

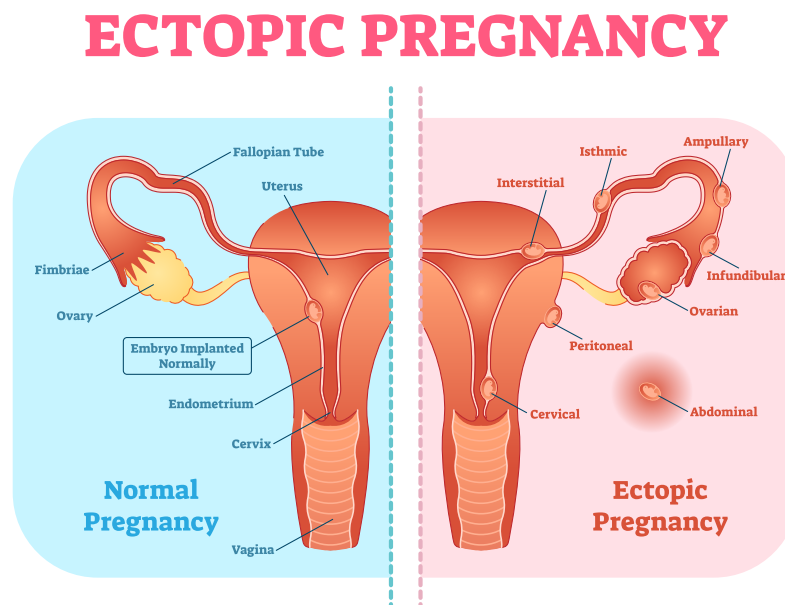
## Ectopic Pregnancy

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Ectopic pregnancy refers to a pregnancy that attaches and grows outside of the uterus. Ectopic pregnancies account for about 2% of all pregnancies.

An ectopic may grow in the following places:

- inside the fallopian tube (90% of ectopic pregnancies happen here)
- on the ovary
- on the cervix
- in the abdomen
- on a cesarean section scar



Ectopic pregnancy is not common, but it can be a life threatening condition. It can be very dangerous if it ruptures and causes bleeding into the abdomen and pelvis. For this reason, it is important to know what signs and symptoms to look for and when to contact your provider.



Typical symptoms of an ectopic or a ruptured ectopic pregnancy include:

- 🌿 Vaginal bleeding
- 🌿 Pelvic and/or abdominal pain or cramping, may be mild or severe
- 🌿 Missed or absent periods
- 🌿 Nausea/vomiting/dizziness

### Risk Factors

Many people with ectopic pregnancies have risk factors that increase their risk of ectopic pregnancies. But about half of people who get an ectopic pregnancy have no known risk factors.

The most common risk factors are:

- 🌿 Prior ectopic pregnancy. If the person gets pregnant again, there is a 10% risk of a second ectopic after first one. After 2 or more ectopic pregnancies, the risk increases to more than 25%.
- 🌿 Pelvic inflammatory disease and some sexually transmitted infections, like chlamydia
- 🌿 Previous surgery in the pelvis or on the fallopian tubes
- 🌿 Smoking
- 🌿 History of tubal sterilization
- 🌿 History of infertility and/or in vitro fertilization
- 🌿 Using an intrauterine device
- 🌿 Age greater than 30 years

It is important to know that using birth control or having a previous cesarean or abortion does NOT increase your risk of ectopic pregnancy.

### Diagnosis

On physical exam, the provider may feel a mass or notice tenderness in the pelvis. Sometimes a person may not have any symptoms. In this case, the diagnosis may be made via blood work and ultrasound imaging.

An ectopic is diagnosed by the combination of:

- 🌱 patient symptoms
- 🌱 physical exam
- 🌱 lab work
- 🌱 ultrasound imaging

Your provider might look at your hormone levels. They might order a repeat ultrasound before making this diagnosis. In some cases, the provider may do a diagnostic laparoscopy. This is a surgical procedure that examines your abdomen and pelvis using a small scope.

Once the diagnosis has been made, your provider will discuss with you the different treatment options. They will make recommendations based on your history, physical exam and clinical findings. It is important to understand these options, including their risks and benefits.

## Treatment

### Medical Management with Methotrexate

Methotrexate is a medication that interferes with DNA formation. It stops actively dividing cells, thus dissolving the ectopic pregnancy. The medication can be given as a single, double or multi-dose regimen, depending on the clinical situation. The medication is injected into the muscle.

Side effects include:

- 🌱 nausea
- 🌱 vomiting
- 🌱 abdominal pain
- 🌱 diarrhea
- 🌱 vaginal bleeding
- 🌱 mouth sores
- 🌱 lab abnormalities
- 🌱 hair loss (very rare)

People who receive methotrexate need to be monitored closely.

Methotrexate cannot be given to people with some health conditions. Your provider will review your history to see if this is an option for you.

People who are taking methotrexate should:

- 🍃 stop taking prenatal vitamins or folic acid supplements
- 🍃 avoid foods rich in folic acid
- 🍃 avoid NSAIDS like aspirin and ibuprofen
- 🍃 not have sex
- 🍃 not get pregnant
- 🍃 avoid strenuous exercise
- 🍃 avoid alcohol
- 🍃 avoid prolonged exposure to sunshine during treatment or in the follow up period.

Your provider will say when you can start regular activity. Research, although limited, shows that methotrexate does not affect future fertility.



## Surgery

Sometimes surgery to remove the ectopic pregnancy tissue is the best option. If the pregnancy is in a fallopian tube, the provider may open the tube and take out the tissue. Or, they might remove the entire tube. This surgery is generally done laparoscopically, via small incisions on the belly with a scope. It may be done through a larger abdominal incision (laparotomy) if necessary to complete the operation. This decision is generally made by the surgeon at the time of surgery. People are usually able to go home the day of surgery after a laparoscopic procedure. An overnight stay in the hospital might be needed after a laparotomy.

## Watchful Waiting

Sometimes it is possible to let your body clear the pregnancy without medication or surgery. Usually, this option is only for people who are clinically stable and who have low levels of HCG, or the pregnancy hormone.

## Take Home Points

- 🍃 Ectopic pregnancy occurs in 2% of all pregnancies. Specific risk factors increase their occurrence. However, 50% of patients diagnosed with an ectopic pregnancy have no known risk factors.
- 🍃 A ruptured ectopic maybe life threatening and requires immediate medical attention.
- 🍃 There are 3 main treatment options –medication, surgery, or watchful waiting. Each option has its own benefits and risks which will be reviewed by the provider in detail.
- 🍃 People who have had one ectopic pregnancy have an increased risk of a subsequent ectopic and this risk is greater than 25% in patients who have had two or more ectopic pregnancies.

## References

Tubal Ectopic Pregnancy. Practice Bulletin No. 191. American College of Obstetricians and Gynecologists. Obstet Gynecol 2018

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## About the Author

Roseanne Gichuru, DO, MBA obtained her undergraduate degrees in Cellular Molecular Biology & Women's Studies from West Chester University. She obtained her Medical Degree from Philadelphia College of Osteopathic Medicine and her MBA from St. Joseph University. She completed her OB/GYN residency at Crozer Chester Medical Center. She currently practices in PA. She has no disclosures to report.