PATIENT EDUCATION

The American College of Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

Pregnancy • EP155

Ectopic Pregnancy

*In a typical pregnancy, a fertilized egg moves through one of the **fallopian tubes** and attaches to the lining of the **uterus**, where it starts to grow. An ectopic pregnancy occurs when a fertilized egg grows outside of the uterus. Because it is outside of the uterus, an ectopic pregnancy cannot produce a healthy baby, and the woman's health is at risk if she does not have treatment. For these reasons, an ectopic pregnancy must be treated.*

This pamphlet explains

- *who is at risk*
- *symptoms of ectopic pregnancy*
- *how it is diagnosed*
- *how it may be treated*

About Ectopic Pregnancy

Almost all ectopic pregnancies—more than 90%—occur in a fallopian tube. As the pregnancy grows, it can cause the tube to burst (rupture). A rupture can cause major internal bleeding. This can be a life-threatening emergency that needs immediate surgery. If the tube has not ruptured, the ectopic pregnancy often can be treated with medication.

Less than one in 10 ectopic pregnancies occurs in a place other than the fallopian tube. These pregnancies can attach to the cervix, an ovary, or another organ in the abdomen. This pamphlet discusses ectopic pregnancy in a fallopian tube.

Who Is at Risk?

Today, about 1 in 50 pregnancies is ectopic. The risk factors for ectopic pregnancy include the following:

- Previous ectopic pregnancy
- Prior fallopian tube surgery
- Previous pelvic or abdominal surgery
- Certain ***sexually transmitted infections (STIs)***
- ***Pelvic inflammatory disease***
- ***Endometriosis***

Some of these conditions can produce scar tissue in the fallopian tubes. This may keep a fertilized egg

from traveling through a tube to reach the uterus. Other factors that may increase a woman's risk of ectopic pregnancy include

- cigarette smoking
- age older than 35 years
- history of infertility
- use of ***assisted reproductive technology***, such as ***in vitro fertilization (IVF)***

About one half of all women who have an ectopic pregnancy do not have known risk factors. This means that sexually active women should be alert to changes in their bodies, especially if they experience symptoms of an ectopic pregnancy.

Symptoms of Ectopic Pregnancy

At first, an ectopic pregnancy may feel like a typical pregnancy with some of the same signs, such as a missed menstrual period, tender breasts, or an upset stomach. Other signs may include

- abnormal vaginal bleeding
- low back pain
- mild pain in the abdomen or pelvis
- mild cramping on one side of the pelvis

At this stage, it may be hard to know if you are experiencing a typical pregnancy or an ectopic pregnancy. Abnormal bleeding and pelvic pain should be reported to your ***obstetrician–gynecologist (ob-gyn)*** or other health care professional.

As an ectopic pregnancy grows, more serious symptoms may develop, especially if a fallopian tube ruptures. Symptoms may include the following:

- Sudden, severe pain in the abdomen or pelvis
- Shoulder pain
- Weakness, dizziness, or fainting

A ruptured fallopian tube can cause life-threatening internal bleeding. If you have sudden, severe pain, shoulder pain, or weakness, you should go to an emergency room.

Diagnosis

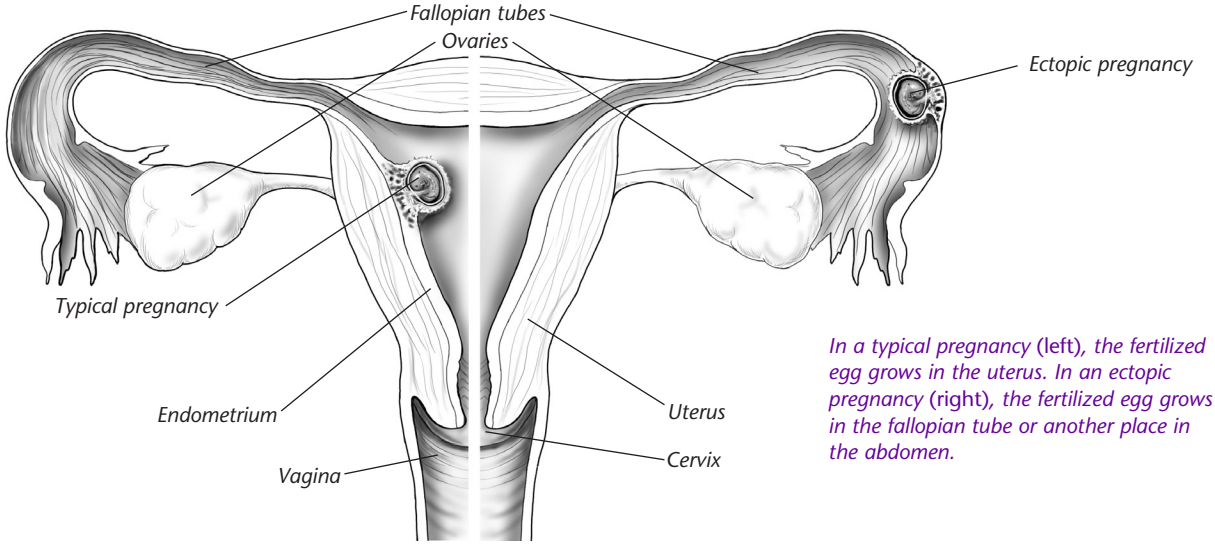
If you do not have the symptoms of a fallopian tube rupture but your ob-gyn or other health care professional suspects you may have ectopic pregnancy, he or she may

- perform a pelvic exam
- perform an ***ultrasound exam*** to see where the pregnancy is developing
- test your blood for a pregnancy ***hormone*** called human chorionic gonadotropin (hCG). The hCG test may be repeated to check the levels again. If the level does not increase as it would during a normal pregnancy, you may be at risk of an ectopic pregnancy or a ***miscarriage***.

Tests to find an ectopic pregnancy may take time. Results may not be clear right away. More tests may be needed. If the fallopian tube is not in danger of rupture, medication may be an option. But if a health care professional thinks you have a ruptured fallopian tube, you will need to have surgery right away.

Treatment

An ectopic pregnancy cannot move or be moved to the uterus, so it always requires treatment. There are two methods used to treat an ectopic pregnancy: 1) medication and 2) surgery. If your ob-gyn or other health care professional thinks you have an ectopic pregnancy, he or she will explain the benefits and risks of treatment based on your medical condition,



In a typical pregnancy (left)*, the fertilized egg grows in the uterus. In an ectopic pregnancy* (right)*, the fertilized egg grows in the fallopian tube or another place in the abdomen.*

your test results, and your plans for future pregnancies. Several weeks of follow-up are required with each treatment.

Medication

If the pregnancy has not ruptured a fallopian tube, medication may be used to treat ectopic pregnancy. The most common drug used to treat ectopic pregnancy is methotrexate. This drug stops cells from growing, which ends the pregnancy. The pregnancy then is absorbed by the body over 4–6 weeks. This does not require the removal of the fallopian tube.

There are many factors that go into the decision to use methotrexate. One of the most important factors is your ability to follow up with blood tests that check your blood levels of hCG. If you are breastfeeding, you will not be able to use methotrexate. Women with certain health problems also cannot use this medication.

Taking Methotrexate. Methotrexate often is given by injection in one dose. In some cases, it may be given in more than one dose over several days. Your ob-gyn or other health care professional will take a sample of your blood before the first dose. Blood tests will be done to measure the level of hCG and the functions of certain organs. If levels have not decreased enough, another dose of methotrexate may be recommended. You will have careful follow-up over time until hCG is no longer found in your blood.

Side Effects and Risks. Taking methotrexate can have some side effects. Most women have some abdominal pain. Vaginal bleeding or spotting also may occur. Other side effects may include

- nausea
- vomiting
- diarrhea
- dizziness

It is important to follow up with your ob-gyn or other health care professional until your treatment with methotrexate is complete. The risk of a fallopian tube rupture does not go away until your treatment is over. Seek care right away if you have symptoms of a rupture, including sudden abdominal pain, shoulder pain, or weakness.

Guidelines. During treatment with methotrexate you should avoid the following:

- Heavy exercise
- Sexual intercourse
- Alcohol
- Vitamins and foods that contain folic acid, including fortified cereal, enriched bread and pasta, peanuts, dark green leafy vegetables, orange juice, and beans.
- Prescription pain medication and nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen. These medications can affect the way methotrexate works in the body.
- Foods that produce gas, which can cause discomfort and mask the pain of a possible rupture of a fallopian tube
- Prolonged exposure to sunlight. Methotrexate can cause sun sensitivity.

Talk with your ob-gyn or other health care professional about when it is safe to go back to normal activities and foods. In addition, you should wait at least 3 months from the last dose of methotrexate before trying to become pregnant again.

Surgery

If the fallopian tube has not ruptured but surgery is needed, the ectopic pregnancy can be removed from the tube, or the entire tube with the pregnancy can be removed. Surgery typically is done with ***laparoscopy***. This procedure uses a slender, lighted camera that is inserted through small cuts in the abdomen. It is done in a hospital with ***general anesthesia***. If the ectopic pregnancy has ruptured a tube, emergency surgery is needed.

Side effects and risks. Your ob-gyn or other health care professional will talk with you about the possible side effects and risks of surgery for ectopic pregnancy. These may include pain, fatigue, bleeding, and infection.

After an Ectopic Pregnancy

Whether you were treated with methotrexate or surgery, you may feel tired for several weeks while you recover. You may feel abdominal discomfort or pain. If you have pain that does not respond to over-the-counter medication, talk with your ob-gyn or other health care professional.

It can take time for the level of hCG in your body to drop after treatment for an ectopic pregnancy. You may continue to feel pregnant for a while. It may take a few cycles for your periods to return to normal. Repeat blood tests may be needed until hCG is no longer found in your body.

You also may have a lot of feelings after an ectopic pregnancy (see box “Emotional Healing”). Allow enough

Emotional Healing

For some women, ectopic pregnancy can be traumatic. You may be dealing with many emotions after an ectopic pregnancy, even if you were not planning to become pregnant. Take time to heal physically, and take time to work through your feelings. Counseling may be helpful. Ask your ob-gyn or other health care professional to recommend a counselor.

There may be support groups in your area for women who have had ectopic pregnancies. Talking with others who have had similar experiences may help. Online forums also can be a place to share stories and get support from women who have been through an ectopic pregnancy.

time for physical and emotional healing before trying to get pregnant again. Your ob-gyn or other health care professional can give you some guidelines.

Finally…

Although an ectopic pregnancy can be life-threatening, prompt treatment and follow-up care can help prevent complications. It is best to find and treat an ectopic pregnancy before serious problems develop. If you have any of the symptoms of ectopic pregnancy, see your ob-gyn or other health care professional for treatment. Once you have had an ectopic pregnancy, you are at higher risk of having another one. During future pregnancies, be alert for signs and symptoms of ectopic pregnancy until your ob-gyn or other health care professional confirms the next pregnancy is growing in the right place.

Glossary

Assisted Reproductive Technology: A group of infertility treatments in which an egg is fertilized with a sperm outside the body; the fertilized egg then is transferred to the uterus.

Endometriosis: A condition in which tissue that lines the uterus is found outside of the uterus, usually on the ovaries, fallopian tubes, and other pelvic structures.

Fallopian Tubes: Tubes through which an egg travels from the ovary to the uterus.

General Anesthesia: The use of drugs that produce a sleep-like state to prevent pain during surgery.

Hormone: A substance made in the body by cells or organs that controls the function of cells or organs.

In Vitro Fertilization (IVF): A procedure in which an egg is removed from a woman's ovary, fertilized in a laboratory with the man's sperm, and then transferred to the woman's uterus to achieve a pregnancy.

Laparoscopy: A surgical procedure in which an instrument called a laparoscope is inserted into the pelvic cavity through a small incision. The laparoscope is used to view the pelvic organs. Other instruments can be used with it to perform surgery.

Miscarriage: Loss of a pregnancy.

Obstetrician–Gynecologist (Ob-Gyn): A physician with special skills, training, and education in women's health.

Pelvic Inflammatory Disease: An infection of the uterus, fallopian tubes, and nearby pelvic structures.

Sexually Transmitted Infections (STIs): Infections that are spread by sexual contact, including chlamydia, gonorrhea, human papillomavirus (HPV), herpes, syphilis, and human immunodeficiency virus (HIV, the cause of acquired immunodeficiency syndrome [AIDS]).

Ultrasound Exam: A test in which sound waves are used to examine internal structures. During pregnancy, it can be used to examine the fetus.

Uterus: A muscular organ located in the female pelvis that contains and nourishes the developing fetus during pregnancy.

This Patient Education Pamphlet was developed by 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 average readability level of the series, based on the Fry formula, is grade 6–8. The Suitability Assessment of Materials (SAM) instrument rates the pamphlets as "superior." To ensure the information is current and accurate, the pamphlets are reviewed every 18 months. 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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