium, or sodium levels
- C. Very cold weather
- D. Muscle tension
- E. Muscle fatigue

III. MANAGEMENT RECOMMENDATIONS

- A. Rule out phlebitis
- B. Review dietary intake of calcium/magnesium

1. Make appropriate recommendations
2. Inform client about foods which prevent calcium absorption
- C. Maintain hydration
- D. Teach dorsiflexion and extension exercises
- E. Teach comfort measures
 1. Elevate feet
 2. Keep feet and legs warm
 3. Massage
- F. Avoid long periods of standing or sitting
- G. Consider natural therapies

LOWER BACK PAIN

- I. ETIOLOGY
 - A. Change in center of gravity
 - B. Hormonal changes
 - C. May be due to constipation, poor posture, improper lifting, UTI, or labor
 - D. Lack of physical movement or exercise
- II. MANAGEMENT RECOMMENDATIONS
 - A. Rule out UTI or labor
 - B. Demonstrate good posture and body mechanics
 - C. Exercise, e.g., yoga, pelvic rock
 - D. Apply heat
 - E. Massage
 - F. Recommend firm mattress
 - G. Consider natural therapies

MORNING SICKNESS

- I. DEFINITION

Nausea and/or vomiting
- II. ETIOLOGY
 - A. Hormonal changes
 - B. Dehydration
 - C. Hypoglycemia
 - D. Emotional factors
- III. SIGNS & SYMPTOMS
 - A. Excessive salivation
 - B. Nausea and/or vomiting
 - C. Dehydration

IV. MANAGEMENT

- A. Rule out hyperemesis gravidarum
- B. Institute starch-based oral rehydration therapy
- C. Check ketones
- D. Eat small frequent high-protein, high-carbohydrate, low-fat meals
- E. Eat solid food separately from liquids
- F. Eat a few crackers before getting up
- G. Consider Vitamin B-6 supplementation
- H. High-protein snacks before bed
- I. Take ginger in various forms such as capsule, tea, candied
- J. Consider natural therapies
- K. Consider consultation with other health care providers if signs and symptoms are severe

ROUND LIGAMENT PAIN

I. DEFINITION

A sharp pain or tenderness in lower abdominal quadrants. Pain may radiate.

II. ETIOLOGY

- A. Hormonal changes
- B. Stretching of ligaments
- C. Incorrect calcium/magnesium balance

III. MANAGEMENT

- A. Evaluate and correct calcium/magnesium and trace mineral intake
- B. Avoid jerky movements
- C. Gentle stretching, lie on or bend towards painful side
- D. Apply moist heat as necessary
- E. Provide abdominal support when lying down
- F. Demonstrate good posture

ECTOPIC PREGNANCY

I. DEFINITION

Life-threatening implantation of the blastocyst anywhere outside of the uterine cavity.

II. RISKS

- A. Salpingitis
- B. Peritubal adhesions
- C. Developmental abnormalities of the tube
- D. Previous ectopic pregnancy
- E. Previous operations on the tube
- F. Multiple previous uterine curettage
- G. Tumors that distort the tube
- H. Endometriosis
- I. Pelvic inflammatory disease (PID)
- J. Current presence of IUD

III. SIGNS & SYMPTOMS

- A. Abdominal and pelvic pain, often mild
 - 1. Vaginal palpation
 - 2. Exquisite tenderness on abdominal and tenderness on motion of the cervix
- B. Referred shoulder pain
- C. Amenorrhea
- D. Vaginal spotting or bleeding/hemorrhage
 - 1. Concealed
 - 2. Frank
- E. Nausea and vomiting
- F. Uterine changes
 - 1. Uterine growth in first 2 months parallels normal pregnancy
 - 2. Uterus may be pushed to one side, rule out bicornate uterus
 - 3. Occasional passing of uterine casts with cramping
- F. Pelvic mass may be palpated posterior or lateral to the uterus
- G. Signs and symptoms of shock
- H. Ultrasound positive for fetal growth outside uterine cavity

IV. MANAGEMENT

- A. Check vital signs and treat for shock if appropriate
- B. Review OB/medical history
- C. Ultrasound
- D. Transport
- E. Educate mother about her condition and the possibility of salpingectomy

FETAL DEMISE

I. DEFINITION

Intrauterine death of fetus at 20 weeks gestation or more

II. SIGNS & SYMPTOMS

- A. No fetal movement
- B. Cramping/labor pains
- C. Bloody or foul discharge
- D. Painful, firm (hard) abdomen
- E. No FHTs
- F. Lack of or decrease in uterine growth
- G. Cessation of maternal weight gain and/or decrease in weight
- H. Retrogressive breast changes

III. MANAGEMENT

- A. Obtain ultrasound to confirm fetal demise
- B. Consult with physician
- C. Prepare/counsel mother and other family members of risks and emotional factors
- D. If appropriate, offer birth at home if 2 weeks or less since demise
- E. Transfer as appropriate
- F. Facilitate private bonding time, burial arrangements, religious and community support
- G. Follow and support with postpartum care. May be longer than the normal 6 week period
- H. Refer for genetic and grief counseling and/or support groups
- I. Follow state regulations for documentation and reporting of fetal demise

FEVER IN PREGNANCY

I. DEFINITION

Maternal temperature of 101.4F

II. ETIOLOGY

- A. Viral infection
- B. Bacterial infection
- C. Protozoal infection
- D. Dehydration
- E. Heat exhaustion
- F. Missed abortion

III. SIGNS & SYMPTOMS

- A. Elevated temperature
- B. Dehydration
- C. Poor skin turgor
- D. Oliguria
- E. Contractions
- F. Tachycardia

IV. MANAGEMENT

- A. History and physical
- B. Maternal vital signs
- C. Fetal heart tones
- D. Lab work appropriate for differential diagnosis
- E. Education for home management of minor illness
- F. Consult for any illness with fever of 101.4F for more than 24 hours or any illness with symptoms
- G. Consider natural therapies or over the counter medication

GENETIC COUNSELING

- I. INDICATIONS: Includes but not limited to
 - A. Advanced maternal age
 - B. Elevated or low MSAFP
 - C. Drug exposures
 - 1. Alcohol
 - 2. Cigarettes
 - 3. Recreational drugs
 - 4. Hypertensives, e.g., angiotensin converting enzyme inhibitors, thiazides
 - 5. Anticoagulants, e.g., Coumadin
 - 6. Anticonvulsants, e.g., Hydantoin, Carbamazepine, Trimethadione, Valproic Acid
 - 7. Antidepressants, e.g., Lithium, tricyclic antidepressants
 - 8. Antipsychotics, phenothiazines
 - 9. Retinoids, e.g., isotretinoin, etretinate
 - 10. Antibiotics, e.g., Tetracyclines, Streptomycin
 - 11. Antimetabolites
 - 12. Other
 - D. Family history of hereditary condition
 - E. Teratogenic Exposure
 - F. Positive TORCH panel
 - G. Client desires testing
- II. MANAGEMENT
 - A. Educate client about indications
 - B. Explain timing and procedures, risks versus benefits, probable costs for MSAFP, chorionic villi sampling, amniocentesis, and ultrasound
 - C. Consult as indicated

GESTATIONAL DIABETES

I. DEFINITION

- A. Carbohydrate intolerance of variable severity, with onset or recognition occurring during pregnancy.
- B. It is important to distinguish between Insulin Dependent Diabetes Mellitus (IDDM) and gestational diabetes (GDM). IDDM is characterized by blood sugar levels that are higher and more difficult to control, and is associated with increased perinatal morbidity and mortality.

II. RISK FACTORS FOR GDM

- A. No risk factors
- B. Overweight
- C. African American, Latina, Pacific Islanders, and Native American
- D. Previous history of GDM
- E. Strong family history of insulin-dependent diabetes
- F. Other possible risk factors that usually affect women with IDDM that may or may not impact women with GDM
 - 1. History of unexplained stillborn
 - 2. Previous birth of infant with fetal anomalies
 - 3. Two or more spontaneous abortions

III. MATERNAL SEQUELAE OF GDM

- A. Increased chance of macrosomia (birth weight over 4000g) with associated risks
 - 1. Shoulder dystocia
 - 2. Operative birth
 - 3. Lacerations
 - 4. Postpartum hemorrhage
- B. May also be associated with
 - 1. Polyhydramnios
 - 2. More frequent incidence of PIH
 - 3. More frequent monilial vaginitis
 - 4. More frequent UTIs
 - 5. Increased risk of developing IDDM in later life

IV. FETAL / NEONATAL SEQUELAE OF GDM

- A. Macrosomia
- B. Hypoglycemia/hypocalcemia
- C. May also be associated with fetal/neonatal sequelae more common with IDDM that may or may not effect GDM
 - 1. Respiratory distress
 - 2. IUGR
 - 3. Polycythemia

4. Hyperbilirubinemia
5. More frequent incidence of congenital anomalies, e.g., sacral agenesis
6. At higher risk for fetal and neonatal death

VI. SIGNS AND SYMPTOMS OF GDM

- A. Glycosuria
- B. Fasting blood sugar of over 110
- C. 2 hour post prandial blood sugar over 120
- D. 50 gram 1 hour test over 140
- E. 3 hour glucose tolerance test (GTT) with 2 or more abnormal result
- F. Excessive weight gain
- G. Baby large for gestational age
- H. Additional signs and symptoms more commonly associated with IDDM
 1. Polyuria, polydipsia, polyphagia
 2. Weight loss
 3. Weakness
 4. Poor healing
 5. Blurred vision

VII. MANAGEMENT

- A. Distinguish between IDDM and GDM based on history, signs and symptoms, and risk factors
- B. If concern for IDDM, consider testing described below in first trimester
- C. Nutritional and exercise counseling
- D. Consider natural therapies
- E. Consult with nutritionist who can train the mother in diabetes management and blood glucose monitoring.
- F. With history of confirmed gestational diabetes, consider fasting blood sugar and/or 2-hour postprandial at initial visit.
- G. At 24 - 28 weeks offer
 1. 50 gram glucose challenge with 1 hour blood draw, OR
 2. Fasting blood sugar and 2-hour postprandial test
 3. If results are greater than normal for the diagnostic method used, follow with a 3-hour Glucose Tolerance Test. If two of the four values exceed normal range, the diagnosis of gestational diabetes is made, OR
 4. If fasting blood sugar is above normal, gestational diabetes is confirmed.
 5. Consider Hemoglobin A1C test
- H. Consult with physician
- I. If blood glucose levels remain uncontrollable with dietary and lifestyle changes, consult with physician

GROUP B BETA-HEMOLYTIC STREPTOCOCCUS (GBS)

I. DEFINITION

Group B Streptococcus (GBS) was first found to cause illness in newborns in the 1930s. Since then, multiple studies show different conclusions about the incidence and poor perinatal outcomes due to GBS. Some studies estimate that as many as 1 in every 3 women carry GBS in their vagina and bowel. Some studies show as little as 1 in 10 women are GBS carriers. It is considered normal flora which rarely causes problems in adults.

Newborns can be exposed to GBS during passage through the vagina. Rarely, GBS can cause severe infection in babies such as sepsis, meningitis, pneumonia, or death.

Many babies who are exposed to GBS will not become infected. The babies most at risk to become ill are: premature newborns (born before 37 weeks gestation), labors where the bag of waters is broken more than 18 hours, mothers who have a fever of greater than 100.4 degrees in labor.

II. SEQUELAE

- A. Premature ROM
- B. Preterm labor
- C. Possible chorioamnionitis
- D. Generalized sepsis in newborn that may include pulmonary infection, septicemia, or meningitis
- E. Postpartum infection in mother

III. SIGNS & SYMPTOMS

- A. Usually asymptomatic
- B. Positive maternal vaginal, urinary, or rectal culture
- C. Symptoms of UTI
- D. Premature rupture of membranes
- E. Premature labor
- F. Fever of 100.4 F degrees or higher
- G. Chorioamnionitis
- H. Early (within first 5 days after birth, average 20 hours postpartum) or late (after first week postpartum) onset of neonatal infection

IV. MANAGEMENT

- A. Provide clients with comprehensive information and informed consent on GBS infection and possible care plans.
- B. Possible plans of midwifery care that can be used for GBS screening and treatment:

1. Obtain a GBS culture between 35 and 37 weeks
 - a. Offer antibiotic treatment in labor to all women who have tested positive (antibiotic treatment prior to labor is not considered effective). Review possible side effects of antibiotics
 - b. Offer alternative treatment prior to or during labor to all women who have tested positive
 - c. Do not treat women who test negative
 2. If cultures not obtained, offer treatment for those women who present in labor with the following risk factors
 - a. Women giving birth before 37 weeks
 - b. Women whose membranes have ruptured longer than 18 hours
 - c. Women who have a fever of greater than 100.4 F degrees in labor
- C. Another category of special circumstances in which treatment is offered for GBS are women who have
1. A previous child ill from GBS infection.
 2. GBS found in urine culture (no other cultures needed)
- D. Consider natural therapies
- E. Refer to pediatrician/physician if signs of neonatal infection
1. Any baby who becomes seriously ill in the first 48 hours should be considered for possible GBS sepsis
 2. Respiratory distress
 - a. tachypnea
 - b. grunting
 - c. nasal flaring
 - d. retractions
 - e. cyanosis
 3. Poor feeding
 4. Drowsiness, lethargy
 5. Vomiting
 6. Convulsions
 7. High or low temperature
 8. High pitched cry

HYPEREMESIS GRAVIDARUM

I. DEFINITION

Excessive nausea and vomiting during pregnancy

II. SIGNS & SYMPTOMS

- A. Nausea and aversion to food unresponsive to treatment for morning sickness
- B. Sensitivity to odors
- C. Excessive vomiting unresponsive to treatment for morning sickness
- D. Oliguria
- E. Weakness and fatigue
- F. Ketonuria greater than 1+
- G. Weight loss or failure to gain weight
- H. Dehydration evidenced by:
 - 1. Decreased skin turgor
 - 2. Dry mucous membranes
 - 3. Fruity odor of ketones on breath
 - 4. Rapid pulse
- J. Blood pressure significantly below client's baseline
- K. Serum electrolyte analysis indicates electrolyte imbalance
- L. CBC indicates hemoconcentration

III. MANAGEMENT

- A. Consider IV rehydration (see IV Protocol)
- B. Institute starch-based oral rehydration therapy
- C. Consider natural therapies
- D. Nutritional counseling and emotional support
- E. Consult

INTRAUTERINE GROWTH RESTRICTION (IUGR)

or

SMALL-FOR-GESTATIONAL AGE (SGA)

I. DEFINITION

- A. IUGR: Intrauterine growth restriction is a pathological condition indicating intrauterine impaired growth
- B. SGA: A neonatal diagnosis that may also indicate IUGR or could possibly be a result of genetics
- C. NOTE: Prior to birth, it is impossible to distinguish between IUGR and SGA. The majority of SGA babies are caused by IUGR.
- D. Symmetrical
 1. Compromised body length
 2. Compromised head circumference
 3. Low body weight
- E. Asymmetrical
 1. Low body weight
 2. Compromised body length
 3. Normal head circumference

II. RISK FACTORS

- A. Poor nutrition, anorexia, bulimia
- B. Smoking
- C. Poor maternal weight gain
- D. Vascular disease
- E. Heart disease
- F. Pre-eclampsia
- G. Renal disease
- H. Infection (TORCH)
- I. Genetic abnormalities
- J. Multiple gestation
- K. Previous history of IUGR or SGA baby
- L. Family history of small babies
- M. Drug use
- N. Pre-pregnancy weight of less than 90 pounds
- O. Anemia
- P. Diabetes
- Q. Alcohol abuse

III. SIGNS & SYMPTOMS

- A. Prenatal assessment shows size-date discrepancy
- B. May include
 1. History of poor weight gain and/or inadequate nutrition
 2. History of chronic illness, including viral disease
 3. History of TORCH infections
 4. History of smoking
 5. Frequent pregnancies
 6. Alcohol and/or drug use
- C. Must include
 1. Fundal height 3 or more cm less than appropriate for dates for two consecutive visits prior to 36 weeks gestation
 2. Estimated fetal weight inappropriately low
 3. Ultrasound report, if previously done

IV. MANAGEMENT

- A. Evaluation for progressive growth; consider
 1. Maternal height, weight and body build
 2. Estimated fetal weight, presentation, position, and station of presenting part
 3. Number of different examiners
- B. Rule out underlying infection, anomalies, obstetric and medical diseases which cause utero-placental insufficiency
- C. Consider natural therapies
- D. Physician consultation
 1. To rule out IUGR
 2. To help control any medical condition which may contribute to the problem
 3. Fetal testing to confirm fetal health
- E. Nutritional assessment and counseling
- F. Periods of rest in left lateral position throughout the day to improve blood flow
- G. Serial ultrasound and non stress test as indicated
- H. Educational and emotional support
- I. Transfer of care as appropriate
 1. Preparation for a hospital birth with a possible cesarean birth if fetus unable to tolerate labor

MISCARRIAGE (SAB)

I. DEFINITION

Loss of embryo or fetus before 20 weeks gestation. May be complete (embryo or fetus and placenta pass on own within a short time frame) or incomplete (either all or part of the embryo, fetus and placenta do not pass within a short time period).

II. ETIOLOGY

- A. Embryonic/Fetal
 - 1. Chromosomal abnormality
 - 2. Disease of the fertilized ovum
 - 3. Poor implantation
- B. Maternal
 - 1. Acute diseases
 - 2. Chronic disorders such as renal disease
 - 3. Drugs
 - 4. ABO incompatibility
 - 5. Corpus luteum insufficiency
 - 6. Developmental defects such as bicornate uterus
 - 7. Myomas
 - 8. Incompetent cervix
 - 9. Trauma
 - 10. Teratogen exposure

III. SIGNS & SYMPTOMS

- A. Vaginal bleeding, passage of tissue, or loss of fluid
- B. Lack of fetal movement
- C. Lack of fetal heart tones
- D. Lack of uterine growth
- E. Pain
 - 1. Cramping
 - 2. Palpation of contractions
- F. Dilation of cervix
- G. Retrograde pregnancy signs and symptoms

IV. MANAGEMENT

- A. Rule out
 - 1. Placenta previa
 - 2. Placenta abruption
 - 3. Cervical polyps
 - 4. Ectopic pregnancy
 - 5. Hydatidiform mole
 - 6. UTI
- B. Consider quantitative HCG and additional blood workup
- C. Consider ultrasound and/or physician consult

- D. Consider natural therapies
- E. If mother RH negative consider RhoGam
- F. If vital signs are unstable or blood loss excessive, transfer
- G. Medical management of incomplete SAB in 3 approaches:
 1. Expectant management: wait and expect miscarriage to complete, time unpredictable
 2. Given intra-vaginally or orally, usually begins to work in 2 – 6 hours
 3. D&C

MULTIPLE PREGNANCY

I. DEFINITION

Presence of two or more fetuses

II. PREDISPOSING FACTORS

- A. Maternal family history of twins
- B. Grand multiparity
- C. Age greater than 35
- D. Racial predisposition
- E. History of fertility therapy
- F. Discontinuation of hormonal contraception within two months of conception

III. SIGNS & SYMPTOMS

- A. Maternal perception of excessive movement or excessive size
- B. Exacerbated signs and symptoms of pregnancy
- C. Accelerated growth usually occurring at 20-24 weeks; fundal height consistently greater than dates following this growth
- D. Large, globular uterus
- E. Abdominal palpation reveals three or more large parts and/or multiple small parts
- F. Auscultation of 2 distinct heartbeats differing by 10 or more BPM
- G. Ultrasound reveals multiple pregnancy

IV. MANAGEMENT

- A. Listed under condition which requires primary care by a physician
- B. Provide education regarding
 - 1. Nutritional counseling
 - 2. Relief of discomforts
 - 3. Possible fetal/maternal risks
 - a. Discordance (discrepancy in the size of the fetuses)
 - b. Polyhydramnios
 - c. Malpresentation
 - d. Pre-eclampsia
 - e. Anemia
 - f. Small for gestational age fetuses
 - g. Premature labor
 - 4. Counsel regarding psychosocial factors
 - 5. Preparation for labor/birth/parenting

NON VERTEX PRESENTATION

I. DEFINITION

Breech or transverse presentation in pregnancy, before labor begins

II. ETIOLOGY

- A. Preterm
- B. Hydramnios
- C. Fibroids in lower uterine segment
- D. Abnormal pelvic/uterine shape
- E. Placenta previa
- F. Cord involvement
- G. Multiple pregnancy
- H. Fetal congenital malformations
 - 1. Hydrocephalus
 - 2. Anencephaly
 - 3. Meningomyelocele
 - 4. Other congenital anomalies

III. SIGNS & SYMPTOMS

- A. Mother reports "ball" up high or on one side
- B. Mother reports kicking at or below pubis
- C. Leopold's maneuvers or vaginal exam reveal head not in pelvis
- D. Heart tones may be heard best at level of umbilicus or higher
- E. Discovered or confirmed by ultrasound

IV. MANAGEMENT

- A. No intervention necessary before 32 weeks
- B. After 32 weeks, consider
 - 1. Pelvic tilt exercises, 15 minutes 2 to 3 times a day
 - 2. Visualization, hypnosis, other natural remedies
 - 3. In the presence of a lax abdominal wall or pendulous abdomen try abdominal binder
 - 4. Consider referral for acupuncture, chiropractor, massage or other natural therapies
- C. After 36 weeks, consult with physician for external version and plan
- D. If breech persists or there are contraindications to external version
 - 1. Educate client about benefits/risks of vaginal breech vs. cesarean birth
 - 2. Arrange for prenatal transfer to physician care

PREGNANCY INDUCED HYPERTENSION

I. DEFINITION

The development of elevated blood pressure and other sequelae beginning at 20 weeks of pregnancy or later or within the first 24 hours postpartum in a previously normotensive woman. Can also present in women who have preexisting hypertension. The term PIH is used to describe a continuum of disease states which begin with hypertension; can proceed to hypertension and proteinuria, or decreased platelets and severe liver complications; and end with seizure and possible death of women and babies. It is divided into four categories

A. Pregnancy Induced Hypertension (Gestational Hypertension)

Elevated blood pressure in pregnancy which resolves in the postpartum period. Presents with no proteinuria, other symptoms, or abnormal lab values.

B. Pre-eclampsia

Hypertension plus proteinuria and nondependent edema beginning at 20 weeks or later of pregnancy. May present with other symptoms (listed below) and is usually defined as mild or severe depending on those symptoms.

C. Eclampsia

Pre-eclampsia accompanied by seizures and/or coma.

D. HELLP Syndrome

Primarily develops in the third trimester as a result of pre-eclampsia, but can be diagnosed in women who have not shown any of the typical symptoms of pre-eclampsia. The underlying mechanism of HELLP includes arterial vasospasms, platelet aggregation, and endothelial damage resulting in tissue hypoxia.

II. WOMEN AT INCREASED RISK FOR PIH

A. Primiparas

B. Teenagers

C. Women over 35

D. Women who have:

1. History of PIH in prior pregnancy
2. Protein poor diet
3. New father of baby (FOB) from last pregnancy
4. Current FOB who had previous partner with PIH
5. Family history of PIH
6. Preexisting hypertension
7. Diabetes or gestational diabetes
8. Hypoglycemia
9. Hyperthyroidism
10. Multiple pregnancy

11. Chronic renal disease
12. Hydatidiform molar pregnancy
13. Fetal hydrops

III. SIGNS & SYMPTOMS

- A. Rise in blood pressure
- B. Proteinuria
- C. Swelling of hands or face
- D. Generalized edema
- E. Excessive weight gain
- F. Oliguria
- G. Neurological Sequelae
 1. Headache (in particular, frontal and occipital)
 2. Visual disturbances
 3. Hyperreflexia
 4. Clonus
 5. Trembling extremities
- H. Epigastric pain
- I. Right upper quadrant pain
- J. General malaise
- K. Nausea and vomiting
- L. Abnormal lab values (see below)

IV. LAB VALUE CHANGES WITH PIH

- | | | |
|----|---------------------------|---------------------|
| A. | Hemoglobin/Hematocrit | Normal or Increased |
| B. | Proteinuria | Present |
| C. | Platelets | Normal or Decreased |
| D. | Uric Acid | Increased |
| E. | Liver Enzymes: | |
| | 1. ALT | Normal or Increased |
| | 2. AST | Normal or Increased |
| | 3. LDH | Normal or Increased |
| F. | Blood Urea Nitrogen (BUN) | Normal or Increased |
| G. | Creatinine | Normal or Increased |

V. MILD VS. SEVERE PREECLAMPSIA, HELLP SYNDROME

Care of women with signs of pre-eclampsia is usually based on a diagnosis of severe or mild. However, it is important to note that those with mild signs can progress quickly to severe. HELLP Syndrome may appear in women who present with only mild signs of pre-eclampsia. Recognition of early symptoms, education, diet, a midwifery model of prenatal care, and attention to subtle changes can make an incredible difference in outcome.

A differential diagnosis of mild and severe pre-eclampsia is usually based on the following

- A. Mild
 - 1. Blood Pressure 140/90
(on 2 occasions)
 - 2. Proteinuria Dip +1 to + 2
 - 3. Proteinuria 24 Hour Collection 300 mg or more
 - 4. Neurological Sequelae Absent
 - 5. IUGR Absent
 - 6. Lab Values Normal or Abnormal
- B. Severe
 - 1. Blood Pressure 160/110
 - 2. Proteinuria Dip +3 to + 4
 - 3. Proteinuria 24 Hour Collection 500 mg or more
 - 4. Neurological Sequelae Present
 - 5. IUGR Present
 - 6. Lab Values Abnormal
- C. HELLP Syndrome
 - 1. Blood Pressure Elevated
 - 2. Proteinuria Dip Normal or increased
 - 3. Proteinuria 24 Hour Collection Normal or increased
 - 4. Neurological Sequelae Absent or present
 - 5. IUGR Absent or present
 - 6. Lab Values Abnormal
 - a. Platelets Decreased significantly
 - b. Liver Enzymes Elevated

VI. MANAGEMENT

- A. Prevention - Education of all pregnant women, especially those with risk factors listed above.
 - 1. Nutritional assessments and recommendations:
 - a. High protein, high calorie diet
 - b. Calcium rich diet: 1500 mg/day or supplementation of 2 gm of calcium a day
 - c. Magnesium rich diet: 1500 mg/day
 - d. Normal salt intake
 - 2. Drink 3 quarts to 1 gallon of water every day
 - 3. Exercise at least 30 minutes a day
 - 4. Rest and relax at least 2 times a day for an hour

- B. Mild
 - 1. Nutritional assessments and recommendations:
 - a. High protein, high calorie diet
 - b. Calcium rich diet: 1500 mg/day or supplementation of 2 gm of calcium a day
 - c. Magnesium rich diet: 1500 mg/day
 - d. Normal salt intake
 - e. Recommend total nutritional intake log
 - 2. Drink 3 quarts to 1 gallon of water every day
 - 3. Exercise at least 30 minutes a day
 - 4. Rest and relax at least 2 - 3 times a day for 1 hour, especially in left lateral position
 - 5. Educate client on symptoms and danger signs
 - 6. Increased prenatal visits
 - 7. Obtain lab work as appropriate
 - 8. Assess fetal growth and well-being
 - 9. Consider natural therapies
 - 10. If symptoms persist or increase consult.
- C. Severe pre-eclampsia and/or HELLP Syndrome refer or transfer immediately

PLACENTA PREVIA

I. DEFINITION

Placenta located over the internal cervical os. Varying degrees have been recognized

- A. Total Previa: The placenta completely covers the internal os
- B. Partial Previa: Part of the internal os is covered by the placenta
- C. Marginal Previa: Edge of the placenta is at the margin of the internal os
- D. Low-Lying Placenta: Placenta implanted in lower uterine segment. May become partial previa as dilation increases
- E. Vasa Previa: Fetal vessels transverse the membranes in the lower uterine segment and cover the cervical os

II. ETIOLOGY

- A. Grand multigravida
- B. Maternal age over 35
- C. Prior cesarean birth, abortion, D&C, or other uterine surgery
- D. History of Pelvic Inflammatory Disease
- E. Cigarette smoking
- F. History of a previous previa

III. SIGNS & SYMPTOMS

- A. Painless, bright red bleeding from the vagina
 - 1. Usually occurring near the end of the second trimester or after.
 - 2. Quantity may vary from slight to profuse hemorrhage.
- B. Ultrasound showing placenta located over or near the internal cervical os.

IV. MANAGEMENT

- A. If before 28 weeks of pregnancy, no bleeding
 - 1. Repeat ultrasound at 34 weeks
 - 2. Educate about risks
- B. If diagnosed by ultrasound after 34 weeks, no bleeding
 - 1. Consult with physician
 - 2. Co-manage prenatal care as appropriate
 - 3. Educate about
 - a. Birth options, probable need for cesarean depending on grade of previa
 - b. Risks, bleeding
 - c. Need for pelvic rest
- C. If previa suspected due to bleeding
 - 1. Do not perform vaginal exams as this can lead to uncontrollable hemorrhage.
 - 2. Treat for shock as indicated.
 - 3. Transfer care, confirm previa and prepare client for cesarean

POST DATES PREGNANCY

I. DEFINITION

Pregnancy prolonged beyond two weeks past EDD

II. ETIOLOGY

- A. Personal and/or familial history of prolonged pregnancies
- B. Psychosocial factors
- C. Unknown or miscalculated dates

III. SIGNS & SYMPTOMS

- A. Lack of maternal signs of impending labor
- B. Changes in frequency and strength of fetal movements
- C. Lack of engagement of presenting part
- D. Fetal weight loss

IV. MANAGEMENT

- A. Review documentation of EDD
 - 1. Menstrual History
 - 2. Review date, regularity and duration of LMP, LNMP
 - 3. History of sexual activity and conception
 - 4. Contraceptive history
- B. Review and evaluate
 - 1. Fundal height corresponding with dates through pregnancy
 - 2. Date and type of positive pregnancy test
 - 3. Date FHTs first heard with doppler and/or fetoscope
 - 4. Quickening
 - 5. Uterine size at first pelvic exam
 - 6. Ultrasound results if any
- C. Educate regarding normalcy of birthing within two weeks after EDD
- D. Educate regarding risk factors of post dates pregnancy
- E. Create post dates plan of care during 41st week
 - 1. Instruct client to do fetal kick counts until birth
 - 2. Address any psychosocial issues
 - 3. Assess preparedness for birth
 - 4. Consider natural therapies to promote labor
 - 5. Assess amniotic fluid
 - 6. Consider NST, AFI, or biophysical profile
 - 7. Strip membranes
- F. Consult if exceeds 42 weeks, transfer care as appropriate

PRETERM LABOR

I. DEFINITION

Labor before 37 weeks gestation

II. ETIOLOGY

- A. Premature rupture of the membranes
 - 1. Possible infection
 - 2. Malpresentation
 - 3. Multiple pregnancy
 - 4. Family history of prematurity
 - 5. Unknown causes
- B. Spontaneous preterm labor with membranes intact
 - 1. Incompetent cervix
 - 2. Uterine fundal abnormalities
 - 3. Fetal anomalies
 - 4. Multiple gestation
 - 5. Extrauterine infection
 - a. Appendicitis
 - b. Peritonitis
 - c. Pyelonephritis
 - d. Pneumonia
 - e. Others
 - 6. Maternal trauma
 - 7. Autoimmune diseases
 - 8. Pregnancy induced hypertension
 - 9. Severe maternal illness
 - 10. Unexplained hydramnios
 - 11. Maternal vaginal infections
 - 12. Dehydration
- C. Complications of pregnancy which jeopardize the mother or fetus
 - 1. Maternal hypertension, pre-eclampsia
 - 2. Severe diabetes
 - 3. Fetal growth retardation
 - 4. Abruptio placenta
 - 5. Other

III. SIGNS & SYMPTOMS

- A. Contractions with progressive cervical changes
- B. Amniotic fluid leakage
- C. Vaginal bleeding

IV. MANAGEMENT

- A. Re-evaluate history and EDD
- B. Complete maternal and fetal evaluation
 - 1. Rule out fetal distress
 - 2. Rule out maternal infection
- C. Recommend pelvic rest
- D. If membranes ruptured transfer
- E. If membranes intact with contractions
 - 1. Determine if contractions are causing progressive cervical changes
 - 2. Hydrate mother
 - 3. Utilize natural therapies to stop contractions
 - 4. Transport if labor confirmed and cervical changes are progressive
- G. Educate mother about prematurity

PRETERM RUPTURE OF MEMBRANES

I. DEFINITION

Confirmed rupture of membranes before 37 weeks

II. ETIOLOGY

- A. Multiple gestation
- B. Malpresentation
- C. Infection
- D. Unknown reasons

III. SIGNS & SYMPTOMS

- A. Leaking amniotic fluid
- B. Pooling in posterior vaginal vault observed during sterile speculum exam
- C. Fluid nitrazine positive
- D. Fluid positive for ferning

IV. MANAGEMENT

- A. Re-evaluate history and EDD
- B. No digital exam
- C. Check FHTs
- D. Assess for contractions
- E. Consider gentle sterile speculum exam to confirm ROM, rule out prolapsed cord, and observe for dilation
- F. Consider rapid Group B strep culture
- G. Obtain maternal vital signs
- H. Inform parents of potential risks
- I. Consult
- J. Consider natural therapies to prevent infection

RH NEGATIVE BLOOD TYPE

- I. DEFINITION: Absence of Rh factor on RBCs
- II. SIGNS AND SYMPTOMS
 - A. Lab tests confirm that mother is Rh negative
 - B. AST confirms mother is antibody negative
- III. MANAGEMENT
 - A. Miscarriage or Abortion
 - 1. After abortion or miscarriage if 6 weeks LMP or further, Rh negative mother should be offered RhoGAM.
 - B. Antepartum
 - 1. Client education regarding Rh factor, future pregnancies and future maternal transfusions
 - 2. Screen for antibodies initially and at 28 weeks
 - 3. Educate client regarding antenatal RhoGAM at 28 weeks with a negative antibody screen
 - a. Administer RhoGAM with client consent
 - b. If RhoGAM is refused, client signs waiver. AST is repeated at 36 weeks.
 - c. Monitor for adverse reaction
 - 4. If antibodies present, consult
 - 5. If maternal trauma or bleeding in pregnancy consider antenatal RhoGam
 - C. Immediate postpartum
 - 1. Obtain cord blood at birth to determine baby blood type
 - 2. If baby Rh positive, consider direct coombs
 - 3. Order RhoGAM workup if direct coombs is positive, redo maternal antibody screen
 - 4. If baby is Rh positive
 - a. Obtain mother's consent to receive RhoGAM or sign waiver of refusal after full discussion of benefits and risks
 - b. If consents, ensure mother receives RhoGAM within 72 hours of birth
 - c. Monitor for adverse reaction

RUBELLA NON-IMMUNE BLOOD STATUS

I. DEFINITION

Woman who is not immune to rubella and is therefore susceptible to contracting rubella.

II. MANAGEMENT

A. During prenatal care

1. Educate woman of implications of contracting Rubella
2. Discuss administration of vaccine postpartum
 - a. Risks of immunization
 - b. Benefits of immunization

B. After birth

1. Obtain informed consent to be immunized
2. Obtain signed waiver if mother refuses immunization
3. Make arrangements for immunization as indicated

ULTRASOUND CONSIDERATIONS

1. Evaluation of fetal growth
2. Estimation of gestational age for unconfirmed or uncertain dates
3. Suspected ectopic pregnancy
4. Suspected hydatidiform mole
5. Suspected fetal demise
6. Suspected multiple gestation
7. Suspected polyhydramnios or oligohydramnios
8. Suspected abruptio placenta or placenta previa
9. Vaginal bleeding of unknown origin
10. Presence of pelvic mass
11. Questionable fetal presentation
12. History of previous congenital anomaly
13. Gestational diabetes
14. History indicative of risk for congenital anomaly
15. As part of biophysical profile
16. Confirm amniotic fluid index (AFI)
17. Client request

LABOR AND BIRTH

LABOR AND BIRTH CARE SCHEDULE

I. INITIAL EVALUATION

- A. Review prenatal records for the following:
 - 1. Age, Date of Birth
 - 2. Gravida, Parity
 - 3. Past obstetric history
 - 4. Obstetric history this pregnancy, e.g., LMP, EDD, weeks gestation, complications, relevant laboratory tests
 - 5. Past medical history
- B. Obtain history of this labor, including:
 - 1. Signs of labor
 - 2. Time contractions began
 - 3. Frequency of contractions
 - 4. Strength of contractions
 - 5. Any fluid leakage
 - 6. Fetal activity
 - 7. History of dietary intake
 - 8. History of voiding and bowel movement
- C. Maternal condition
 - 1. Pulse
 - 2. Blood pressure
 - 3. Temperature
 - 4. Abdominal palpation for position
 - 5. As indicated, urine dipstick and/or ketones
 - 6. When indicated, perform vaginal examination for
 - a. Cervical effacement and dilation
 - b. Status of membranes
 - c. Fetal station, position, and presentation
- D. Fetal heart rate evaluation. Establish a baseline by listening to fetal heart tones through at least one contraction.
- E. Determine to admit to care or not.

II. ON-GOING CARE

- A. Continuing evaluation of maternal condition
 - 1. Vital signs as indicated
 - 2. Monitor input/output while encouraging hydration and calories. Encourage fluid intake and easily digestible calories particularly in early labor.
 - 3. General condition
- B. Continuing evaluation of fetal condition
 - 1. Fetal heart rate and pattern. Check heart rate as indicated above
 - a. Early labor: at least every hour
 - b. Active labor: every 30 minutes

- c. Second stage: every 5 – 15 minutes
 - 2. Check FHTs upon
 - a. Unusual bleeding other than normal show
 - b. Signs and symptoms of abruption
 - c. Rupture of membranes
 - d. Any other concern
 - e. Drastic change in labor
 - 3. For intrapartum VBAC management, refer to intrapartum VBAC care schedule
- C. Continuing evaluation of progress of labor
 - 1. Perform vaginal exams as indicated or by client preference
 - a. Dilation
 - b. Effacement
 - c. Station
 - d. Position
 - 2. Contraction pattern
 - a. Frequency
 - b. Duration
 - c. Intensity
- D. Continue screening for normalcy of labor
- E. Consider consult if labor fails to follow normal parameters,
- F. Transfer upon mother's request, medical necessity, abnormal labor patterns, maternal or fetal distress.

ADULT CARDIO-PULMONARY RESUSCITATION (CPR)

I. ETIOLOGY

- A. Mother is unresponsive
- B. Mother has no respirations and/or no pulse

II. MANAGMENT

- A. Activate Emergency Medical Service
- B. Begin rescue breathing or CPR as appropriate, according to protocol established by the American Red Cross or the American Heart Association
- C. Start IV
- D. Transport immediately

AMNIOTOMY (ARTIFICIAL RUPTURE OF MEMBRANES - AROM)

I. DEFINITION

Artificial rupture of the membranes surrounding the fetus.

II. CRITERIA

- A. Labor pattern is established
- B. Confirmed cephalic presentation, engaged, and well-applied to the cervix

III. INDICATIONS

- A. To rule out the presence of meconium
- B. To augment labor
- C. Post birth to remove intact membranes from newborn

IV. MANAGEMENT

- A. Educate about amniotomy and possible effects on labor
- B. Use sterile technique
- C. Rupture membranes during contractions to decrease risk of cord prolapse
- D. Leave fingers in vagina to rule out prolapse
- E. Assess fetal heart tones immediately after procedure
- F. Evaluate color and amount of amniotic fluid

CHORIOAMNIONITIS

I. DEFINITION

Inflammation of the amniotic sac and the chorion; the two conditions almost always coexist.

II. ETIOLOGY

- A. Prolonged (>24 hours) rupture of membranes with or without labor
- B. Repeated vaginal exams
- C. Manipulative vaginal or intrauterine procedures
- D. Most common infecting organisms are those that ascend from the vagina (e.g., Streptococci B, anaerobes)
- E. Infrequently occurs with intact membranes

III. SEQUELAE

- A. Rupture of membranes
- B. Premature labor
- C. Neonatal sepsis, pneumonia
- D. Maternal postpartum infection

IV. SIGNS & SYMPTOMS

- A. Antepartum/intrapartum
 - 1. Maternal fever
 - 2. Maternal tachycardia
 - 3. Fetal tachycardia
 - 4. Uterine tenderness
 - 5. Vaginal walls warm/hot to touch
 - 6. Foul-smelling, purulent, and/or meconium stained amniotic fluid
 - 7. Elevated WBCs
 - 8. Abnormal labor pattern
- B. Immediate postpartum
 - 1. Infant possibly hypothermic
 - 2. Translucent, steamy umbilical cord and membranes
 - 3. Maternal hemorrhage

IV. MANAGEMENT:

- A. Transfer care unless birth is imminent.
- B. If birth is imminent, prepare for above risks and consult as necessary

DEHYDRATION IN LABOR

I. DEFINITION

A condition in which the client exhibits a fluid volume deficit resulting in a deterioration in maternal vital signs and general condition.

II. ETIOLOGY

- A. Vomiting
- B. Diarrhea
- C. Reduced fluid intake
- D. Diuresis
- E. Diaphoresis

III. SIGNS & SYMPTOMS

- A. Prolonged latent phase
- B. Fatigue, exhaustion, discouragement
- C. Thirst
- D. Oliguria
- E. Excessive vomiting or diarrhea
- F. Inadequate fluid intake
- G. Increased urinary concentration
- H. Ketonuria
- I. Fruity odor on breath
- J. Tachycardia
- K. Fever

IV. MANAGEMENT

- A. Rehydrate orally with electrolyte replacement fluids
- B. Consider natural therapies
- C. If condition is severe or deteriorates, consider starting an IV
- D. Reevaluate as needed
- E. If there is no improvement, consult

EMERGENCY TRANSPORT

I. DEFINITION

The transport of the mother or the infant when the condition of either is outside normal parameters and transport to a medical facility is deemed necessary.

II. ETIOLOGY

- A. Abruptio placenta
- B. Anaphylaxis
- C. Anomalies, severe
- D. Breech presentation (surprise), if birth not imminent
- E. Fetal distress
- F. Hypovolemic shock
- G. Neonatal resuscitation unresponsive
- H. Placenta accreta
- I. Placenta previa
- J. Postpartum hemorrhage uncontrolled and unresponsive to management
- K. Prolapsed cord
- L. Respiratory distress syndrome
- M. Retained placenta with bleeding
- N. Twins (surprise), if birth not imminent
- O. Uterine inversion
- P. Uterine rupture
- Q. Transverse presentation in labor

III. MANAGEMENT

- A. Implement and maintain emergency procedures to stabilize condition of mother and/or infant while initiating and throughout transfer
- B. Activate EMS to facilitate transport
- C. Notify physician and/or hospital of impending transport and current status of mother/fetus or infant
- D. Accompany mother and/or infant to hospital and continue to provide stabilization procedures as indicated
- E. Provide necessary records to accepting facility/personnel
- F. Notify physician/hospital if situation resolves and decision is made not to transfer

FETAL DISTRESS

I. DEFINITION

A physiologic response by the fetus to known and unknown fetal/utero/placental conditions resulting in pathologic changes in fetal functioning detected by auscultation of fetal heart tones or the presence of meconium.

II. ETIOLOGY:

- A. Maternal conditions such as
 - 1. Hypertension or hypotension
 - 2. Anemia
 - 3. Diabetes
 - 4. Pre-eclampsia
 - 5. Heart conditions
- B. Placenta previa or abruption
- C. Postmaturity syndrome
- D. Hypertonic uterus
- E. Cord compression or prolapse
- F. Prolonged labor or difficult delivery
- G. Maternal malnutrition
- H. Exposure to toxic substances
- I. Substance abuse
- J. Intrauterine growth retardation
- K. Fetal abnormalities

III. SIGNS & SYMPTOMS

- A. Mother may report decreased fetal movement
- B. Fetal heart rate abnormalities
 - 1. Bradycardia
 - 2. Tachycardia, especially if associated with/followed by bradycardia and decreased variability
 - 3. Progressive decrease in variability
 - 4. Late decelerations
 - 5. Prolonged or moderate/severe variable decelerations
- C. Meconium stained (thick, particulate) amniotic fluid
- D. Excessive fetal movement in association with one of the above findings

IV. MANAGEMENT

- A. Administer oxygen to the mother
- B. Turn mother to either side and observe FHTs through two contractions to determine if there is a change
- C. If no change or severity increases, reposition mother and assess FHTs again

- D. Perform fetal scalp stimulation for fetal responsiveness: fetal accelerations, either induced or spontaneous, indicate the absence of acidosis.
- E. If condition persists and birth is not imminent, arrange for transport
- F. If membranes just ruptured, assess for prolapsed cord
- G. If birth is imminent:
 1. Activate EMS
 2. Administer oxygen to the mother
 3. Change mother's position
 4. Expedite birth
 5. Be prepared to resuscitate infant
 6. Reassess need for EMS transport and notify facility if transfer has been canceled

INTRAVENOUS THERAPY

- I. FOR DEHYDRATION
 - A. See Dehydration guideline
 - B. Start an IV with 20 gauge needle or smaller
 - C. Use large tubing: 10 gtt or 15 gtt
 - D. Hang 1000cc Lactated Ringers or Normal Saline
 - E. Administer bolus of 500cc to 1000cc
 - F. Plan to replace fluid volume equal to estimated fluid volume lost
 - G. Titrate drip rate to achieve optimal maternal pulse
 - H. Evaluate maternal vital signs every 15 minutes until stable
 - I. Auscultate lungs for rales and rhonchi
 - J. Monitor IV site
 - K. Evaluate urinary output for volume and ketones before discontinuing IV therapy
 - L. If IV is discontinued before birth, consider using a heparin or saline lock to keep IV site open
 - M. Continue to evaluate maternal well being/stability

- II. FOR POSTPARTUM HEMORRHAGE
 - A. See Postpartum Hemorrhage guideline
 - B. Start an IV with 20 gauge needle or smaller
 - C. Use large tubing: 10 gtt or 15 gtt
 - D. Hang 1000cc Lactated Ringers or Normal Saline
 - E. Administer bolus of 500cc to 1000cc
 - F. Titrate drip rate to achieve desired maternal pulse
 - G. Monitor vital signs every 5 to 15 minutes until stable
 - H. Monitor IV site
 - I. Administer fluid volume equal to estimated blood loss volume
 - J. Continue IV therapy until mother is stabilized
 - K. 20 IU of Pitocin may be added to each 1000cc of IV fluid to manage postpartum hemorrhage

- III. FOR ADMINISTRATION OF INTRAPARTUM ANTIBIOTICS
 - A. See guidelines for individual client need (e.g. GBS prevention)
 - B. Review client history to rule out history of allergies to medication
 - C. Start an IV with 20 gauge needle or smaller
 - D. Use large tubing: 10 gtt or 15 gtt
 - E. Hang Lactated Ringers or Normal Saline
 - F. Mix antibiotic and add it to the bag or hang piggy back bag of antibiotic
 - G. Administer medication at the rate prescribed
 - H. Monitor client for reaction. (See Anaphylaxis guideline)
 - I. Discontinue or continue therapy as indicated
 - J. Flush lock with normal saline after administration

- IV. TO DISCONTINUE IV
 - A. For hypovolemia
 - 1. Re-evaluate maternal condition as appropriate
 - a. If stable
 - i. Reduce drip rate and re-evaluate maternal pulse
 - ii. If stable continue to reduce drip rate
 - b. If unstable
 - i. Increase drip rate and re-evaluate every five minutes
 - ii. If unstable, consult and transfer
 - 2. IV may be discontinued when maternal vital signs are stable
 - B. For medication discontinue when complete course of medication

OXYGEN IN LABOR

I. INDICATIONS

- A. Deteriorating vital signs
- B. Excessive exhaustion, air hunger, faint
- C. Over-exertion, excitement, pain, nausea
- D. Poor venous return
- E. Maternal hemorrhage
- F. Fetal distress
- G. Prolapsed cord

II. MANAGEMENT: As indicated by the condition

- A. Nasal canula administer at 5L per minute
- B. Mask 8-12L per minute
- C. Wean oxygen as appropriate

PLACENTA ABRUPTION

I. DEFINITION

Premature separation of the normally implanted placenta from the uterine wall.

II. ETIOLOGY: Unknown, but associated with:

- A. Maternal age over 35
- B. Grand multiparity
- C. Premature rupture of membranes
- D. Abdominal trauma, including external version
- E. Cigarette smoking
- F. Alcohol consumption
- G. Cocaine and meth-amphetamine use
- H. Uterine fibroids
- I. Previous placental abruption
- J. PIH or chronic hypertension
- K. Sudden decrease in uterine volume
- L. Short cord
- M. Malnutrition
- N. Multiple gestation
- O. Hydramnios

III. SIGNS & SYMPTOMS:

- A. Continuous pain in upper portion of uterus
- B. Irritable, discordinate contractions
- C. Concealed or frank bleeding
- D. Uterine enlargement, if bleeding is concealed
- E. Hypertonic uterus
- F. May have normal FHTs
- G. May have abnormal FHTs
 - 1. Tachycardia
 - 2. Variable decelerations
 - 3. Late decelerations
 - 4. Lack of variability
- G. Decreased or absent fetal movement
- H. Maternal shock

IV. MANAGEMENT

- A. Activate EMS
- B. Administer oxygen to mother
- C. Treat for shock as indicated
- D. Expedite birth of baby if possible while prepared for neonatal resuscitation
- E. If baby born, expedite birth of placenta

- F. Be prepared for postpartum hemorrhage (see postpartum hemorrhage guideline)
- G. If birth not imminent, transfer care immediately

PROLAPSED CORD

I. DEFINITION

Three degrees may be distinguished

- A. Cord prolapsed into the vagina or outside the vulva after the membranes have ruptured
- B. Cord presentation palpable through the cervical os but within the intact membranes
- C. Occult prolapse with the cord located alongside the presenting part but not within reach on vaginal exam

II. ETIOLOGY

- A. Any condition in which the presenting part does not fit accurately into the lower uterine segment
 1. Malpresentation
 2. Polyhydramnios
 3. Multiparity
 4. ROM with high station or unengaged head

III. SIGNS & SYMPTOMS

- A. Cord visualized or palpated
- B. FHTs become irregular in combination with periodic episodes of bradycardia of variable duration
- C. Severe variable decelerations

IV. MANAGEMENT

- A. Activate EMS
- B. Notify hospital to prepare for cesarean birth
- C. Woman should get into knee-chest or Trendelenburg position
- D. Administer oxygen
- E. Elevate the presenting part with a hand in the vagina and keep it there until delivery
- F. Do not try to reposition cord
- G. If cord prolapsed outside of the vulva, wrap in a warm sterile moist towel or replace in vagina
- H. Start IV
- I. Transport immediately

PROLONGED LABOR

I. DEFINITION

- A. First Stage - Labor which exhibits no progress after 4 to 5 centimeters with contractions every 2-4 minutes which palpate strong and last 60 seconds or longer.
- B. Second Stage - Labor which exhibits no signs of descent through the mid pelvis and/or pelvic outlet after complete dilation and active pushing.

II. ETIOLOGY

- A. Malpresentation
- B. Labor dysfunction
- C. PROM with unripe cervix
- D. Cervical dystocia
- E. CPD
- F. Psychosocial issues
- G. High anxiety
- H. Induced labor

III. SIGNS & SYMPTOMS

- A. Maternal signs of exhaustion
 - 1. Signs of dehydration
 - 2. Increased pulse, rising temperature
 - 3. Restlessness, anxiety, distress, unable to sleep
- B. Lack of progress
- C. Signs of malposition - deflexed, asynclitic head, or posterior position
- D. Irregular contraction pattern
- E. Caput formation without descent
- F. Uterine abnormalities

IV. MANAGEMENT

- A. Prolonged latent phase in either primigravida or multipara
 - 1. Assess fetal and maternal conditions
 - a. Contractions
 - i. Frequency
 - ii. Duration
 - iii. Intensity
 - iv. Interval
 - v. Changes in pattern
 - b. Fetal heart tones
 - c. Maternal vital signs
 - d. Energy level
 - e. Maternal environment
 - f. Maternal emotional response to labor
 - g. Position, presentation

2. If condition of both mother and baby is stable, consider the following measures
 - a. If mother is tired, encourage rest and sleep with natural therapies, hot bath, and/or massage, IV therapy, medications, etc.
 - b. If mother is energetic, encourage augmentation of labor through walking, showering, nipple stimulation, squatting, enema, other natural remedies
 - c. Consider position assist

B. Prolonged active labor

1. Assess maternal and fetal condition
2. If condition is unstable, transfer care
3. If condition is stable
 - a. Consider therapeutic measures described above
 - b. If fetal head is engaged and well applied to the cervix, consider AROM
4. If no progress in effacement, dilation or station after above measures have been employed, obtain consult

C. Second Stage with no descent

1. Assess fetal and maternal conditions
2. If mother and baby are stable, consider the following:
 - a. Determine baby's position
 - i. If asynclitic or posterior, consider position assist
 - ii. Try pushing in different positions; e.g., squat, supported squat, hands and knees, toilet sitting
 - b. Check to make sure bladder is empty; consider catheterization if unable to void
 - c. Have mother rest until contractions resume in strength and frequency
 - d. Augment contractions using nipple stimulation, natural therapies
 - e. If no progress consult physician
3. If condition of mother or baby is unstable, transfer care

PROLONGED RUPTURE OF MEMBRANES

I. DEFINITION

The spontaneous rupture of membranes at term with or without labor for an extended period.

II. ETIOLOGY

- A. Infection
- B. Injury
- C. Poor Nutrition
- D. Unknown

III. SIGNS & SYMPTOMS

- A. Mother reports gushing or leaking from the vagina
- B. Fluid is nitrazine positive
- C. Fluid is positive for ferning
- D. Fluid observed pooling in the vaginal vault during sterile speculum exam
- E. Unusual odor of amniotic fluid

IV. MANAGEMENT

- A. A sterile speculum exam may be done to verify ROM and/or rule out prolapsed cord
- B. Do not do digital vaginal exams until active labor is established
- C. Assess FHTs and fetal movement
- D. Evaluate maternal vital signs
- E. Determine gestation (if preterm see PROM guideline)
- F. Inform parents of potential risks
- G. Confirm vertex position
- H. Educate mother
 - 1. Wear clean sanitary pads and change frequently
 - 2. Daily shower
 - 3. Clean, loose clothing
 - 4. Complete pelvic rest
 - 5. Wipe from front to back
 - 6. Careful hand washing
 - 7. Signs and symptoms of infection
- I. Have mother check temperature every 4 hours
- J. Report change in fluid color or odor, fever, or illness symptoms immediately
- K. Maintain hydration and nutritional intake
- L. Consider natural therapies to prevent infection
- M. Consider natural therapies to initiate or augment labor
- N. If unknown GBS status, consider antibiotics after 18 hours of rupture (see guideline for GBS)

SHOULDER DYSTOCIA

I. DEFINITION

The birth of the head occurs, but the shoulders cannot be delivered by the usual methods.

II. RISK FACTORS

- A. Estimated fetal weight greater than 4000 grams or estimated fetal weight one pound or greater than birth weight of largest previous baby
- B. Maternal obesity or prenatal weight gain over 60 pounds
- C. Marginal pelvis; contracted outlet
- D. Previous shoulder dystocia
- E. Prolonged second stage and prolonged crowning
- F. Maternal diabetes

III. SIGNS & SYMPTOMS

- A. Retraction of fetal head against perineum, usually after some difficulty with its birth and extension
- B. Color of head darkens to deep purple
- C. Head fails to restitute spontaneously
- D. Normal traction and maternal effort fail to effect birth
- E. No spontaneous birth of shoulders

IV. MANAGEMENT, not necessarily in this order:

- A. Once shoulder dystocia is suspected note time of birth of the head
- B. Rule out nuchal cord, compound presentation
- C. Change maternal position to effect Gaskin maneuver (hands and knees), semi-squat, exaggerated lithotomy, standing, standing with one leg up
- D. Apply suprapubic pressure if in lithotomy
- E. If shoulders transverse or AP, rotate to oblique
- F. Flex shoulders if extended
- G. Attempt delivery of posterior arm
- H. Consider episiotomy
- I. Consider Woods Corkscrew Maneuver
- J. Break fetal clavicle to deliver posterior shoulder
- K. Be prepared for neonatal resuscitation and possible pneumothorax
- L. Be prepared for possible postpartum hemorrhage
- M. Transport as indicated

SURPRISE BREECH

I. DEFINITION

Undiagnosed breech presentation late in labor

II. SIGNS & SYMPTOMS

Vaginal exam or visual inspection of perineum reveals baby's buttocks, testes, feet or knees, probable meconium

III. MANAGEMENT

A. Transport mother to hospital if timely transfer is possible

B. If birth is imminent

1. Activate EMS
2. Be prepared to resuscitate infant
3. Catheterize maternal bladder if necessary
4. Place mother at edge of bed or in squat
5. Remain calm
6. Ascertain dilation is complete before pushing
7. Consider cutting an episiotomy
8. Hands off the breech until it delivers to the umbilicus
 - a. Rotation to the sacrum anterior is necessary for delivery of the head
 - b. Do not put traction on the fetal trunk to hasten delivery because it deflexes the head, provide supra-pubic pressure instead
 - c. Unless cord is under tension there is no value in pulling on the cord
 - d. Wrap the baby's body in a warm towel
 - e. Maintain suprapubic pressure to keep head flexed
 - f. Legs and feet are usually born spontaneously, gently disengage if necessary
 - g. If necessary feel for the arms
 - i. If present deliver anterior shoulder first
 - ii. Elevate buttocks to deliver the posterior shoulder
 - iii. If arms are extended, deliver shoulders by rotating to the antero-posterior position and sweeping down first the anterior arm and then the posterior arm
9. When hairline appears
 - a. Birth head by flexion
 - b. Grasp infant's feet with one hand
 - c. Elevate the baby's feet through a 180 degree arc until the face is born over the perineum

- d. Slowly deliver baby's head
 - e. If head has extended, apply suprapubic pressure and proceed with delivery
 - f. If head won't deliver, apply maneuvers to flex the baby's head. Remember flexion before traction
- 10. Expect low-APGAR infant
 - 11. Resuscitate as indicated
 - 12. Transfer infant as indicated

SURPRISE TWINS AT BIRTH

I. DEFINITION

Unexpected birth of previously undetected multiple gestation infants.

II. SIGNS & SYMPTOMS

- A. After birth of the first baby, the mother feels continued pushing contractions
- B. Mother feels fetal movement
- C. Uterus is very large, well above umbilicus
- D. Fetal heart tones can be heard
- E. Presenting part is at the introitus

III. MANAGEMENT

- A. After birth of first baby, clamp the cord. Double clamp the cord and cut in between the clamps to protect both babies from exsanguination
- B. Activate EMS
- C. Assess fetal heart tones
- D. Assess speed with which delivery will take place
- E. If birth is not imminent, transfer.
- F. If birth is imminent, facilitate the birth
 - 1. Be prepared for
 - a. Breech delivery
 - b. Neonatal resuscitation
 - c. Postpartum hemorrhage
 - d. Normalcy
 - 2. Consider catheterization
 - 3. Assess the presentation and position of the second baby prior to the actual delivery
 - 4. Have an assistant direct the second twin into position abdominally as vaginal manipulations guide the presenting part into the pelvis
 - 5. Once the presenting part is fixed, consider rupturing the membranes
 - 6. Encourage the mother to push and conduct the birth as usual

TIGHT NUCHAL CORD

I. DEFINITION

Umbilical cord wrapped tightly around baby's neck at birth, potentially inhibiting birth of body and preventing oxygen supply to baby.

II. ETIOLOGY

Fetal activity resulting in cord being wrapped around neck

III. SIGNS AND SYMPTOMS

- A. Variable decelerations of FHTs during labor
- B. Baby's head retracting on pelvic floor
- C. Delayed birth of shoulders
- D. Tight cord felt around baby's neck after birth of head

IV. MANAGEMENT

- A. If possible, insert two fingers between cord and baby's body and encourage mother to push
- B. Take cord over baby's head
- C. If needed, somersault baby to birth body
- D. If the above managements are ineffective or if FHTs or baby's color indicate need for immediate delivery:
 - 1. Double clamp and cut cord
 - 2. Ask mother to push and assist delivery of shoulders as needed
- E. Assess baby and anticipate need for resuscitation

TRIAL OF LABOR AFTER CESAREAN

I. DEFINITION

Mother with history of previous Cesarean birth who wants to birth vaginally

II. MANAGEMENT

- A. Monitor maternal–fetal condition as outlined under labor and birth care schedule
- B. Follow procedures requested by consulting physician
- C. If client has never birthed vaginally, assess progress by first birth criteria
- D. If client has birthed vaginally, assess progress by multiparous criteria
- E. Consider placement of a heparin/saline lock upon active labor
- F. Continually assess for symptoms of uterine rupture
 - 1. Sudden, severe, tearing; unusual pain
 - 2. Frank, bright red bleeding
 - 3. Loss of uterine contractions or tonus
 - 4. Signs and symptoms of shock
- G. In the presence of any symptoms of uterine rupture, remain calm, inform client of status, prepare for emergency transfer
- H. Transfer if labor fails to follow normal parameters or upon midwife's or mother's request

URINARY CATHETERIZATION

I. DEFINITION

Emptying of the bladder by inserting a catheter

II. INDICATIONS:

- A. Avoid further trauma to the bladder during the birth
- B. Decrease the discomfort to the woman during the birth
- C. Allow the head to apply firmly to the cervix
- D. Facilitate descent of the head
- E. Address prolonged labor
- F. Decrease risk of shoulder dystocia or immediate postpartum hemorrhage
- G. Mother is unable to void postpartum
- H. Facilitate birth of placenta

III. SIGNS & SYMPTOMS

- A. Suprapubic pain
- B. Inability to void, even with inducements
- C. Enlarged bladder can be felt above the pubis
- D. Failure of descent of fetal head
- E. Uterus remains large/boggy after the birth
- F. Postpartum bleeding is excessive

IV. MANAGEMENT

- A. Assess distention of the bladder and when the woman last voided
- B. Assess fluid intake
- C. Decide if the bladder distension is causing an impediment to the progress of the labor
- D. Determine whether or not a possible complication is anticipated
- E. Assess the ability of the woman to void postpartum in a reasonable time
- F. Perform urinary catheterization using careful sterile technique
- G. Educate regarding risks of infection post procedure

UTERINE RUPTURE

I. DEFINITION

- A. Complete: involves a tear that passes through the entire uterine wall (most dangerous, especially in fundus)
- B. Incomplete (also called dehiscence or window): involves a tear through the myometrium but the peritoneum is intact; may be asymptomatic or involve minimal bleeding

II. ETIOLOGY

- A. Prolonged, obstructed, or dysfunctional labor
- B. Fetal malpresentations
- C. High parity
- D. Previous uterine surgery
- E. Injudicious use of uterine stimulants
- F. Operative procedures
- G. External pressure causing uterine trauma
- H. Manual exploration of the uterus or manual removal of placenta
- I. Placenta accreta

III. SIGNS AND SYMPTOMS

- A. Maternal
 - 1. Mother complains of
 - a. Sudden, sharp, tearing suprapubic/abdominal pain at height of contraction
 - b. Followed by relief of pain
 - c. Followed by abrupt cessation of labor
 - d. Elevated heart rate and decreased blood pressure
 - 2. Slight or frank bright red vaginal bleeding
 - 3. Shock which may be out of proportion to external blood loss if bleeding is intraperitoneal
 - 4. Referred shoulder pain secondary to intraperitoneal bleeding
 - 5. Uterus is felt as round, firm and contracted beside the fetus
 - 6. Fetal parts are easily palpable
 - 7. Presenting part recedes and is moveable above the inlet
- B. Fetal
 - 1. Fetal tachycardia with minimal variability
 - 2. Repetitive late decelerations followed by bradycardia, or loss of heart tones
 - 3. Violent fetal movement followed by decreased or no fetal activity

- IV. MANAGEMENT
 - A. Activate EMS
 - B. Treat for shock and blood loss
 - C. Transport

BIRTH OF THE PLACENTA

THIRD STAGE CARE SCHEDULE

I. DEFINITION

Care of the client during the period of time from the birth of the infant through the birth of the placenta.

II. MANAGEMENT

- A. Facilitate bonding and early breastfeeding of baby
- B. Evaluate condition of mother
 - 1. Monitor vital signs
 - 2. Monitor blood loss
 - 3. Monitor fundal height
- C. Obtain cord blood, if indicated
- D. Facilitate delivery of placenta
 - 1. Determine whether or not placenta has separated
 - 2. After separation
 - a. Encourage maternal pushing efforts
 - b. Apply gentle cord traction if needed
 - 3. If signs and symptoms of hemorrhage, hidden or frank bleeding, identify the source and treat appropriately
- E. Screen for signs and symptoms of other complications of third stage

MANUAL REMOVAL OF PLACENTA

I. INDICATIONS

- A. All other attempts to deliver placenta have failed
- B. Steady flow of blood from vagina

II. MANAGEMENT

- A. Engage woman's cooperation
- B. Catheterize bladder if indicated
- C. Consider IV before or after removal
- D. Using sterile technique, place whole hand into uterus by following umbilical cord to placenta
- E. Grasp uterus abdominally with external hand to keep fundus well contracted and to provide counterforce to internal hand's actions
- F. Using internal hand, quickly feel entire fetal surface of placenta to gauge size
- G. Find area of placental separation to use as starting point
- H. Place the back of the hand against the uterine wall and, with fingers between the placenta and the uterus, gently sweep back and forth from side to side, separating the placenta from the uterine wall
- I. If you come to an area that does not remove easily, STOP, you may have an accreta and need to transfer immediately
- J. When the entire placenta has been separated from the uterus, grasp placenta in palm of hand and slowly remove hand from uterus and vagina while continuing to grasp fundus abdominally
- K. Administer 20 IU Pitocin IM or IV, .2 mg Methergine IM (not with increased blood pressure), or 400- 800 mcg Misoprostil rectally to assure contraction of traumatized uterus
- L. Immediately inspect placenta, membranes and cord
- M. Treat for shock if necessary
- N. Activate EMS if necessary
- O. Consider prophylactic antibiotics or natural therapies and monitor closely for infection
- P. Consult/transfer as necessary

PLACENTA ACCRETA

I. DEFINITION

Abnormal adherence of placenta directly to myometrium with missing or defective decidua. May involve part or all of the placenta.

- A. When the chorionic villi invade the myometrium, the condition is called placenta increta.
- B. When the chorionic villi extend through the uterine muscle and into the serosa, the condition is called placenta percreta.

II. RISK FACTORS

- A. Previous uterine curettage
- B. Previous Cesarean birth or other uterine surgery
- C. Placenta previa
- D. Previous accreta

III. SIGNS & SYMPTOMS

- A. Complete Accreta
 - 1. Placenta does not deliver
 - 2. Bleeding is minimal to non-existent
- B. Partial Accreta
 - 1. Placenta does not deliver
 - 2. Steady flow of blood after non-adherent areas separate from uterus
 - 3. Attempt to manually remove placenta fails due to abnormal adherence

IV. MANAGEMENT

- A. All attempts at delivering the placenta have failed
- B. Stabilize mother
- C. Activate EMS
- D. Administer Pitocin and Methergine to cause strong uterine contractions to control bleeding if indicated
- E. Treat for shock
- F. Start IV
- G. Transport immediately

RETAINED PLACENTA

I. DEFINITION

Undelivered placenta or placental fragments

II. ETIOLOGY

- A. Separated but retained, with or without bleeding
- B. Partially separated or partial accreta
- C. Completely adherent

III. MANAGEMENT OF RETAINED PLACENTA WITHOUT BLEEDING

- A. Check for placental separation
- B. Facilitate placental delivery (not necessarily in this order):
 - 1. Consider upright/squatting maternal position
 - 2. Encourage nursing or nipple stimulation
 - 3. Assess for bladder distention, encourage voiding. Catheterize if necessary
 - 4. Consider natural therapies
 - 5. Consider the administration of 10 IU Pitocin IM, every 5 minutes up to 3 times
 - 6. Consider intra-venous umbilical Pitocin 10-20 IU alone or in Normal Saline and milk it towards the placenta
 - 7. Consider 400 – 800 mcg Misoprostil rectally
- C. Consider gentle traction to the cord
- D. Feel for location of the placenta
 - 1. Use sterile technique
 - 2. Follow cord up to cervical os
 - 3. If present, deliver by controlled cord traction
- E. If placenta not delivered
 - 1. Start IV with 1000cc Lactated Ringers
 - 2. Assess vital signs, contractions, bleeding and fundal height
 - 3. Consider adding 20 IU Pitocin to the IV solution
 - 4. Consider 400 – 800 mcg Misoprostil rectally
 - 5. Consider natural therapies
 - 6. Administer oxygen
 - 7. Consider manual removal (see guideline)
 - 8. Transport if placenta undelivered or mother unstable

IV. MANAGEMENT OF RETAINED PLACENTA WITH BLEEDING

- A. Try above methods. If no success:
 - 1. Assess vital signs every 15 minutes, uterine tone, bleeding and fundal height
 - 2. Start IV with 1000cc Lactated Ringers
 - 3. Consider adding 20 IU Pitocin to the IV solution

4. Consider natural therapies
 5. Administer oxygen
 6. Perform manual removal of placenta using sterile technique
- B. If manual removal is unsuccessful or vitals are unstable, transfer immediately

POSTPARTUM CARE MOTHER

POSTPARTUM CARE SCHEDULE

- I. The postpartum care schedule consists (at the minimal):
 - A. 24-48 hours
 - B. 3-5 days
 - C. 2-3 weeks
 - D. 4-6 weeks

- II. The first visit shall take place within 24-48 hours of birth in the client's home, at the birth center, or where the client is presently housed. The following should be evaluated. (For infant evaluation see Newborn Care Schedule Guidelines)
 - A. Breasts/nipples
 - B. Perineum and repairs
 - C. Nutrition/elimination
 - D. Emotional adjustment, bonding, parenting
 - E. Vital signs
 - F. Activity level
 - G. Fundus/lochia
 - H. Sexuality and family planning plans

- III. If all is normal, the next follow-up visit should take place at 3-5 days. The items above should again be evaluated

- IV. By ten days postpartum the birth certificate, paternity statement, and enumeration of birth for social security should be completed and sent to the State.

- V. It is also appropriate to either make a phone consultation or other visit at 2-3 weeks postpartum. Items above should again be evaluated.

- VI. The final visit is from 4-6 weeks postpartum. The final visit should consist of the following:
 - A. Breasts/breastfeeding
 - B. Nutrition
 - C. Rest/activity level
 - D. Exercise
 - E. Emotional adjustment, including partner, family, and siblings
 - F. Sexuality
 - G. Family planning and well woman care as needed

AFTERBIRTH PAINS

I. DEFINITION

Sensation caused by the continuing sequential contraction and relaxation of the uterus during the postpartum period. More common and uncomfortable with increasing parity and in women who breastfeed.

II. SIGNS & SYMPTOMS

- A. Cramping ranging from menstrual-like cramps to stronger contractions.
- B. Increase in cramping with breastfeeding

III. MANAGEMENT

The basis for relief is a continuously well-contracted uterus

- A. Keep bladder empty
- B. Assess for bleeding. Rule out clots, see postpartum hemorrhage guidelines.
- C. Encourage the woman to check her uterus regularly for firmness
 - 1. Rub uterus periodically
 - 2. Encourage breastfeeding
 - 3. Offer natural remedies to stimulate uterine
 - 4. Lie prone to stimulates the uterus to contract
- D. Try natural therapies or over the counter pain relief medication
- E. Rub uterus periodically
- F. Assure normalcy and that it will pass

BIMANUAL COMPRESSION

I. DEFINITION

- A. External Bimanual Compression:
The compression of the uterus between an external hand on the fundus and an external hand placed suprapubically.
- B. Internal Bimanual Compression:
The compression of the uterus between an external hand on the fundus and a fist placed vaginally with knuckles against the uterine wall.

II. INDICATION

- A. Uncontrolled postpartum bleeding following the birth of the placenta
- B. Uterine atony
- C. Uterine atony unresponsive to vigorous fundal massage, administration of Pitocin and/or Methergine and/or Misoprostil and/or natural therapies, and urinary catheterization.

III. TECHNIQUE FOR INTERNAL BIMANUAL COMPRESSION

- A. One hand is placed on the fundus while the other, using sterile technique, is placed as a fist inside the vagina until the knuckles come in contact with the uterine wall. The uterus is squeezed between the fist and the hand to provide direct pressure to stop bleeding and contract the uterus.
- B. Continue internal bimanual compression until bleeding stops.
- C. Consider IV management, Pitocin, Methergine, Misoprostil, natural therapies.
- D. See postpartum hemorrhage guideline

BREAST CARE

- I. SUGGESTIONS FOR THE BREASTFEEDING MOTHER:
 - A. Keep breasts clean, washing only with water. Do not use soap, as it can be drying and lead to cracked nipples.
 - B. Keep nipples dry, exposing them to fresh air and sunshine frequently.
 - C. Provide good support to the breasts by wearing a comfortable, properly fitting nursing bra.
 - D. Always break the suction with your finger before removing baby from the breast
 - E. Drink plenty of fluids
 - F. Good nutrition and supplements
 - G. Get good rest

- II. Ensure proper nursing positions, proper latch, and signs of swallowing
 - A. Decrease stress
 - B. If nipples become tender
 1. Be sure baby is properly positioned
 2. Apply warm compresses to enhance let-down
 3. Breast-feed more frequently
 4. Nurse on the sore nipple first
 5. Expose nipples to air/sunlight to promote healing
 6. Apply breast milk or natural remedies to nipples
 - C. Watch for signs and symptoms of engorgement
 1. Breasts feel full, firm, hard
 2. Breasts are tender, throbbing, painful
 3. Breasts are warm to the touch
 4. Skin becomes tight, shiny, or red
 5. Veins may become visible, streaking
 6. Increased maternal temperature
 - D. If breasts become engorged
 1. Go to bed and increase frequency of feedings
 2. Apply warm compresses to breasts prior to breast-feeding
 3. Shower, letting water flow over breasts
 4. Soak breasts in warm water
 5. Express milk manually or with a pump prior to nursing to help baby latch onto nipple
 6. Express milk to empty breasts if uncomfortably full
 7. Wear supportive nursing bra that does not pinch or bind
 8. Consider natural therapies
 - E. Educate and assess for signs of infection
 - F. Anticipate difficulties with difficult or complicated births, and babies with problems
 - G. Refer to La Leche League, breastfeeding consultant as indicated

MASTITIS

I. DEFINITION

Inflammation of the breast which develops as a result of bacterial infection

II. ETIOLOGY

- A. Over-active or over-stressed mom
- B. Breast over-distension
- C. Clogged duct
- D. Cracking or fissures of the nipple
- E. Depression

III. SIGNS & SYMPTOMS

- A. Precursory signs
 - 1. Severe engorgement
 - 2. Slight fever
 - 3. Mild pain in one segment of the breast which is exaggerated when the baby nurses
- B. Signs and symptoms of actual mastitis
 - 1. Rapid onset
 - 2. Rapid elevation of temperature to 103-104 F
 - 3. Increased pulse rate
 - 4. Chills, general malaise, headache, muscle aches
 - 5. Indurated and reddened area or red streak of the breast, usually painful
 - 6. Hard, sizable lumps may be palpated
 - 7. Heat radiating over infected area
- C. Signs and symptoms of abscess
 - 1. Discharge of pus
 - 2. Remittent fever with chills
 - 3. Breasts swollen and extremely painful; large hard mass with an area of fluctuation, reddening, and bluish tinge to the skin indicating the location of the pus filled abscess

IV. MANAGEMENT

- A. Continue nursing; beginning on the affected side each time
- B. Use hot moist packs
- C. Drink plenty of fluids
- D. Bed rest during the acute phase
- E. Consider natural therapies
- F. Consult if no improvement or at mother's request

POSTPARTUM HEMORRHAGE (IMMEDIATE)

I. DEFINITION

Excessive bleeding after the birth of the baby, within the first 24 hours. Can occur any time in those first 24 hours

II. ETIOLOGY

- A. Uterine atony
 - 1. Multiple pregnancy
 - 2. Large baby
 - 3. Maternal exhaustion
 - 4. Prolonged second stage
 - 5. Abnormal labor pattern
 - 6. Precipitous labor
 - 7. Distended bladder
- C. Retained placental fragments
- D. Trauma or lacerations
- E. Clotting defect
- F. Uterine rupture
- G. Partial separation of the placenta

III. SIGNS & SYMPTOMS

- A. Uncontrolled bleeding
- B. Signs and symptoms of shock
- C. Excessive blood loss
- D. Concealed bleeding
 - 1. Rising uterus
 - 2. Increasing pain

IV. MANAGEMENT (Not necessarily in this order)

- A. Determine source of bleeding
- B. Facilitate birth of placenta (see retained placenta guideline)
- C. Assess placenta for completeness, manually remove fragments as indicated (see manual removal guideline)
- D. If placenta born and uterus is not well contracted, express clots, and apply fundal massage until the uterus is firm
- E. Apply direct pressure to any bleeding lacerations
- F. Catheterize bladder if indicated
- G. Consider internal or external uterine bimanual compression
- H. Consider 10 IU Pitocin IM every 5 minutes up to 3 times if appropriate
- I. If placenta born, consider .2 mg Methergine IM and/or 400 – 800 mcg Misoprostil rectally as appropriate
- J. Consider Methergine tablets, .2 mg orally every 8 hours for 24 hours after acute hemorrhage is controlled

- K. Consider using additional natural therapies
- L. Monitor vital signs
- M. Start IV as indicated; consider 20 units Pitocin to every 1000 ccs IV fluids
- N. Treat for shock and activate EMS as necessary
- O. Transport as necessary, bring placenta with transport
- P. Postpartum labs as appropriate
- Q. Anticipate postpartum issues like anemia, depression, infection, breastfeeding difficulties (see appropriate guidelines)

POSTPARTUM HEMORRHAGE (LATE)

I. DEFINITION

A hemorrhage occurring after 24 hours postpartum, most commonly 1-2 weeks postpartum and can occur up to 6 weeks postpartum.

II. ETIOLOGY

- A. Retained portion(s) of the placenta
- B. Rigorous maternal activity
- C. Infection
- D. Unknown

III. SIGNS & SYMPTOMS

- A. Sudden onset bright red uterine bleeding
- B. Excessive large blood clots
- C. Subinvolution of the uterus
- D. Signs and symptoms of infection
- E. Signs and symptoms of shock

IV. MANAGEMENT

- A. Attempt to control bleeding (see immediate postpartum hemorrhage guideline)
- B. Ultrasound to rule out retained fragments
- C. Consider antibiotic treatment
- D. Consider natural therapies
- E. Consult/refer as needed

POSTPARTUM MOOD DISORDERS

I. DEFINITION:

- A. Maternity or Baby Blues – a mild, self limiting form of depression commonly occurring during the first few days postpartum and lasting up to two weeks.
- B. Postpartum Depression – a biochemical imbalance usually occurring after the first couple of weeks postpartum. Can last up to one year.
- C. Postpartum Psychosis – a rare but serious psychiatric emergency requiring immediate intervention. Usually a manifestation of bipolar disorder, and schizophrenia.

II. CONTRIBUTING FACTORS

- A. Difficulties in relationship with domestic partner
- B. Unwanted pregnancy
- C. Lack of familial or social support
- D. Traumatic birth experience
- E. Previous mental illness, postpartum depression
- F. Personal or family history of depression, bipolar disorder
- G. History of abuse or trauma
- H. Hormonal imbalance
- I. Sleep deprivation
- J. Chemical and vitamin imbalance
- K. Lack of exercise
- L. Lack of breastfeeding or bonding
- M. Isolation
- N. Currently on medication or stopping medication during pregnancy and/or postpartum

III. SIGNS & SYMPTOMS

- A. Baby Blues
 - 1. Usual onset with milk coming in (3 – 5 days postpartum)
 - 2. Unexplained weeping, sadness, irritability, anxiety, confusion.
 - 3. Transient, does not consistently effect ability to function
 - 4. Resolves by 10 days to 2 weeks
- B. Moderate depression
 - 1. Feelings of overwhelming sadness, grief, guilt, or shame
 - 2. Withdrawal, social isolation
 - 3. Loss of interest in baby, and/or excessive concern for baby
 - 4. Anxiety
 - 5. Lack of interest in daily activities
 - 6. Decreased energy
 - 7. Sleep disturbances
 - 8. Rapid weight loss with decreased appetite

9. Memory loss
- C. Severe depression/psychosis
 1. Sudden onset, severe, usually within the first month (can occur within 3 – 14 days postpartum)
 2. All of the above signs and symptoms
 3. Paranoid delusions
 4. Suicidal thoughts and impulses
 5. Inability to care for self and children
 6. Hallucinations
 7. Threats of violence toward baby or other family members

IV. MANAGEMENT

- A. Refer to appropriate care providers, family, friends, community resources
- B. Determine level of mood disorder (see attached screening tool as one type of guide)
- C. Consider thyroid screening
- D. Consider natural therapies
- E. Immediate intervention may be appropriate
- F. Notify Child Protective Services if client's children are in danger of abuse of neglect

V. Resources

- A. Depression after Delivery (DAD) – 800-944-4773; 908-575-9121; depressionafterdelivery.com
- B. Postpartum Support, International – 805-967-7636
- C. Postpartum Survival Guide
- D. Marie Osmond's "Behind the Smile"
- E. Brooke Shield's "Down Came the Rain: My Journey through Postpartum Depression"
- F. Edinburgh Postnatal Depression Scale (See Below)

EDINBURGH POSTNATAL DEPRESSION SCALE (EPDS)

Taken from the British Journal of Psychiatry, June 1987, Vol.150 by J. L. Cox, J. M. Holden, R. Sagovsky

The Edinburgh Postnatal Depression Scale has been developed to assist primary health care providers to detect mothers suffering from postnatal depression: a distressing disorder more prolonged than the “blues” (which occur in the first week after birth) but less severe than periparturient psychosis. Previous studies have shown that postnatal depression affects at least 10% of women and that many depressed mothers remain untreated. These mothers may cope with their baby and with household tasks, but their enjoyment of life is seriously affected and it is possible that there are long term effects on the family.

The EPDS was developed at health centers in Livingston and Edinburgh. It consists of ten short statements. The mother underlines which of the four possible responses is closest to how she has been feeling the last week. Most mothers complete the scale without difficulty in less than 5 minutes.

The validation study showed that mothers who scored above threshold 92.3% were likely to be suffering from a depressive illness of varying severity. Nevertheless, the EPDS score should not override clinical judgment. A careful clinical assessment should be carried out to confirm the diagnosis. The scale indicates how the mother has felt during the previous week and in doubtful cases may be usefully repeated in 2 weeks. The scale will not diagnose mothers with anxiety neuroses, phobias, or personality disorder.

Instruction for users:

1. The mother is asked to underline the response which comes closest to how she has been feeling in the previous 7 days.
2. All ten items must be completed.
3. Care should be taken to avoid the possibility of the mother discussing her answers with others.
4. The mother should complete the scale herself, unless she has limited English or has difficulty with reading.
5. The EPDS may be used at 6-8 weeks to screen postnatal women. The child health clinic, postnatal check-up, or a home visit may provide suitable opportunities for its completion.

Scoring:

1. Response categories are scored 0, 1, 2, 3 according to increased severity of symptoms.
2. Items marked with an asterisk are reverse scored (3, 2, 1, 0)
3. The total score is calculated by adding together the scores for each of the ten items

Name: _____ Baby's Age _____

As you have recently had a baby, we would like to know how you are feeling. Please UNDERLINE the answer that comes closest to how you have felt IN THE PAST 7 DAYS, not just how you feel today.

I have been able to laugh and see the funny side of things.

As much as I always could
Not quite so much now
Definitely not much now
Not at all

I have looked forward with enjoyment to things.

As much as I ever did
Rather less than I used to
Definitely less than I used to
Hardly at all

*I have blamed myself unnecessarily when things went wrong.

Yes, most of the time
Yes, some of the time
Not very often
No, never

I have been anxious or worried for no good reason.

No, not at all
Hardly ever
Yes, sometimes
Yes, very often

*I have felt scared or panicky for not very good reasons.

Yes, quite a lot
Yes, sometimes
No, not much
No, not at all

*Things have been getting on top of me.

Yes, most of the time I haven't been able to cope at all
Yes, sometimes I haven't been coping as well as usual
No, most of the time I have coped quite well
No, I have been coping as well as ever

*I have been so unhappy that I have had difficulty sleeping.

Yes, most of the time
Yes, sometimes
Not very often
No, not at all

*I have felt sad or miserable.

Yes, most of the time
Yes, sometimes
Not very often
No, not at all

*I have been so unhappy that I have been crying.

Yes, most of the time
Yes, quite often
Only occasionally
No, never

*The thought of harming myself has occurred to me.

Yes, quite often
Sometimes
Hardly ever
Never

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POSTPARTUM PERINEAL CARE

I. DEFINITION

Care of the perineum after birth from normal stretching, swelling, trauma, tear or episiotomy.

II. SIGNS & SYMPTOMS

- A. Tender and painful perineal area
- B. Signs dependant on location of tear
- C. Reluctance or difficulty with elimination
- D. Assess for REEDA
 - 1. Redness
 - 2. Edema
 - 3. Ecchymosis
 - 4. Discharge
 - 5. Approximation
- D. Hemorrhoids
- E. Hematoma

III. MANAGEMENT

- A. Assess vulva well after birth
- B. Assess need for repair (see perineal tear and repair guideline)
- C. Educate and encourage the use of methods for
 - 1. Preventing infection
 - 2. Reducing swelling
 - 3. Increasing circulation
 - 4. Maintaining hygiene
 - 5. Providing comfort
 - 6. Reducing activity levels
 - 7. Advising pelvic rest
 - 8. Encouraging nutrition and hydration to assure bowel and bladder function
- D. Advise Kegel exercises
- E. Encourage sitz baths, natural light and air
- F. Follow up
 - 1. Examine perineum
 - 2. Discuss any fears or concerns
 - 3. Consult if healing is unsatisfactory

PERINEAL TEARS AND REPAIR

I. DEFINITION

Perineal, labial, peri-urethral, and vulvar tears due to birth or as the result of an episiotomy

II. ETIOLOGY

- A. Normal process of birth
- B. Weaken tissue from previous scar
- C. Compound presentation
- D. Poor perineal integrity
- E. Previous trauma
- F. History of physical or sexual abuse
- G. Precipitous birth
- H. Tight muscle tone
- I. Dystocia, malpresentation/position, or compound presentation

III. SIGNS & SYMPTOMS

- A. Bleeding
- B. Tissue damage
- C. Vaginal/perineal examination reveals tear
- D. Pain

IV. MANAGEMENT

- A. Determine need for repair/consult
 - 1. Evaluate
 - a. Degree: length and depth.
Third and fourth degree tears should be repaired by an experienced provider.
 - b. Assess for REEDA
 - i. Redness
 - ii. Edema
 - iii. Ecchymosis
 - iv. Discharge
 - v. Approximation
 - c. Bleeding and vital signs
 - d. Maternal activity level postpartum
 - e. Maternal desires and feelings
- B. If repair
 - 1. Administer local anesthetic if needed, assess allergy history
 - 2. Repair
 - 3. Give instructions for perineal care
 - 4. Follow up as necessary

- C. If unable to repair yourself
 - 1. Refer to other midwife or experienced suturer
 - 2. Consult with physician
- D. If no repair
 - 1. Teach mother appropriate perineal hygiene
 - 2. Inform of availability of ice, sitz baths, and other natural remedies
 - 3. See postpartum perineal care guideline

POSTPARTUM HEMATOMA

I. DEFINITION

A swelling or mass of blood in the vulva or retroperineal area, caused by the rupture of a vessel in the soft tissue and usually concealed.

II. ETIOLOGY

- A. Trauma during the course of birth, stretching deep tissue and rupturing a deep vessel
- B. Episiotomy

III. SIGNS & SYMPTOMS

- A. Sudden onset of severe pain
- B. Rectal pressure, need for BM
- C. Possible difficulty in voiding
- D. Enlarged, firm mass, usually unilateral; often not visible due to location in rectovaginal area
- E. Purplish discoloration
- F. If involving the broad ligament
 - 1. Severe lateral uterine pain
 - 2. Flank pain
 - 3. Abdominal distension

IV. MANAGEMENT

- A. Assess vital signs regularly
- B. Consider natural therapies
- C. Small vulvar hematoma, and not enlarging
 - 1. Application of ice packs
 - 2. Teach good hygiene
 - 3. Observe to confirm absorption rather than size increase
- D. If large and growing, or maternal signs of pain and/or increased blood loss
 - 1. Treat for shock as indicated
 - 2. Consult and transfer as indicated

POSTPARTUM INFECTION

I. DEFINITION

An infection of the reproductive tract associated with birth and usually occurring 24 hours after birth to 10 days postpartum.

II. ETIOLOGY

Bacterial infection

III. PREDISPOSING FACTORS

- A. Cesarean birth
- B. Prolonged rupture of membranes
- C. Prolonged labor
- D. Frequent vaginal exams during labor
- E. Anemia
- F. Postpartum hemorrhage
- G. Malnutrition
- H. Retained placental fragments
- I. Cervical, vaginal, or perineal lacerations
- J. Hematomas
- K. Underlying stress
- L. Pre-existing infection
- M. Inability to void in labor
- N. Contamination during birth

IV. SIGNS & SYMPTOMS

- A. Fever
- B. Abdominal or perineal tenderness and pain
- C. Malaise, pallor, lassitude
- D. Tachycardia
- E. Chills
- F. Foul, purulent discharge
- G. Elevated WBCs
- H. Positive genital culture

V. MANAGEMENT

- A. Obtain appropriate laboratory work
 - 1. CBC screen
 - 2. Genital culture
 - 3. Urinalysis
- B. Treat for infection with natural therapies and/or antibiotics
- C. Educate about hygiene, rest, nutrition and hydration
- D. Monitor temperature
- E. Consider natural therapies

- F. Follow up within 24 hours of initiating therapy
- G. Consult with physician as appropriate

UTERINE INVERSION

I. DEFINITION

Condition in which the uterus turns inside out so that the fundus either

- A. Protrudes through the cervical os (incomplete inversion)
- B. Descends to the introitus (complete inversion)
- C. Extends beyond the vulva (prolapsed inversion)

II. ETIOLOGY

- A. Strong cord traction with unseparated placenta
- B. Uterine atony with dilated cervix
- C. External fundal pressure to help expel placenta with poorly contracted uterus
- D. Accreta
- E. Increasing parity

III. SIGNS & SYMPTOMS

- A. Uterus observed at introitus or protruding beyond vulva
- B. Fundus felt protruding through cervical os upon manual examination
- C. Maternal shock
- D. Hemorrhage

IV. MANAGEMENT

- A. Activate EMS and prepare for transfer
- B. Position mother in Trendelenburg position
- C. Reposition uterus by placing entire hand in vagina with inverted fundus in palm of hands and fingertips at junction of inversion. Gently walk fingers up the walls of the uterus as fundus is repositioned. Hold in place for several seconds.
- D. Perform internal bimanual compression to control bleeding
- E. Administer 10 IU Pitocin IM every 5 minutes up to 3 times
- F. Treat for shock
 - 1. Administer oxygen
 - 2. Start IV therapy
- G. If placenta is delivered and repositioning is effective, administer .2 mg Methergine IM
- H. Transfer as appropriate
- I. Educate regarding risk of infection post procedure and strengthening of muscle tone

VENOUS THROMBOSIS

I. DEFINITION

The presence of a blood clot in a vein

II. ETIOLOGY

- A. Injury to a vein
- B. Clotting abnormalities
- C. More common in the presence of varicosities

III. SIGNS AND SYMPTOMS

- A. Leg pain
- B. Fever
- C. Tachycardia
- D. Heat, redness, and tenderness at site of thrombosis
- E. Edema
- F. Positive Homan's sign

IV. SEQUELAE

Clot may dislodge and lead to pulmonary embolism

V. MANAGEMENT

- A. Do not massage affected area
- B. Refer for treatment

NEWBORN CARE

NEWBORN CARE SCHEDULE

I. DEFINITION

Care of the newborn from birth through the neonatal period.

II. MANAGEMENT

A. Immediate newborn care

1. Honor and welcome baby
2. Do immediate newborn assessment
3. Assess infant's need for resuscitation
4. Facilitate bonding and breastfeeding
5. APGAR score at 1 and 5 (10 minutes if indicated)
6. Perform baby vitals as appropriate
7. Perform complete newborn exam (neurological and physical assessment)
8. Administer prophylactic ophthalmic ointment and vitamin K per parents request
9. Educate parents on normal newborn care, behaviors and physiology
10. Educate parents on warning signs of abnormal newborn behavior
11. Recommend newborn physician appointment within the first six weeks or sooner as necessary

B. Neonatal period

1. The neonatal care schedule consists (at the minimal):
 - a. 24-48 hours
 - b. 3-5 days
 - c. 2-3 weeks
 - d. 4-6 weeks
2. The first visit shall take place within 24-48 hours of birth in the client's home, at the birth center, or where the client is presently housed. The following should be evaluated
 - a. Cord
 - b. Temperature
 - c. Feeding and elimination
 - d. Skin (color/hydration)
 - e. Auscultation of heart and lungs
 - f. Weight
 - g. Sleep/wake patterns
 - h. General condition/reflexes/fontanel
 - i. Educate on well baby care, developmental stages, immunizations and circumcision
 - j. First newborn screening test (between 24 and 72 hours), or waiver signed
 - k. Recommend newborn hearing screening

3. If all is normal, the next follow-up visit should take place at 3-5 days. The items above should again be evaluated, with the possible addition of the newborn screening for the infant, if only doing one on the five day, and waiver signed.
4. It is also appropriate to make a visit at 2-3 weeks postpartum. If the second newborn screening test is desired, do at this time. Items above should again be evaluated.
5. The final visit is from 4-6 weeks postpartum. The final visit should consist of the following
 - a. Weight
 - b. Vital signs
 - c. Skin care
 - d. Feeding/elimination
 - e. Appropriate development
 - f. Sleep/wake patterns
 - g. Plans for well-baby care and immunization

NEONATAL RESUSCITATION

I. DEFINITION

Necessary therapy given to a newborn in cardiac or respiratory failure, or shock. Resuscitation aims to provide adequate ventilation, oxygenation, and cardiac output to ensure that an appropriate amount of oxygen is delivered to the brain, heart, and other vital organs.

II. ETIOLOGY

- A. Asphyxia (either in utero or after delivery)
- B. Prematurity
- C. Drugs administered to or taken by the mother
- D. Congenital neuromuscular disease
- E. Congenital malformation
- F. Intrapartum hypoxemia
- G. Unknown factors

III. SIGNS & SYMPTOMS

- A. Poor or absent respiratory effort
- B. Heart rate below 100
- C. Cyanosis

IV. MANAGEMENT

Refer to the neonatal resuscitation guidelines in accordance with American Academy of Pediatrics and American Heart Association Neonatal Resuscitation Guidelines.

NEONATAL JAUNDICE

I. DEFINITION

Is a symptom characterized by hyperbilirubinemia with deposition of bilirubin in the skin and sclera and a resultant yellow appearance.

- A. Physiological: A benign condition
- B. Pathological: A symptom of one of many different diseases or disorders

II. ETIOLOGY

- A. Physiological: Most common form of jaundice. Caused by the normal process of production and excretion of red blood cells in the newborn. Risk factors include maternal hemorrhage, operative procedures, preterm birth, acidosis resulting from hypoxia, maternal ingestion of certain drugs (e.g. aspirin, vitamin K, Pitocin, morphine, sedatives, antihypertensives).
- B. Pathological
 - 1. Infection
 - 2. Liver disease or dysfunction
 - 3. Metabolic disease
 - 4. ABO incompatibility or other hemolytic diseases
 - 5. Hematoma
 - 6. Cerebral hemorrhage

III. SIGNS & SYMPTOMS

- A. Yellowing of the skin and sclera starting at the head and neck, extending downward depending on severity
- B. Physiological
 - 1. First apparent 24-36 hours after birth
 - 2. Peaks at day 3-4
 - 3. Resolves by day 10-14
 - 4. No alterations in vital signs, feeding or consciousness
 - 5. Bilirubin levels do not exceed levels normal for physiological jaundice (icterometer levels are less than 16 on day 3 or 4, or jaundice does not extend below hip level and does not extend into arms and legs, or blood bilirubin is below 16 mg/dL).
- C. Pathological
 - 1. Lethargy
 - 2. Poor feeding
 - 3. Projectile vomiting
 - 4. High-pitched cry
 - 5. Extremely dark urine
 - 6. Light stools
 - 7. Fever
 - 8. Jaundice visible within first 24 hours of life

9. Total bilirubin serum content increases daily by more than 5 mg/dL
10. Total bilirubin serum concentration is over 15 mg/dL
11. Jaundice becomes more extensive or persists more than 10-14 days

IV. MANAGEMENT

- A. Review maternal history for risk factors for pathological jaundice
- B. Review neonatal history for time of onset of jaundice and signs noted above
- C. Assess baby for following issues:
 1. Degree of yellowing of skin and sclera
 2. Abdominal distension
 3. Skin turgor
 4. Fontanel
 5. Irritability
 6. Weight loss
 7. Stool and urine color and quantity
 8. Cry
 9. Feeding
 10. Lethargy
 11. Vital signs
 12. Signs and symptoms of infection
 13. Signs and symptoms of trauma
- D. Educate parents about jaundice signs and risks
- E. Encourage mother to breastfeed frequently
- F. Advise placing infant in indirect sunlight 2-4 times per day for 10-15 minutes
- G. Consider natural therapies
- H. Consultation or referral is indicated if abnormal findings occur, if jaundice occurs in first 24 hours of life, or if jaundice increases or persists

PROPHYLACTIC EYE TREATMENT OF THE NEWBORN

I. DEFINITION

The application of medication into the newborn's eyes required by law to prevent ophthalmia neonatorum or ophthalmic chlamydial infections.

II. INDICATIONS

Neisseria Gonorrhoeae bacteria, Chlamydia Trachomatis, or any other bacterial infection present at time of birth. New Mexico law mandates that all newborns be treated prophylactically within the first hours of life.

III. MANAGEMENT

- A. Educate parents on legal and medical sequelae
- B. Have parents read and sign informed consent
- C. Wash hands immediately prior to application
- D. Administer ophthalmic ointment (Erythromycin) in a narrow ribbon 1/4 inch long in lower conjunctival surface of each eye starting at the inner canthus. This can be delayed two hours to allow for bonding.
- E. Observe for hypersensitivity (inability to focus, edema, inflammation). Side effects usually disappear in 24-48 hours.
- F. Consider breastmilk as alternative for those who waive Erythromycin application.

VITAMIN K ADMINISTRATION

I. DEFINITION

Routine prophylactic administration of Vitamin K is recommended for all newborns to prevent hemorrhagic disease due to Vitamin K deficiency.

Newborns particularly at risk for hemorrhagic disease:

- A. Traumatic labor or birth
- B. Prematurity
- C. Any condition which may compromise liver function in baby
- D. Antenatal exposure to antagonistic medications taken by the mother, including anti-convulsants, anti-tuberculins, anti-coagulants, and barbiturates.
- E. Difficult or interventive birth with trauma

II. SEQUELAE

- A. Vitamin K is a fat soluble vitamin that is necessary to turn certain proteins into active clotting factors.
- B. All babies are born with low levels of vitamin K
- C. Babies use up their levels of Vitamin K quickly following birth.
- D. Colonization of the bacteria that produces Vitamin K in a baby's gut is promoted through breastfeeding, but stores build up gradually over time and may not be sufficient to stop hemorrhage if it should occur.
- E. Usually occurs between the second and fifth day of life, but can occur weeks and months after birth.

III. SIGNS & SYMPTOMS OF HEMMORAGIC DISEASE

- A. Skin Bruising
- B. Petechiae
- C. Bleeding
 - 1. Blood seepage from body openings
 - 2. Internal unseen bleeding
- D. Seizures
- E. Death

IV. MANAGEMENT

- A. Prenatal recommendations:
 - 1. Parents should receive information about the benefits and risks of Vitamin K administration to their newborn. This information should include signs and symptoms of hemorrhagic disease.
 - 2. Education regarding prenatal Vitamin K supplementation for all women
 - 3. Consider natural therapies
 - 4. Counsel women who must take medications known to be antagonistic to Vitamin K. These medications include anti-

coagulants (Warfarin, Coumadin, etc.), anti-convulsants (Dilantin, etc.), anti-tuberculins (TB medications), and barbiturates (Phenobarbital). For these women, it is recommended they receive 10 mg of oral Vitamin K supplement daily from 36 weeks gestation to birth.

B. Postpartum

1. Give information and informed consent to parents; have them sign waiver.
2. The American Association of Pediatrics (AAP) recommends all newborns receive a one-time intramuscular (IM) injection of the neonatal dosage (from 0.5 - 1.0 mg) of Vitamin K1 Phytonadione after birth.
3. At the present time, there is no approved form of oral Vitamin K in the United States. The AAP has issued a further recommendation that, when an appropriate oral form of Vitamin K1 is developed, it should be given as follows: 2 mg at birth with subsequent doses at 1-2 weeks and 4 weeks in exclusively breastfed infants. Oral dosage of Vitamin K must be repeated to be effective.
4. Recommend administering Vitamin K for all babies having circumcision

BIBLIOGRAPHY

AAT Graph - Elsevier Science Inc. from Paine, L. L., Payton, R. G., and Johnson, T. R. B. Auscultated fetal heart rate accelerations: Part i. Accuracy and Documentation. J. Nurse-Midwifery 31(2):70 Copyright 1986 ACNM

American Academy of Pediatrics; American Heart Association Textbook of Neonatal Resuscitation, 2006.

Barger, Mary K. et al. Protocols for Gynecologic and Obstetric Health Care. W. B. Saunders Co., 1988.

Benson, R.C. Handbook of Obstetrics and Gynecology. Lange Medical Publications, 1980.

Burrows and Duffy. Medical Complications During Pregnancy, 5th edition; WB Saunders Company, 1999.

CDC, National Center for Infectious Diseases, Group B Strep Infections, 2005.

Cunningham, MacDonald, Gart, Levemo, Gilstrap, Hawkins, Clark. Williams Obstetrics 20th edition; Appleton and Large, 1997.

Davis, E. A Guide to Midwifery: Heart and Hands, 4th edition; John Muir Publications, 2004.

Fraser and Cooper, Myles' Textbook for Midwives. Churchill Livingstone, 2003.

Frye, Anne. Holistic Midwifery: A Comprehensive Textbook for Midwives in Homebirth Practice, vol 1; Labrys PR, 2004.

Frye, Anne. Holistic Midwifery: A Comprehensive Textbook for Midwives in Homebirth Practice, vol 2; Labrys PR, 2006.

Gabbe, Niebyl, Simpson. Obstetrics: Normal and Problem Pregnancies, 4th edition; Churchill Livingstone, 2007.

Gaskin, Ina May. Ina May's Guide to Childbirth; Bantam, 2003.

Gaskin, Ina May. Spiritual Midwifery. 4th edition; The Book Publishing Company, 2002.

Institute of Medicine. Nutrition During Pregnancy and Lactation: An Implementation Guide. National Academy Press, 1990.

MMWR January 23, 1998 Vol.47/No.RR-1, "1998 Guidelines for Treatment of Sexually Transmitted Diseases", Centers for Disease Control, US Department of Health and Human Services

Martin, Dibe. UNMH OB/GYN Post-Graduate Conference, 1996. Track G: Obstetrics and Pharmacology, "Drugs and Pregnancy."

New Mexico Genetic Screening Program Informational Statement & Waiver
DOH/PHD 014E revised 1/96

Olds, Sally, et al. Maternal Newborn Nursing, 3rd edition. Addison-Wesley Publishing Co., 1988.

Oxorn, Harry. Human Labor And Birth, 5th edition. Appleton-Century-Crofts, 1986.

State of New Mexico, Department of Health, Maternal Health Program "Public Health Division Pregnancy Testing and Prenatal Protocols" 3/2/98

Tabor, Ben-Zion. Manual of Gynecological and Obstetric Emergencies. Harper and Row, 1982.

Turner, T. L. et al.. Craig's Care of the Newly Born Infant, 8th edition. Churchill Livingstone, 1988.

Varney, Helen. Varney's Midwifery, 4th edition. Jones and Bartlett Publishers, 2004.