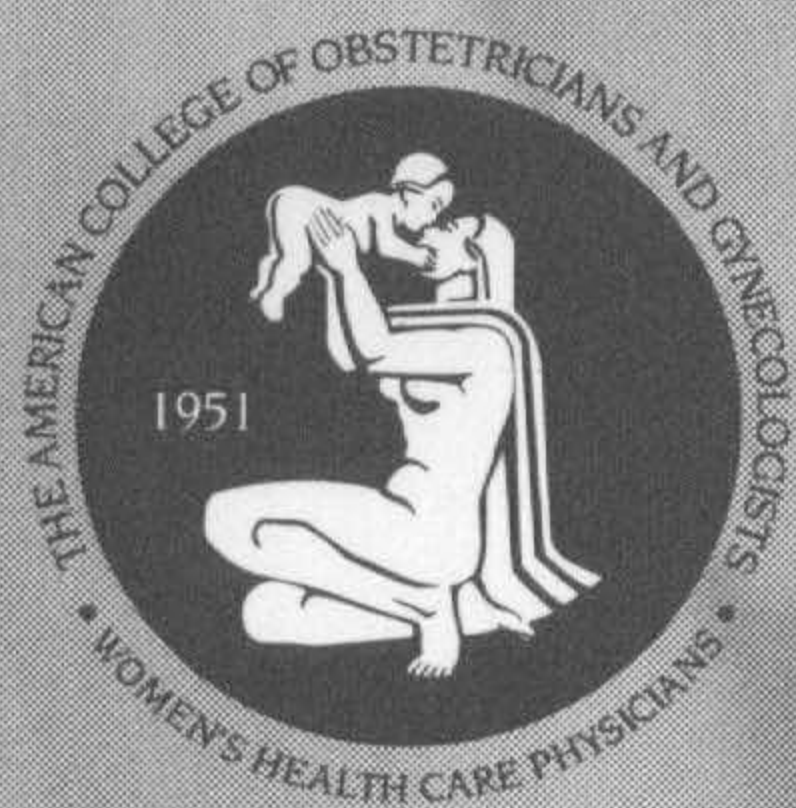


Early Pregnancy Loss:

Miscarriage, Ectopic Pregnancy, and Molar Pregnancy



The loss of a pregnancy before 20 weeks is called early pregnancy loss. Often, the loss is a *miscarriage* (often called spontaneous abortion by doctors). There may be an *ectopic pregnancy*, which occurs outside the uterus. This is less common. A rare form of pregnancy loss is *molar pregnancy*.

The loss of a pregnancy—no matter how early—often involves more than the loss of a fetus. For many women, miscarriage also results in feelings of loss and grief. This pamphlet discusses some of the major causes and symptoms of early pregnancy loss. It also tells you about the signs that may alert you to a possible pregnancy loss and what to expect after the loss.

Miscarriage

Miscarriages occur in about 15–20% of all pregnancies. Most occur in the first 13 weeks, or first trimester. Some miscarriages take place before a woman misses a menstrual period or is even aware that she is pregnant.

The process of fertilization—in which the male sperm and the female egg join—is complex. Miscarriage can be caused by any one of a number of things before, during, or after this process. 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 survive.

The cause of miscarriage often is not known. Most factors that cause a miscarriage are genetic. Sometimes a miscarriage is caused by the mother's health problems.



Most early pregnancy losses cannot be prevented.

Genetic Factors

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 center of the body's cells. Each chromosome carries many genes. Genes decide all of a person's physical traits, such as sex, hair and eye color, and blood type.

Miscarriages can result from an abnormal number or structure of chromosomes. The genes they carry may be abnormal, also. Most chromosomal abnormalities are not inherited (passed on from the parents). They happen by chance and are not likely to occur again in a later pregnancy. In most cases, there is nothing wrong with the mother's or father's health. Some genetic problems, though, are passed on from the mother or the father. These problems may relate to the age of the parents.

Factors of the Mother's Health

Problems with a woman's uterus or cervix (opening of the uterus) can lead to miscarriage. These problems most often occur in the second trimester (14–26 weeks) of pregnancy. Problems include an abnormally shaped uterus or an incompetent cervix. An incompetent cervix begins to widen and open too early, in the middle part of pregnancy, without any pain or other signs of labor.

If the mother has a chronic disease, such as diabetes that is not controlled, she may have a higher risk for miscarriage. Infections of the genital tract often cause no symptoms but may affect the uterus and fetus and, as a result, end the pregnancy. Problems with the mother's hormones also can cause very early miscarriage.

Lifestyle Factors

Pregnant women who smoke are more likely to have vaginal bleeding during pregnancy. Their risk of miscarriage is higher than that of women who don't smoke. Heavy alcohol use also increases the risk of miscarriage. This is especially true in early pregnancy, when the major organs of the fetus are being formed. Using illegal drugs, especially cocaine, also increases the risk.

What Doesn't Cause Miscarriage

Most aspects of daily life do not increase the risk of miscarriage. For instance, there is no proof that work-

ing, exercising, having sex, or having used birth control pills before getting pregnant increases a woman's risk. The upset stomach that is so common in early pregnancy also does not increase the risk. In fact, women who have severe stomach upset may have a lower risk of miscarriage.

Often women who have had a miscarriage believe that it was caused by a recent fall, blow, or even a fright. In fact, in most miscarriages the fetus died some weeks before the miscarriage occurred.

Symptoms of Miscarriage

Bleeding is the most common sign of miscarriage (see box). Many women who have vaginal spotting or bleeding during the early months of pregnancy have healthy babies. Some of these women, though, will miscarry. This is why bleeding during early pregnancy is called threatened miscarriage. It does not mean that it is certain that the pregnancy will end in a miscarriage, but it might.

If you bleed while you are pregnant, you and your doctor will need to be watchful for a few days. In the very early stages, it is hard to tell if the pregnancy is going to miscarry.

Sometimes mild cramping of the lower stomach or a low backache may occur along with bleeding.

Warning Signs of Miscarriage

Call your doctor if you have:

- Spotting or bleeding without pain
- Heavy or persistent bleeding with abdominal pain or cramping
- A gush of fluid from your vagina but no pain or bleeding. You may need to be examined to see if your membranes have broken.

If you have heavy bleeding and think you have passed fetal tissue, place it in a clean container and take it to the doctor for inspection. Your doctor will want to examine you to see whether your cervix has dilated. If it has, miscarriage is certain.

Bleeding may persist, become heavy, or occur along with a pain like menstrual cramps or breaking of the amniotic sac (fluid-filled sac that surrounds the fetus in the mother's uterus). When the cervix has dilated (opened) and fetal tissue is lost, a miscarriage is certain.

If your doctor does not think that a miscarriage has occurred, you may be asked to rest and to avoid having sex. Although these measures have not been proven to prevent miscarriage, they may help reduce bleeding and discomfort.

After a Miscarriage

Often when miscarriage occurs early in pregnancy, tissue is left in the uterus. If there is concern about heavy bleeding or infection, this tissue will be removed. The tissue can be part of the fetus, part of the placenta (tissue that connects the mother and fetus), or both.

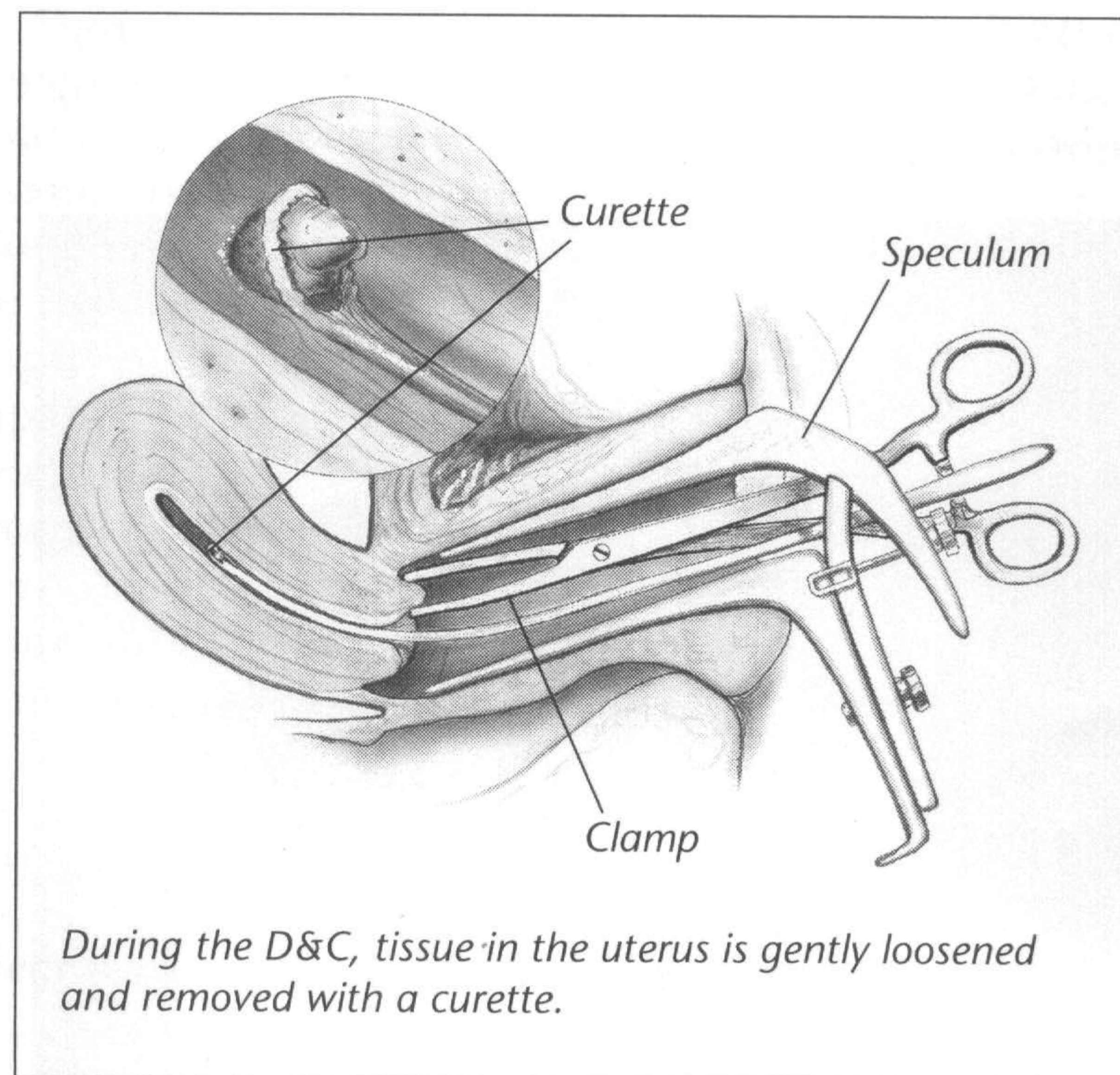
The tissue that remains may be removed by dilation and curettage (D&C). With this method, the cervix may be widened if needed. The tissue then is gently removed from the lining of the uterus. D&C is done in the office, emergency room, or surgical center. It often does not require a hospital stay.

Your doctor may want to see you in a few weeks to check on your progress. You can expect spotting and some discomfort for a few days. You should call your doctor right away if you have any of the following:

- Heavy bleeding
- Fever
- Chills
- Severe pain

Your recovery will take some time. If you are beyond 13 weeks of pregnancy, you may still look pregnant, and your breasts may leak milk. Light exercise is good, but increase your activity slowly. Consult with your doctor about which exercises are best and how often you should do them. It is safe to have sex after the bleeding stops.

You can ovulate and become pregnant as soon as 2 weeks after an early miscarriage. If you do not wish to become pregnant again right away, be sure to use birth control.



If your blood is Rh negative, you should ask your doctor whether you need a blood product called Rh immune globulin (RhIG). This prevents you from developing antibodies that could affect a future Rh-positive baby. If you have had a number of miscarriages in a row, your doctor may order a few tests to look for a cause.

Ectopic Pregnancy

Sometimes the fertilized egg doesn't reach the uterus. It begins to grow in the fallopian tube or, rarely, attaches to an ovary or other organs in the stomach. This is called an ectopic pregnancy. Because it is outside the uterus, an ectopic pregnancy cannot grow as it should and must be treated. About 1 in 60 pregnancies is ectopic.

Almost all ectopic pregnancies occur in the fallopian tube. Because the tube is so narrow and its wall is so thin, the pregnancy can grow to only about the size of a walnut before the tube bursts. This can occur any time in the first 3 months of pregnancy. Because the tube may burst and cause major bleeding, ectopic pregnancy must be treated promptly once it is found.

Women who have abnormal fallopian tubes are at higher risk for ectopic pregnancy. These abnormalities may be present in women who have had:

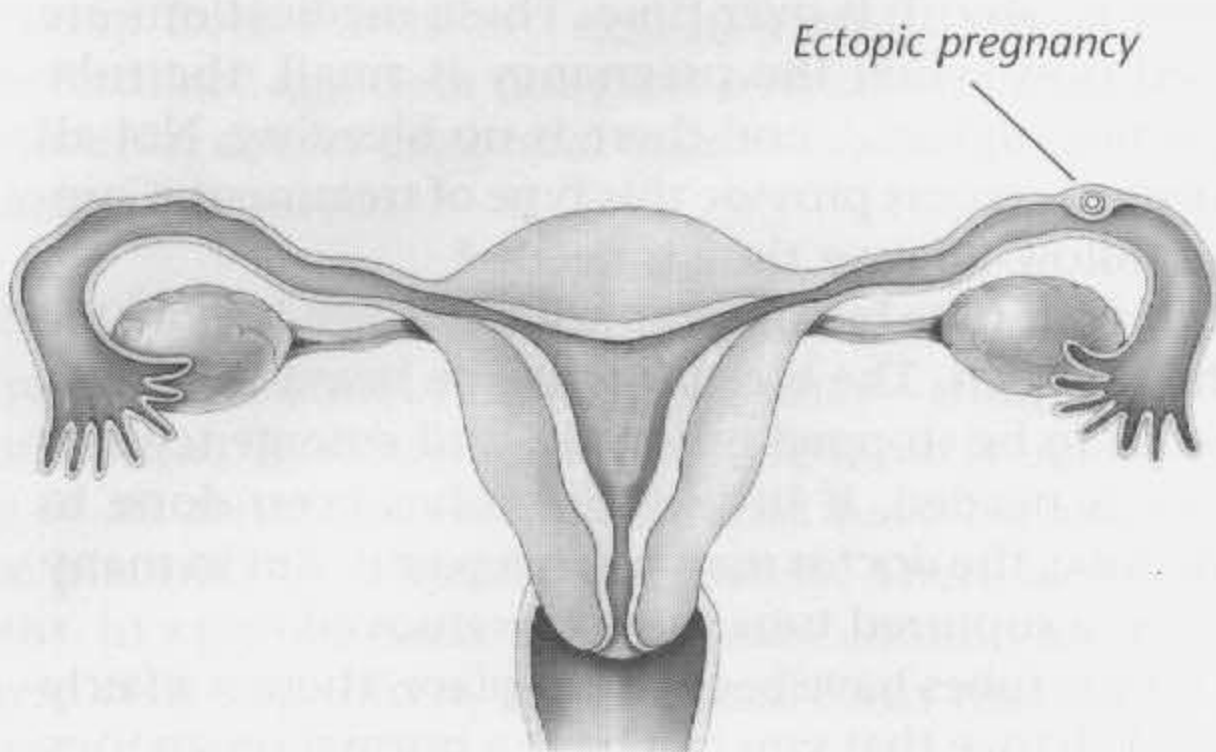
- *Pelvic inflammatory disease* or *salpingitis*
- Previous ectopic pregnancy
- Infertility
- Pelvic or abdominal surgery (eg, appendectomy)
- *Endometriosis*

Symptoms and Diagnosis

Ectopic pregnancies can be hard to diagnose. The symptoms of ectopic pregnancy sometimes include the symptoms of pregnancy, such as tender breasts or upset stomach. Some women may have no symptoms at all and may not even know that they are pregnant. Symptoms may include:

- *Vaginal bleeding.* Bleeding will be unlike your normal menstrual bleeding. Bleeding may be lighter or heavier than is normal.
- *Abdominal pain.* This can be sudden and sharp and ache without relief or seem to come and go. It often occurs on one side of the stomach.
- *Shoulder pain.* Blood from the ruptured tube area can build up in the stomach under the diaphragm (the area between your chest and stomach). This causes pain that is felt in the shoulder.
- *Weakness, dizziness, or fainting*

Because an ectopic pregnancy can occur without warning, you should call your doctor about any pain or bleeding right away. Call even if you do not think there really is a problem.



If your doctor suspects that you may have an ectopic pregnancy, he or she may give you a pelvic exam, perform blood tests, or give you an ultrasound exam. The results may not be clear right away, and these tests may need to be done again. Surgery may be needed to be certain of the presence of an ectopic pregnancy. Your doctor may perform a laparoscopy, in which a slender, light-transmitting telescope is inserted through a small opening in your stomach. This test is done in an operating room with general anesthesia. It allows the doctor to see inside your body. A D&C is another option. It may be performed to check for signs of an early miscarriage.

If your doctor suspects that you have an ectopic pregnancy that has ruptured, it is an emergency. You will need to have surgery right away.

Treatment

If your doctor thinks you have an ectopic pregnancy, he or she will decide on the best treatment based on your medical condition and your future plans for pregnancy.

Sometimes, if the pregnancy is small and the tube is not ruptured, the pregnancy can be lifted out through a hole made in the tube during a laparoscopy. A bit of pregnancy tissue may remain after the procedure. Blood testing over a few weeks may be needed after the treatment to check for this.

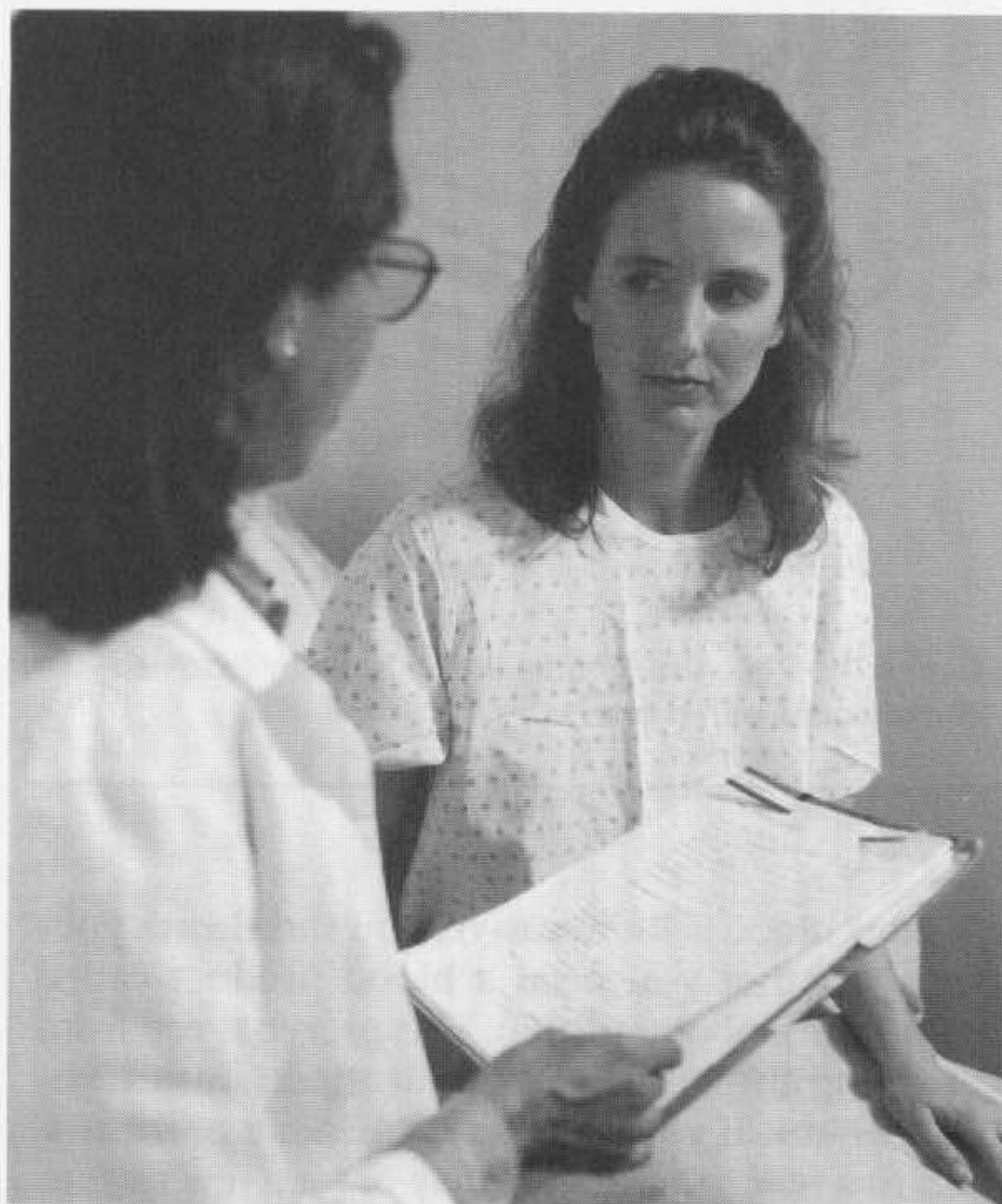
A laparotomy—in which a larger incision is made in the stomach—may be needed if the pregnancy is large or the blood loss is thought to be life threatening. During laparotomy, the pregnancy may be lifted out through an opening in the tube. Or, some or all of the tube may be removed.

Sometimes medications can be prescribed to stop the growth of the pregnancy tissue and permit the body to absorb it over time. These medications are used only when the pregnancy is small, the tube has not ruptured, and there is no bleeding. Not all medical centers provide this type of treatment. Careful follow-up over time is needed.

If your tube bursts, you will have bleeding inside the stomach. The bleeding may be heavy. Bleeding needs to be stopped promptly, and emergency surgery is needed. If little damage has been done to the tube, the doctor may try to repair it. But in many cases, a ruptured tube must be removed.

If the tubes have been left in place, there is a fairly good chance that you can have a normal pregnancy

in the future. Once you have had an ectopic pregnancy, though, you are at higher risk for having another one.



Molar Pregnancy

Molar pregnancy, also called gestational trophoblastic disease (GTD) or a “mole,” is rare. It results in the growth of abnormal tissue, not an embryo. In the United States, molar pregnancy occurs in 1 of every 1,000–1,200 pregnancies.

Both normal pregnancies and molar pregnancies develop from a fertilized egg. In a mole, though, the fertilized egg does not grow as it should. A genetic error causes abnormal cells to grow and form a mass of tissue.

Types of Molar Pregnancy

There are two kinds of molar pregnancy—complete and partial. The mass in a complete mole is made up of all abnormal cells that would have become the placenta in a normal pregnancy. There is no fetus. In a partial mole, the mass may contain both these cells and, often, an abnormal fetus that has severe defects.

Symptoms and Diagnosis

Most molar pregnancies cause symptoms that signal a problem. The most common symptom of a mole is vaginal bleeding during the first trimester. Other signs of moles, such as a uterus that is too large for the stage of the pregnancy or enlarged ovaries, can be found only by your doctor. If your doctor suspects a mole, he or she may order a blood test that measures the level of a hormone called human chorionic gonadotropin (hCG). This hormone is produced by the body during pregnancy or molar pregnancy.

Your doctor can find out whether you have a molar pregnancy by using ultrasound. If a molar pregnancy is found, a series of tests will be done to check for other medical problems that sometimes occur along with a mole. These problems might include preeclampsia (a condition of pregnancy in which there is high blood pressure and swelling) and hyperthyroidism (overactive thyroid gland). These problems are treated by removal of the mole.

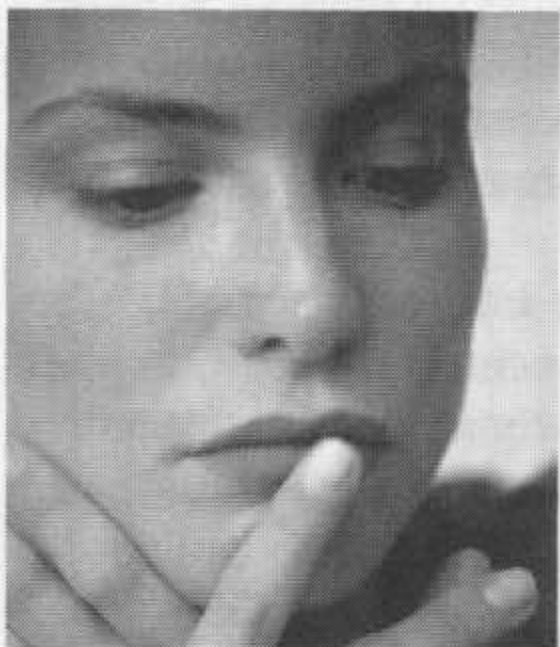
Treatment

The cervix is dilated, either under general or local anesthesia, and the mole is removed. Hysterectomy (removal of the uterus) is an option if a woman does not want more children. About 90% of women whose moles are removed require no more treatment. They do need careful follow-up, though. For about 6 months to 1 year after the mole is removed, you should receive routine tests for hCG. These tests can tell your doctor whether the treatment was a success.

After a mole has been removed, abnormal cells may remain. This is called persistent GTD and it is rare. It occurs in as many as 10% of women after a molar pregnancy. It can also occur after a normal pregnancy. One sign of persistent GTD is an hCG level that remains high after the mole has been removed. Sometimes chemotherapy may be needed to remove the molar pregnancy if it persists. In some cases, hysterectomy may be done. Cure rates are close to 100% for persistent GTD.

If you have had a molar pregnancy, your doctor most likely will advise you to wait 6 months to 1 year before trying to become pregnant again. It is safe to use birth control pills during this time. The chances of having another molar pregnancy are low (about 1%).

Coping with the Loss



For many women, emotional healing takes a good deal longer than physical healing. Even if the pregnancy ended very early, the sense of bonding between a mother and her fetus can be strong. The feelings of loss can be intense for some women.

Grief can involve a wide range of feelings. You may find yourself searching for the reason your pregnancy ended. You may wrongly blame yourself. You may have headaches, lose your appetite, feel tired, or have trouble concentrating or sleeping.

Your feelings of grief may differ from those of your partner. You are the one who has felt the physical changes of pregnancy. Your partner also may grieve, but he may not express his feelings in the same way you do. He may feel 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 when you need each other the most.

If either of you is having trouble handling the feelings that go along with this loss, talk to your doctor. You also may find it helps to talk with a counselor.

Don't blame yourself for the pregnancy loss. In most cases it is not likely that it could have been prevented. Reach out to those closest to you. Ask for their understanding, comfort, and support.

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Finally. . .

Most early pregnancy losses cannot be prevented. Losing a pregnancy often doesn't mean that a woman can't have more children or that there is something wrong with her health. Most women who miscarry have a healthy pregnancy later.

Emotional healing is as vital as physical healing. Grieving allows you to accept this painful loss and go on with your life. Counseling can help both you

and your partner if you can't deal with these feelings alone. You should allow enough time for physical and emotional healing before trying to get pregnant again. Your doctor can give you some guidance.

Glossary

Ectopic Pregnancy: A pregnancy in which the fertilized egg begins to grow in a place other than inside the uterus, usually in the fallopian tubes.

Endometriosis: A condition in which tissue similar to that normally lining the uterus is found outside the uterus, usually on the ovaries, tubes, and other pelvic structures.

Miscarriage: The spontaneous loss of a pregnancy before the fetus can survive outside the uterus.

Molar Pregnancy: Growth of abnormal placental tissue in the uterus. Also called gestational trophoblastic disease (GTD).

Pelvic Inflammatory Disease: An infection that involves the fallopian tubes and nearby structures.

Salpingitis: Inflammation of the fallopian tube.

This Patient Education Pamphlet was developed under the direction of the Committee on Patient Education of the American College of Obstetricians and Gynecologists. Designed as an aid to patients, it sets forth current information and opinions on subjects related to women's health. The information in this pamphlet does not dictate an exclusive course of treatment or procedure to be followed and should not be construed as excluding other acceptable methods of practice. Variations taking into account the needs of the individual patient, resources, and limitations unique to the institution or type of practice may be appropriate.

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