

Learn about ectopic pregnancy

Ectopic pregnancy occurs when the fertilised egg implants in tissue outside of the uterus and the placenta and fetus begin to develop there. The most common site is within a Fallopian tube. However, ectopic pregnancies can rarely occur in the ovary, the abdomen, and in the lower portion of the uterus (the cervix).

Causes, incidence, and risk factors

Ectopic pregnancies are usually caused by conditions that obstruct or slow the passage of a fertilised ovum (egg) through the fallopian tube to the uterus. This may be caused by a physical blockage in the tube, or by failure of the tubal epithelium to move the zygote (the cell formed after the egg is fertilised) down the tube and into the uterus.

Most cases are a result of scarring caused by previous tubal infection or tubal surgery. Up to 50 percent of women with ectopic pregnancies have a medical history of salpingitis or PID (pelvic inflammatory disease). Some ectopic pregnancies can be traced to congenital tubal abnormalities, endometriosis, tubal scarring and kinking caused by a ruptured appendix, or scarring caused by previous pelvic surgery and prior ectopic pregnancies. In a few cases, the cause is unknown.

On occasion, a woman will conceive after elective tubal sterilisation. The risk of an ectopic

pregnancy occurring in this situation may reach 60 percent. Women who have had surgery to reverse previous tubal sterilisation in order to become pregnant also have an increased risk of ectopic pregnancy (when reversal is successful).

The administration of hormones (specifically estrogen and progesterone) can slow the normal movement of the fertilised egg through the tubal epithelium and result in implantation in the tube. Women who become pregnant despite using progesterone-only oral contraceptives have a 5-fold increase in the ectopic pregnancy rate.

Women who become pregnant despite using progesterone-bearing IUDs (Intra-Uterine Device of contraception) also have an increased risk of ectopic pregnancy. Ectopic pregnancy rates for those who become pregnant despite non-medicated IUD are 5 percent, while the rate for medicated IUD users who become pregnant despite the device is 15 percent. Note that these rates only refer to percents of the tiny proportion of women who become pregnant while using these methods -- they do not refer to women who have once used these methods and later become pregnant, or to the percent of women who become pregnant while using these methods.

The "morning after pill" is associated with a 10-fold increase in risk of this condition when its use fails to prevent pregnancy.

Ectopic pregnancies occur from 1 in every 40 to 1 in every 100 pregnancies.

Increased risk is associated with women who have a history of salpingitis or PID, tubal surgery of any type (including tubal ligation and reversal of), or prior ectopic pregnancy.

Symptoms

↓ Lower abdominal or pelvic pain
↓ Mild cramping on one side of the pelvis
↓ Amenorrhea (cessation of regular menstrual cycle)
↓ Abnormal vaginal bleeding -- usually scant amounts, spotting
↓ Breast tenderness
↓ Nausea
↓ Back pain, low

If rupture and hemorrhaging occurs before successfully treating the pregnancy, symptoms may worsen and include:
↓ Severe, sharp, and sudden pain in the lower abdominal area
↓ Feeling faint or actually fainting
↓ Referred pain to the shoulder area

Signs and tests

A pelvic examination may reveal uterine adnexal (Fallopian tube or ovary region) tenderness.

↓ There is usually a positive pregnancy test.

↓ Urine HCG (qualitative) tests may be falsely negative in up to 17.5 percent of them.

↓ In contrast, serum HCG (quantitative) tests have only a 2 percent incidence of false-negative results.

↓ A hematocrit test may be normal or decreased.

↓ The white blood count may be normal or increased.

↓ A culdocentesis may be performed to determine if free blood is present in the abdomen.

↓ An ultrasound (transvaginal ultrasound or pregnancy ultrasound) illustrates an empty uterus. Products of conception may be evident elsewhere.

↓ A laparoscopy and/or laparotomy may be necessary for adequate diagnosis.

↓ A D & C may be indicated to rule out a nonviable intrauterine

pregnancy.

↓ This disease may also alter the results of the following tests:

↓ Serum progesterone (a value of 25 ng/mL or more is 98 percent of the time associated with a normal pregnancy in the uterus, while a value of less than 5 ng/mL indicates that the pregnancy, regardless of location, is not going to be successful)

Treatment

In the event that pelvic-organ rupture has occurred because of the ectopic pregnancy, internal bleeding and/or hemorrhage may lead to shock. This is the first symptom of nearly 20 percent of ectopic pregnancies.

The maternal death rate from ectopic pregnancy in the U.S. has decreased in the last 30 years to less than 0.1 percent.

Complications

↓ Rupture, with resulting hemorrhage leading to shock and the risk of requiring a blood transfusion or rarely of death, is the most common complication.

↓ Infertility occurs in 10 to 15 percent of women who have experienced an ectopic pregnancy.

Calling your health care provider

A woman who has an early pregnancy or who has had the opportunity to become pregnant and has symptoms (especially lower abdominal pain and/or abnormal vaginal bleeding) should notify her health care provider. Ectopic pregnancy can occur in any woman who is sexually active, regardless of contraceptive use.

Prevention

Forms of ectopic pregnancy, other than tubal, are probably not preventable. However, tubal pregnancies, which make up the majority of ectopic pregnancies, may be prevented in some cases by avoiding those conditions that might cause scarring of the Fallopian tubes. Such prevention may include:

↓ Avoiding risk factors for PID (multiple partners, intercourse without a condom, and contracting sexually transmitted diseases, also called STDs)

↓ Early diagnosis and adequate treatment of STDs

↓ Early diagnosis and adequate treatment of salpingitis and pelvic inflammatory disease (PID)

Ectopic pregnancies cannot continue to term, so removal of the

developing cells is necessary to save the life of the mother.

Expectations (prognosis)

About 85 percent of the women who have experienced one ectopic pregnancy are later able to achieve a normal pregnancy. A subsequent ectopic pregnancy may occur in 10 to 20 percent of cases. Some women fail to become pregnant again, while others become pregnant and spontaneously abort during the first trimester.

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Did you know?

You can decrease the risk of spreading HIV through:

- ↓ Use condoms during sexual activity
- ↓ Do not share drug injection equipment
- ↓ Do not take unscreened blood
- ↓ If you are HIV-infected and pregnant, talk with your doctor about taking anti-HIV drugs
- ↓ If you are an HIV-infected woman, do not breast feed any baby
- ↓ Protect cuts, open sores, and your eyes and mouth from contact with blood.

Rh incompatibility can cause a serious health hazard

with severe Rh incompatibility.

It occurs several days after delivery and is characterised initially by loss of the Moro (startle) reflex, poor feeding, and decreased activity. Later, a high-pitched shrill cry may develop along with unusual posturing, a bulging fontanel, and seizures. Infants may die suddenly of kernicterus.

Mild:

- ↓ Aggressive hydration
- ↓ Phototherapy using bilirubin lights
- ↓ Hydrops fetalis:
- ↓ Amniocentesis to determine severity

↓ Movement disorder

Treatment

Since Rh incompatibility is almost completely preventable with the use of RhOGAM, prevention remains the best treatment. Treatment of the already affected infant depends on the severity of the condition.

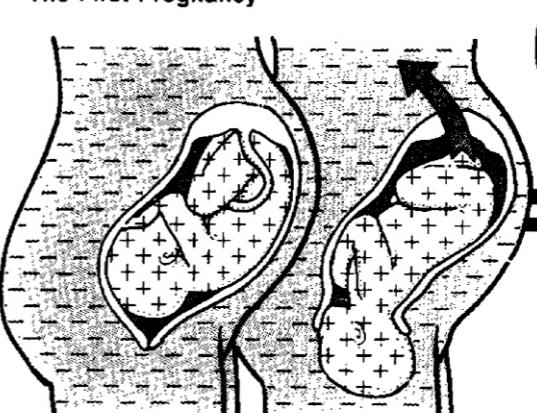
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THE RHESUS FACTOR

An Rh negative woman rarely has problems with her first baby, because in a normal pregnancy the maternal and foetal bloodstreams never mix. At delivery, however, some of the baby's blood cells can enter the mother's bloodstream. If the baby is Rh positive the mother's blood develops antibodies to the baby's blood cells. The danger is that in a subsequent pregnancy the antibodies will cross the placenta and attack another Rh positive baby's blood.

The First Pregnancy



The Rh factor is only important when an Rh negative woman is carrying an Rh positive baby. At delivery some of the baby's positive blood cells may leak into the maternal bloodstream. As a result the woman develops antibodies that destroy any Rh positive blood cells.

Key

— Rh negative blood	+	Rh positive blood
▲ Rh antibodies		

Each Subsequent Pregnancy



In a second pregnancy, these antibodies cross the placenta. If the new baby is also Rh positive, its blood is damaged (in severe cases destroyed) by the mother's antibodies.

The Solution



Doctors now routinely inject a serum into Rh negative women within 48 hours of the birth of each baby. The serum prevents antibodies to Rh positive blood developing in the maternal bloodstream.

negative, her system cannot tolerate the presence of Rh positive red blood cells.

In such cases, the mother's immune system treats the Rh positive fetal cells as if they were a foreign substance and makes antibodies against the fetal blood cells. These anti-Rh antibodies may cross the placenta into the fetus, where they destroy the fetus' circulating red blood cells.

First-born infants are often not affected (unless the mother has had previous miscarriages/abortions, which could have sensitised her system) as it takes time for the mother to develop antibodies against the fetal blood. However, second children who are also Rh-positive may be harmed.

Rh incompatibility can cause symptoms ranging from very mild to fatal. In its mildest form, Rh incompatibility causes hemolysis (destruction of the red blood cells) with the release of free hemoglobin into the infant's circulation.

Hemoglobin is converted into bilirubin, which causes an infant to become yellow (jaundiced). The jaundice of Rh incompatibility, measured by the level of bilirubin in the infant's bloodstream, may range from mild to dangerously high levels of bilirubin.

Hydrops fetalis is a complication of a severe form of Rh incompatibility in which massive fetal red blood cell destruction (a result of the Rh incompatibility) causes a severe anemia resulting in fetal heart failure, total body swelling, respiratory distress (if the infant has been delivered), and circulatory collapse. Hydrops fetalis often results in death of the infant shortly before or after delivery.

Kernicterus is a neurological syndrome caused by deposition of bilirubin into the brain (CNS) tissues. Kernicterus develops in extremely jaundiced infants, especially those

↓ Intrauterine fetal transfusion

↓ Early induction of labor

↓ Direct transfusion of packed red blood cells (compatible with the infant's blood)

↓ Exchange transfusion (may require multiple exchanges)

↓ Phototherapy

Expectations (prognosis)

Full recovery is expected for mild Rh incompatibility. Both hydrops fetalis and kernicterus represent extreme conditions caused by hemolysis. Both have guarded outcomes. Hydrops fetalis has a high mortality rate.

Complications

Neurological syndrome with mental deficiency, movement disorder, hearing loss, speech disorder, and seizures.

Calling your health care provider

Call your health care provider if you think or know you are pregnant and have not yet seen a doctor.

Prevention

Rh incompatibility is almost completely preventable. Rh negative mothers should be followed closely by their obstetricians during pregnancy.

If the father of the infant is Rh positive, the mother is given a mid-term injection of RhOGAM and a second injection within a few days of delivery.

These injections prevent the development of antibodies against Rh positive blood. This effectively prevents the condition.

Facts about hair and hair loss

Most people routinely lose between 70 and 150 hairs from their scalp each day, mainly through washing, brushing, and combing.

Hair starts to thin when more hairs are lost through normal shedding than the scalp is able to renew. About 40 percent of the density of scalp hair has to be lost before thinning of the hair becomes noticeable.

Hair loss can be caused by:

Heredity: Most balding is caused by a genetic predisposition - in other words, it is part of a person's genetic makeup. This is called male pattern baldness, or hereditary balding or thinning. It is the most common cause of thinning hair.

Illness, certain physical conditions, or their treatments: This can include high fever, thyroid disease, childbirth, inadequate protein in the diet, iron deficiency, cancer treatments, the use of certain medications, and other causes.

Hair may be lost in two ways:

In patchy hair loss: well-defined areas of hair are lost while the remaining scalp retains a good covering of hair.

In generalised hair loss: there is a uniform thinning over the entire scalp with no areas of normal hair growth.

The medical term for hair loss is **alopecia**. There are different classifications of alopecia:

Alopecia areata is a disease in which well-defined bald patches occur. It usually clears completely within 6 to 12 months without treatment.