Miscarriage

March of Dimes Resource Center

A miscarriage can be an intensely sad and frightening experience. A pregnancy that had seemed normal suddenly ends, leaving expectant parents devastated. About 15 to 20 percent of recognized pregnancies end this way.

Miscarriage is pregnancy loss that occurs prior to 20 weeks, before the fetus is able to survive outside the womb. Most occur in the first trimester or 12 weeks of pregnancy. Up to 50 percent of all pregnancies may end in miscarriage, because many losses occur before a woman realizes she is pregnant.

Why do miscarriages occur?

The causes of miscarriage are not entirely understood. When a woman has a first-trimester miscarriage, her doctor often cannot determine the cause. However, most occur when a pregnancy is not developing normally. Usually, there is nothing a woman or her doctor can do to prevent it.

Among factors known to cause first-trimester miscarriages, the most common is a chromosomal abnormality in the fetus. Chromosomes are the tiny thread-like structures in each cell that carry our genes, which dictate all traits from eye color to how our internal organs work. Each person has 23 pairs of chromosomes, or 46 in all, with one chromosome per pair coming from the mother and one from the father. Up to 70 percent of first-trimester miscarriages are caused by chromosomal abnormalities in the fetus.

Most chromosomal abnormalities result from a faulty egg or sperm cell. Before pregnancy, immature egg and sperm cells divide to form mature cells with 23 chromosomes. Sometimes, the cell splits unevenly, resulting in egg or sperm cells with too many or too few chromosomes. If a cell has the wrong number of chromosomes, the embryo has a chromosomal abnormality and usually is miscarried. Chromosomal abnormalities become more common with women over age 35 who are at higher risk of miscarriage than younger women.

Chromosomal abnormalities also can result in a "blighted ovum" — a pregnancy sac that contains no fetus, either because the embryo did not form or because it stopped developing very early. In early pregnancy, the woman may notice that her pregnancy symptoms have stopped and she may develop dark-brown vaginal bleeding. An ultrasound will show an empty pregnancy sac. A "blighted ovum" will eventually result in miscarriage, although often not for weeks. Because waiting for a miscarriage is traumatic, doctors generally recommend emptying the uterus with a procedure called a D&C (dilation and curettage). This procedure also is recommended after some first-trimester miscarriages because it can help prevent heavy bleeding and infection.

In most cases, when a woman has a first miscarriage in the first trimester, her doctor will tell her that the cause was most likely a chromosomal abnormality. However, other factors also can contribute, including infections, and hormonal and maternal health problems.

A recent study found that women with bacterial vaginosis infection were 5 times more likely to have a miscarriage than uninfected women.

A mother's lifestyle also can increase her risk of a first-trimester miscarriage. Studies suggest that women who drink alcohol, or smoke cigarettes, or use illicit drugs increase their risk.

Second-trimester miscarriage often is caused by problems with the uterus (e.g., abnormally shaped uterus) or by a weakened cervix that dilates prematurely. As with first-trimester losses, maternal infections and chromosomal abnormalities can cause later miscarriages. Chromosomal abnormalities may cause up to 20 percent of second-trimester miscarriages. Certain immune system problems also can cause these losses.

Factors that usually do not increase the risk of miscarriage include having sex, working outside the home (unless around harmful chemicals), and exercise.

What tests are done after a loss?

Doctors usually do not perform any tests following a first miscarriage in the first trimester. However, a woman who is having a first-trimester miscarriage should try to save the tissue from the miscarriage in case the tissue can be tested to learn whether a chromosomal abnormality caused the loss. In a second trimester miscarriage, doctors may recommend tests, including blood tests, to determine the cause.

What causes repeat miscarriages?

While miscarriage usually is a one-time occurrence, up to one in twenty couples experience two miscarriages in a row, and one in one hundred have three or more. In some cases, these couples have an underlying problem that is causing the losses. Couples who have experienced two or more miscarriages should have a complete medical evaluation to learn the cause of the miscarriages, and how they can prevent another one. Testing can reveal the cause of repeat miscarriages in at least 75 percent of couples.

In recent years, doctors have learned a great deal about why some couples have repeated miscarriages. Among the more common known causes are:

Chromosomal problems. While past studies have suggested that chromosomal problems usually occur only once, more recent studies suggest that these problems may cause up to 60 percent of repeated losses. Most parents who suffer repeated miscarriages have normal chromosomes; however, there is a 5 percent chance that either partner carries a chromosomal rearrangement that does not affect his or her health, but can cause chromosomal abnormalities in the fetus that can result in miscarriage. A blood test (karyotype) is recommended to check for these chromosomal rearrangements.

Uterine abnormalities. Abnormalities of the uterus cause 10 to 15 percent of repeated miscarriages. These losses can occur in the first or second trimester. Some women are born with a uterus that is too small or abnormally shaped, or partly or completely divided. Others develop noncancerous tumors (fibroids) or have scars in the uterus from past surgery. Uterine abnormalities can limit space for the growing fetus or interfere with the blood supply to the uterus. They are diagnosed with one or more of several methods of viewing the uterus, including ultrasound, X-ray, or hysteroscopy (viewing the uterus through a special scope inserted through the cervix). Many can be surgically corrected, sometimes during the diagnostic procedure, with improved outlook for

future pregnancies. A weakened (incompetent) cervix (opening of the uterus) can lead to miscarriage, usually between 16 and 18 weeks of pregnancy. Repeated loss due to weakened cervix often can be prevented by placing stitches around the cervix early in the next pregnancy, (a procedure called cerclage).

Endocrine causes. When endocrine glands secrete too much or too little of certain hormones, risk of miscarriage may increase. Low levels of the hormone progesterone, which is crucial to support an early pregnancy, are believed to cause between 5 and 40 percent of losses that occur prior to 10 weeks of pregnancy. Women who have low levels of progesterone in repeated menstrual cycles have what is called a luteal phase defect. This is diagnosed by endometrial biopsy (suctioning a small piece of uterine lining to check progesterone levels) or with repeated blood tests of progesterone levels. Treatment with the drug clomiphene citrate, natural progesterone suppositories or injections of human chorionic gonadotropin may help prevent another miscarriage; however, studies have not yet proven these treatments effective. Occasionally, poorly controlled diabetes or thyroid abnormalities may contribute to repeat miscarriages.

Immune system problems. While everyone produces proteins called antibodies to fight off infections, some people produce antibodies (called autoantibodies) that can attack their own tissues, causing a variety of health problems. Particular types of autoantibodies (such as anticardiolipin) cause blood clots that can clog blood vessels in the placenta. Studies suggest that this and related antibodies (called antiphospholipid antibodies) cause between 5 and 10 percent of repeat miscarriages. Special blood tests can measure antibody levels. Treatment with low doses of aspirin and the blood-thinning drug heparin result in a healthy baby in 70 to 80 percent of affected women. Researchers also are studying whether other immune system problems may cause a woman's body to reject her fetus. A genetic abnormality called the Factor V Leiden mutation, which affects blood clotting, also may play a role in repeat losses. Researchers are studying whether treatment with aspirin and heparin also may help prevent these losses.

Infections and other factors. Certain symptomless infections of the genital tract play a role in repeated miscarriages. If an infection is diagnosed, the couple will be treated with antibiotics prior to another pregnancy. Workplace exposure to certain industrial solvents, by the pregnant woman or her partner, sometimes may cause miscarriage. Couples should discuss chemicals in their workplace with their doctor.

One study also suggested that women with low levels of folic acid in their blood also may be at increased risk of repeated early miscarriage. The March of Dimes recommends that all women who can become pregnant take a daily multivitamin that contains 400 micrograms of folic acid starting before and in the first few weeks of pregnancy to prevent certain birth defects of the brain and spinal cord. Taking folic acid also may help prevent early miscarriages.

In about 25 percent of cases, the cause of repeated miscarriages cannot be found. However, couples in this situation should not lose hope: even without treatment, about 60 percent of women with repeated miscarriages eventually have a healthy pregnancy.

How long does it take to recover?

It takes weeks to a month or more for a woman to recover physically, depending upon how long she was pregnant. For example, some pregnancy hormones remain in the blood for one to two months after a miscarriage. Most women experience a menstrual period four to six weeks after a miscarriage.

Often, emotional recovery takes much longer. Both parents may experience intense grief as they mourn their loss. A woman may experience many emotions including numbness, sadness, guilt, difficulties concentrating, depression and anger. She and her partner may handle grief differently, creating tension at a time when they need each other most. They should not hesitate to ask their doctor for a referral to a counselor experienced in dealing with pregnancy loss. Many couples also benefit from support groups.

When can a woman attempt another pregnancy?

A woman should not attempt to become pregnant again until she is physically and emotionally ready and she has completed any tests recommended to determine the cause of the miscarriage. Medically, it appears safe to conceive after a woman has had one normal menstrual period (if she is not undergoing tests or treatments for the cause of her miscarriage). However, it may take longer before a woman feels emotionally ready to attempt pregnancy.

Many women who have had a miscarriage worry that it will happen again. Fortunately, at least 85 percent of women who have had one loss will go on to have a successful pregnancy the next time, as will 75 percent of those who have experienced two or three losses.

Some women should consult a specialist before attempting to conceive. If a woman has had two or more miscarriages (especially if she is over age 35), or if she has an illness (such as diabetes or systemic lupus erythematosus) that can affect her pregnancy, or has had fertility problems, she should see an expert in high-risk pregnancy. Her doctor can refer her to the appropriate specialist in maternal-fetal medicine, genetics or reproductive endocrinology, who can recommend tests, so she can receive the best treatment to increase her chances that the next pregnancy will be a healthy one.

References

Donders, G.G.G., et al. Relationship of bacterial vaginosis and mycoplasmas to the risk of spontaneous abortion. American Journal of Obstetrics and Gynecology, volume 183, number 2, August 2000, pages 431-437.

Hill, Joseph A., Miscarriage risk factors and causes: what we know now. OBG Management, October 1998, pages 58-68.

Lewis, V. The biology of early pregnancy loss, in Woods, J.R., Jr., and Woods, J.L.E. (eds): Loss During Pregnancy or in the Newborn Period, Pitman, NJ, Jannetti Publications, Inc., 1997, pages 37-69.

Nelen, W.L.D.M., et al. Homocysteine and folate levels as risk factors for recurrent early pregnancy loss. Obstetrics & Gynecology, volume 95, number 4, April 2000, pages 519-524.

Scott, J.R. Early pregnancy loss, in Danforth's Obstetrics and Gynecology, Eighth Edition. Philadelphia, Lippincott Williams & Wilkins, 1999, pages 143-153.

QUESTIONS?

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Call: 1-800-367-6630
Or write:
March of Dimes
P.O. Box 1657
Wilkes-Barre, PA 18703

Saving babies, together

THOSE FEW WEEKS

For those few weeks
I had you to myself.
And that seems too short a time
To be changed so profoundly.

In those few weeks
I came to know you....
And to love you.
You came to trust me with your life.
Oh, what a life I had planned for you!
Just those few weeks
When I lost you,
I lost a lifetime of hopes, plans, dreams,
and aspirations...
A slice of my future simply
vanished overnight.

Just those few weeks
It wasn't enough to convince others
How special and important your were,
How odd, a truly unique person has
recently died
And no one is mourning the passing.
Just a mere few weeks
And no "normal" person would
cry all night
Over a tiny, unfinished baby.
Or get depressed and withdraw
day after endless day.
No one would, so why am I?

You were just those few weeks my little one.
You darted in and out of my life too quickly.
But it seems that's all the time you needed
To make my life so much richer
And give me a small glimpse of eternity.

- Susan Erlin

Additional websites you may find helpful:

www.aplacetoremember.com
www.hannah.org/loss.htm
www.sands.org.au
www.obgyn.net/women/loss/loss.htm
www.angels4ever.com
www.babyloss.com
http://griefnet.org
www.climb-support.org

For further Information, please contact the Bereavement Office at:
(716) 568-6653

KALEIDA HEALTH

KALEIDA HEALTH
www.kaleidahealth.org

SUB-053 08/04

GRIEF AFTER A MISCARRIAGE

MILLARD FILLMORE SUBURBAN HOSPITAL
A Kaleida Health Hospital

To the woman who has experienced a miscarriage or ectopic pregnancy,

Women react differently when they experience a miscarriage because there is no "right" way to deal with this event. Some women view a miscarriage as a medical situation or a fact of life, while others feel as if they've lost a baby. Either reaction is valid and normal.

Guilt is relatively common, especially for women, because they may feel responsible for the miscarriage. Many couples mistakenly think that they could have done something to cause their miscarriage, such as having sexual relations or going for a long ride. In actuality, approximately 50 to 60 percent of miscarriages are caused by chromosomal abnormalities. These are the result of things that occurred during the production of eggs and sperm. They cannot be avoided. Parents have NO control over production of eggs and sperm. There is nothing that is done that causes these accidents to occur and nothing that can be done to prevent them.

Common symptoms of grief after a miscarriage are:

- Sadness
- Tearfulness
- A heavy feeling
- Trouble eating or sleeping
- A profound sense of worthlessness, failure and deficiency
- Fear about not being able to have a healthy baby or get pregnant again

Your grief relates to the meanings, hopes, values, needs, feelings, and expectations that have been placed on the advent of your long-awaited parenthood. It is important to understand that the mother and father may experience grieving differently because their level of involvement with the baby was different. Involvement and bonding with the unborn child increase as time passes, visible body changes occur and fetus movements are felt. Mothers do tend to form a bond with the unborn child more quickly because they carry the baby and feel the changes the pregnancy brings to their bodies. However, many fathers do become involved in the image of their child from early in the pregnancy. Patience, kindness, listening to each other and not expecting the other to feel as you do can help the healing process for both of you.

Some women often feel a lack of desired support from friends, family members and co-workers after miscarriage because there may not have been visible signs of pregnancy. That makes the baby less real to others than it was to you, and their lack of support may be painful. While there is no magical formula for the grieving process, there are ways to help you face the pain and stay healthy. Talk or write a letter to the baby you lost, keep a journal, and don't be afraid to cry. Name the baby if you think it's important, create a living memory by planting a tree or bush, buy an item like a Precious Moment figurine, or purchase a brick in the Circle of Love Healing Garden located at the entrance of Millard Fillmore Suburban Hospital.

Don't be afraid to seek help from someone who will listen and not try to "fix" your feelings if you need it. Kaleida Health's Millard Fillmore Suburban Hospital offers monthly support groups for you, and others like you, who may be experiencing difficulty coping with their losses. Caring Arms Support Group can be attended by anyone; there is no fee. Call **568-6653** to participate whenever you feel ready to do so.

Bereavement books that focus on miscarriage, newborn loss and children's grief are available to you through our Kaleida Health Libraries. There is a large selection for adult men and women, as well as children, to borrow. Visit the Millard Fillmore Suburban Hospital Library from 9 a.m. to 4 p.m. Monday through Friday, or call **568-6540**. Our professional medical librarians can also perform computer searches to assist your research efforts upon request.

We hope you are soon feeling better.

To the family and friends of a woman who has experienced a miscarriage or ectopic pregnancy,

A miscarriage can be a traumatic and grief filled event, or it may be perceived as "nature taking its course." In either case, how one copes with a miscarriage is an intensely personal experience, which can make it difficult for family and friends to know how to respond. Reactions may vary greatly from person to person.

Suggestions:

- ***Follow the leader.*** Go at the pace your family member or friend who has had the miscarriage sets. If she would like to talk, LISTEN. If she doesn't want to discuss the miscarriage, do not pressure her to. Give no advice to try to "fix" her grief.
- ***Remember the father.*** Friends and family often demonstrate concern only for the mother, but many fathers experience intense grief and sadness, too. He may be initially too concerned about his wife to think of his own feelings, so his grief may be delayed. Be ready to LISTEN and acknowledge his feelings when he is ready to share them.
- ***Remember siblings.*** Siblings are often confused about what has happened; be honest and truthful when explaining the miscarriage.
- ***Understand that certain dates may be difficult.*** Holidays, due dates and anniversaries may trigger intense grief feelings, including but not limited to sadness, jealousy and anger.
- ***Be aware that pregnant women may trigger a reaction.*** Pregnant women, discussion of pregnancy, baby showers and infants may be very difficult for a couple that have experienced a miscarriage. Be sensitive to this possibility.
- ***Be available.*** Many women often feel a variety of emotions at different times. Their moods change frequently. LISTEN. Try to be patient and acknowledge her feelings.
- ***Don't change the subject.*** If a person chooses to talk about their experience or grief, do not cut them off. LISTEN and acknowledge THEIR feelings.
- ***Don't tell someone how or when to react.*** Avoid telling someone who has had a miscarriage when to be angry and at whom. Do not make statements such as:
  - "Don't be mad at your God."
  - "You should be thankful you have other children."
  - "You should be over it by now."
  - "You are young you can just try again."
  - "Everything happens for the best."

Rights of parents who experience a miscarriage or ectopic pregnancy

- To be cared for by sympathetic staff who will offer choices and respect your feelings, thoughts and individual choices.
- To be with each other throughout the hospitalization, as much as possible.
- To request genetic studies (this may reveal the cause of the miscarriage and sex of the baby).
- To have information presented in simple terms so you can understand approaching surgical procedures, pathology reports, etc.
- To be provided with information or support resources that assist in the healing process, e.g. support groups, counseling, and reading material.
- To observe cultural and religious practices.
- To be given an opportunity to see the baby if expulsion occurs prior to surgery.
- To understand options regarding choices about care of your baby's remains:
  1. If you have had a D & C for a miscarriage or surgery for an ectopic pregnancy, the hospital will take responsibility for the disposition of the remains. (This is often the choice made by parents).
  2. You may have your baby buried or cremated by a funeral home of your choice.
  3. If your baby is less than 20 weeks gestation, or 300 grams but born alive, New York State requires that a funeral home be contacted and a burial or cremation be planned for your baby.