PREGNANCY

Repeated Miscarriage

Miscarriage, often called spontaneous abortion by doctors, is the loss of a pregnancy before 20 weeks. It occurs in about 15–20% of all pregnancies. Most happen in the first 3 months. Many miscarriages take place before a woman even knows that she is pregnant.

Three or more miscarriages in a row may be called ***repeated miscarriage****. Special tests are needed to try to find the cause.*

This pamphlet will explain:

- *What causes repeated miscarriage*
- *What tests and procedures might be needed*
- *What special care might be needed during pregnancy*

Even if you have had repeated miscarriages, you still have a good chance to have a successful pregnancy.

ACOG PATIENT EDUCATION

Causes

After several miscarriages, you may wonder whether you will ever be able to have a healthy baby. Be hopeful. The chances of having a successful pregnancy are good even after more than one miscarriage.

Often, the reason for repeated miscarriage is not known. Sometimes, though, it has a certain cause. Known causes include:

- Chromosomal problems
- Illness in the mother
- Hormone imbalance
- Disorders of the immune system
- Abnormalities of the uterus
- Environmental and lifestyle factors

If you have had more than one miscarriage, each may have had a different cause.

Chromosomal Problems

More than half of miscarriages in the first 13 weeks of pregnancy are caused by problems with the ***chromosomes*** of the fetus. Chromosomes are tiny structures inside the cells of the body. Each carries many genes. Genes are the basic units of heredity. They determine all of a person's physical makeup, such as sex, hair and eye color, and blood type.

Problems with the number or structure of chromosomes, or with the genes they carry, can lead to miscarriage. Often this is nature's way of ending a pregnancy in which the fetus was not growing as it should and would not have been able to live.

Most chromosomal problems occur by chance. They have nothing to do with the mother's or father's health. They are not likely to occur again in a later pregnancy.

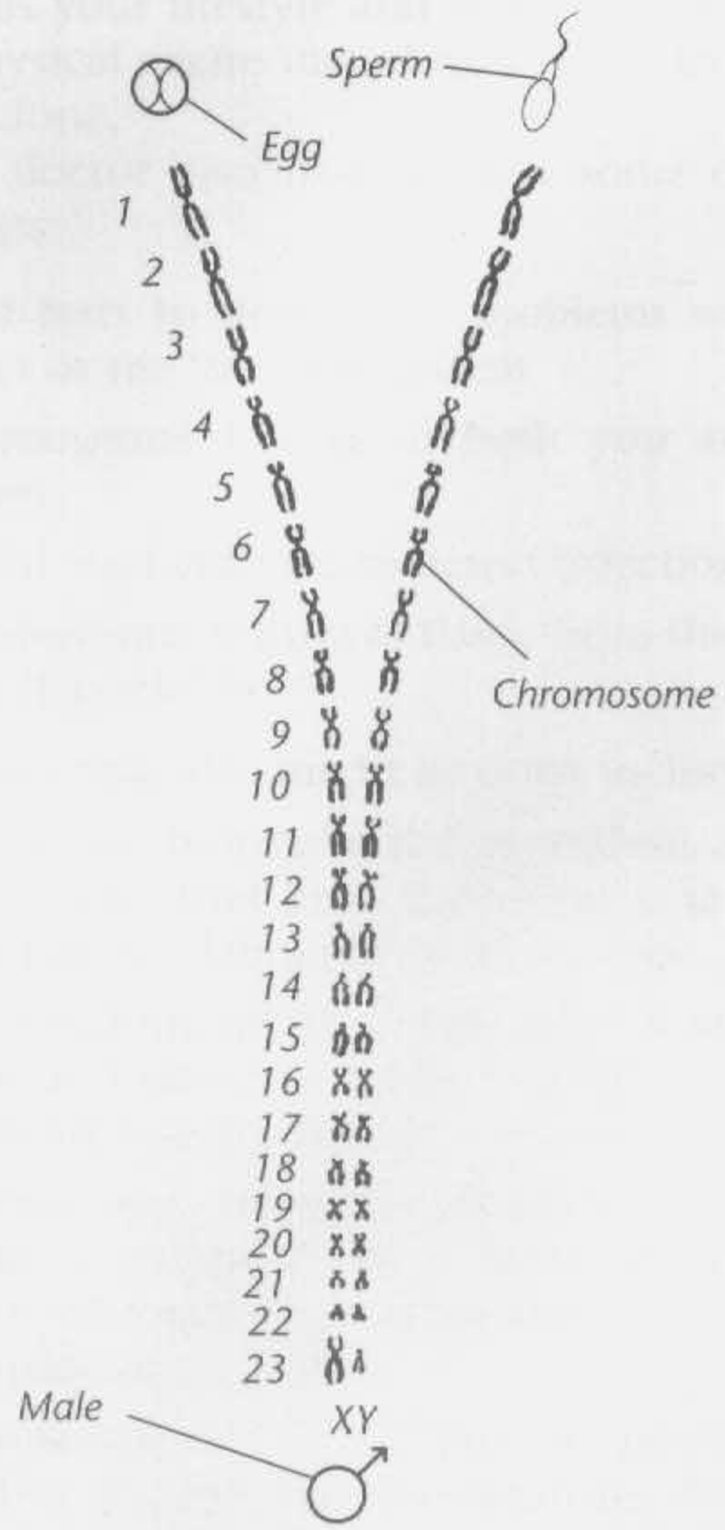
In a small number of cases, though, problems with the parents' chromosomes can cause repeated miscarriage. There are tests to find out whether chromosomal problems are a factor in repeated miscarriage.

Illnesses in the Mother

Certain illnesses in the mother have been linked to a greater risk of repeated miscarriage. These include:

- Systemic lupus erythematosus and other autoimmune disorders
- Congenital heart disease
- Severe kidney disease, especially when linked with high blood pressure (hypertension)
- Diabetes that is not controlled
- Thyroid disease
- Intrauterine infection

Sometimes treatment of the illness can improve the chances for a successful pregnancy. This is even more true if the illness is under control before a woman becomes pregnant. Other illnesses may need care or close watching during pregnancy.



The fetus inherits 23 chromosomes each from its mother and father to make 23 pairs. The 23rd pair determines the sex of the fetus: XX is female and XY is male.

Hormone Imbalance

Progesterone is a hormone that prepares the lining of the uterus during the second half of the menstrual cycle to nourish a fertilized egg.

If the egg is not fertilized, it is shed with the uterine lining during the menstrual period. If the egg is fertilized, hormones prepare the uterus for pregnancy.

Early in pregnancy, enough progesterone must be made to maintain the pregnancy. If not, miscarriage will occur. If tests show that a woman's body is not making enough progesterone, her doctor may prescribe supplements to correct the problem.

Disorders of the Immune System

The immune system is designed to recognize and attack foreign substances within the body. Antibodies are formed to help the body fight off disease and heal itself in case of infection. Normally, the mother's body protects the "foreign" fetus from attack by her own antibodies. It is thought that this protection may be absent in the blood of some women who have had repeated miscarriage.

Other immune system problems are caused by differences between the mother and the fetus and even between the mother and the father. For instance, the mother's immune system may produce antibodies to the cells of her body. This can cause pregnancy loss. Tests can be done that may help find problems with the immune system.

Abnormalities of the Uterus

Several abnormalities of the uterus are linked to repeated miscarriage:

- Congenital abnormalities. These are defects present from birth. For instance, a woman may have a uterus that is divided into two sections by a wall of tissue (septate uterus).
- Uterine fibroids (leiomyomata). Uterine fibroids are benign growths (not cancer) made up of uterine muscle tissue.
- Incompetent cervix. An incompetent cervix is one that begins to widen and open too early, in the middle of pregnancy, without any sign of pain or labor.

Most of these can be treated with surgery.

Environmental and Lifestyle Factors

The risk of miscarriage may be increased in pregnant women who:

- Smoke
- Drink alcohol
- Use illegal drugs
- Are exposed to high levels of radiation or toxic agents

Diagnosis

Because repeated miscarriage has many possible causes, your doctor will need a great deal of information to diagnose the problem. You will be asked about your medical history and past pregnancies, as well as your lifestyle and work setting. A complete physical exam, including a pelvic exam, also may be done.

Your doctor also may suggest some or all of these tests:

- Blood tests to detect any problems with hormones or the immune system
- Chromosomal testing of both you and your partner
- Genital tract cultures to detect infection
- Chromosomal testing of tissue from the miscarriage, if available

Procedures that also might be done include:

- Endometrial biopsy. In this procedure, a sample of the tissue that lines the uterus is taken and looked at in a lab under a microscope.
- Hysterosalpingography. This is an X-ray of the uterus and fallopian tubes. It is taken after the organs are injected with a small amount of fluid.
- Hysteroscopy. In this procedure, the doctor inserts a hysteroscope—a thin, telescope-like device—through the vagina and cervix to view the inside of the uterus.
- Laparoscopy. This is a surgical procedure in which a slender, light-transmitting device, the laparoscope, is used to view the pelvic organs.
- Ultrasound. In this procedure, sound waves are used to view the internal organs.

Special Care for Future Pregnancies

Sometimes the problem that caused the miscarriages can be treated. Surgery may help some problems of the uterus and cervix. Treatment with antibiotics can cure infections. In other cases, hormone treatment may help.

If chromosomal problems are found in the parents, your doctor may advise genetic counseling. A genetic counselor can help you and your partner learn what risks a genetic problem might pose for future pregnancies. The fetus can be tested for some problems in future pregnancies by ***amniocentesis*** or ***chorionic villus sampling***.

Coping with Repeated Miscarriage

The loss of a pregnancy—no matter how early or how late—can result in feelings of grief. You may be troubled and even overwhelmed by grief and discouragement. For many women, the emotional healing takes longer than the physical healing that follows a miscarriage.

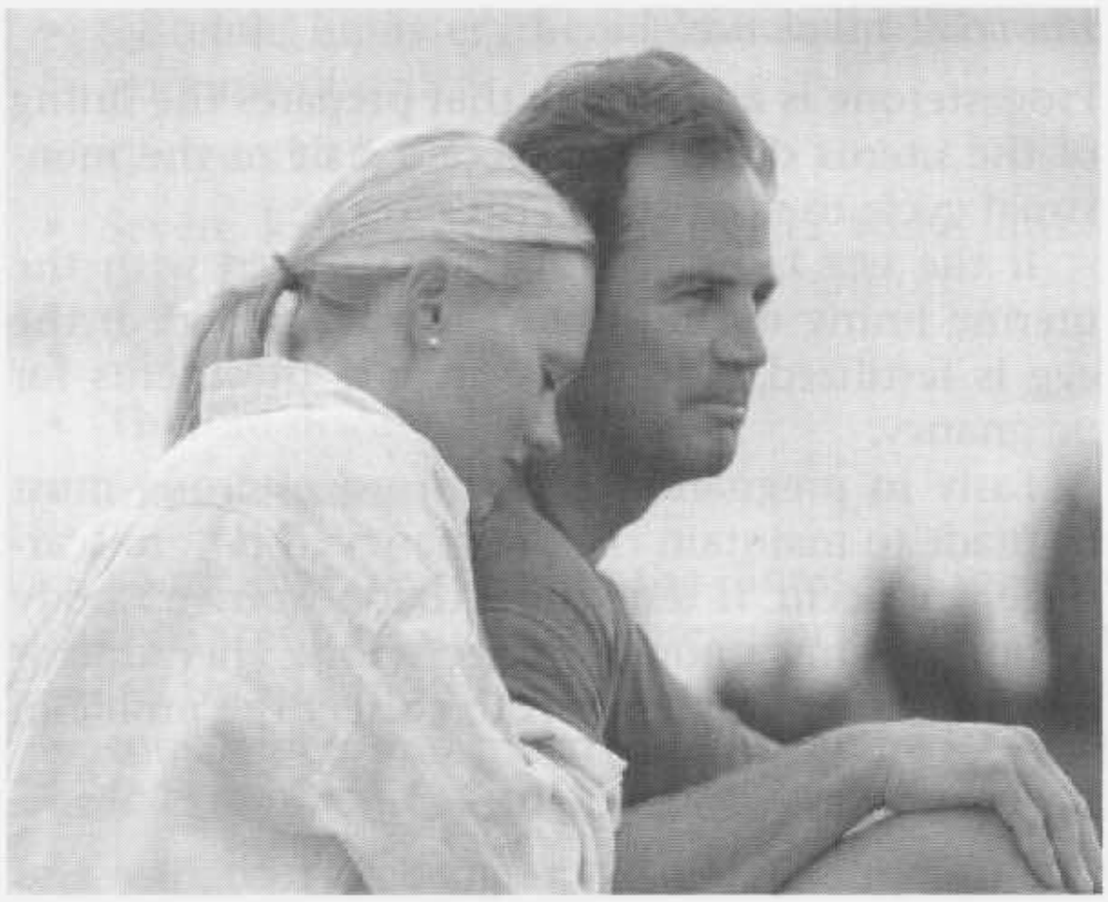
What You Can Do

If you have had repeated miscarriage, future pregnancies should be planned, diagnosed early, and watched. You can improve your chances of having a successful pregnancy in the future by doing certain things:

____ Have a complete medical workup before you try to get pregnant again. It may be that the cause of the miscarriages can be found and treated by your doctor.

____ If you think that you might be pregnant, see your doctor right away. The sooner you seek prenatal care, the sooner you can receive any special care that you may need.

____ Follow your doctor's instructions. He or she will tell you what you need to do to keep yourself and your fetus as healthy as you can.



Grief can cause you to blame yourself although you did nothing wrong. You might find yourself thinking about the early days of your pregnancy, searching for a clue that would explain the loss. You also may find yourself angry at your partner or other loved ones.

Other signs of emotional stress might include:

- Headaches
- Loss of appetite
- Not being able to sleep
- Feeling tired
- Having trouble concentrating

Your feelings of grief may differ from those of your partner. You are the one who felt the physical changes of pregnancy. Your partner also may grieve, but he may not express his feelings the same way you do. He may feel that he has to be strong for both of you and may not share his hurt and disappointment. This may create tensions between the two of you just when you need each other the most.

Emotional pain is as real as physical pain, even though the injury cannot be seen or touched. If you feel sad, allow yourself to grieve. Grieving will help you accept the loss and get on with your life.

Above all, don't blame yourself for the miscarriages. Self-blame is self-punishment, and you do not deserve punishment. You need and deserve love, support, and reassurance.

Reach out to those closest to you and ask for their comfort and support. Talk to your doctor. There may be support groups in your area that are eager to help. Counseling can help both you and your partner if you think that you can't deal with your feelings alone.

Finally . . .

Even if you have had repeated miscarriages, you still have a good chance to have a successful pregnancy. This is true even if the causes of the past pregnancy losses cannot be found. Future pregnancies will need prompt and early care. Your doctor will check your pregnancy closely and provide any special care you may need as your fetus grows.

Glossary

Amniocentesis: A procedure in which a small amount of amniotic fluid is taken from the sac surrounding the fetus and tested.

Chorionic Villus Sampling (CVS): A procedure in which a small sample of cells is taken from the placenta and tested.

Chromosomes: Structures that are located inside each cell in the body and contain the genes that determine a person's physical makeup.

Repeated Miscarriage: Consecutive loss of three or more pregnancies before 20 weeks of gestation. Also called habitual abortion.

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