

Test and Procedures.

Amniocentesis

Amniocentesis is a prenatal test that helps you learn if a fetus has health problems. The test is most often done between week 15 and week 20 of pregnancy. Discuss with your healthcare provider whether amniocentesis is right for you.

Should you have amniocentesis?

If the fetus has a higher than normal chance of birth defects or other problems, you may want to have this test. The following risk factors can increase chances of fetal health problems:

- You're 35 or older.
- There's a history of inherited (genetic) problems in your family.
- Other tests have shown that the fetus may have health problems.

How is amniocentesis done?

- First, the fetus is located with ultrasound (sound waves that make an image on a screen).
- A thin needle is then inserted into your belly. The healthcare provider keeps the needle from touching the fetus by watching the screen.
- The needle is used to remove a small amount of fluid from your womb. Your body will make more fluid to replace what was taken.
- You can go home right after the test. But you may need to take it easy for a day or so.

When to call your healthcare provider

Call your healthcare provider right away if you notice:

- Severe pain or cramping
- Vaginal bleeding (spotting)
- Fever or chills
- Fluid leaking from your vagina

Getting test results

You'll learn your amniocentesis results in 2 weeks. Most results are normal. Even if yours aren't, it doesn't always mean there's a problem. But this will depend on what your healthcare provider is looking for with amniocentesis. You and your healthcare provider can talk about other tests or special care you may want.

Blood Glucose Screening During Pregnancy

Gestational diabetes is diabetes that only pregnant women get. Changes in your body during pregnancy can cause high blood sugar (glucose). This can cause problems for you and your baby. It is a serious condition, but it can be controlled.

Who is at risk for gestational diabetes?

You are at risk of getting gestational diabetes if any of the following risk factors apply to you. The risk for gestational diabetes becomes higher as your number of risk factors increases:

- You are Hispanic, African American, American Indian, Asian, or Pacific Islander.
- You weigh more than your healthcare provider says is healthy for you.
- You have a relative with diabetes.
- You are older than age 25.
- You had gestational diabetes during a past pregnancy.
- You had a stillbirth or a very large baby before.
- You have a history of abnormal glucose tolerance.
- You have sugar in your urine at the first prenatal visit.
- You have metabolic syndrome, polycystic ovary syndrome (PCOS), currently use glucocorticoids, or have hypertension.
- You have multiple gestation (twins, etc.).



Your healthcare provider will talk with you about blood glucose screening.

What happens during a screening?

Here is what to expect during a blood glucose screening:

- While conflicting recommendations for screening exist, the American College of Obstetricians and Gynecologists currently recommends universal screening for gestational diabetes. Your risk for gestational diabetes will determine when you are

screened. Women are tested at 24 to 28 weeks of pregnancy. Women at high risk may be tested when they first learn they are pregnant.

- To do the screening, a blood sample is taken, and your blood sugar level is measured.
- If the results show a high blood sugar level, a glucose tolerance test may be ordered. You will drink a specific amount of sugar. This test measures the amount of time it takes for sugar to leave your blood. The test will determine if you have gestational diabetes.

What to know if you test positive

Here are some things you need to know:

- Gestational diabetes is treatable. The best way to control gestational diabetes is to find out you have it as early as possible and start treatment quickly.
- Gestational diabetes can cause problems for the mother during pregnancy. It can also cause problems with the baby during pregnancy, delivery, and after. Treatment greatly lowers the chance for problems.
- The changes in your body that cause gestational diabetes normally happen only when you are pregnant. After the baby is born, your body goes back to normal and the condition goes away. You may be more likely to have type 2 diabetes later, though. So talk to your healthcare provider about ways to help prevent type 2 diabetes.

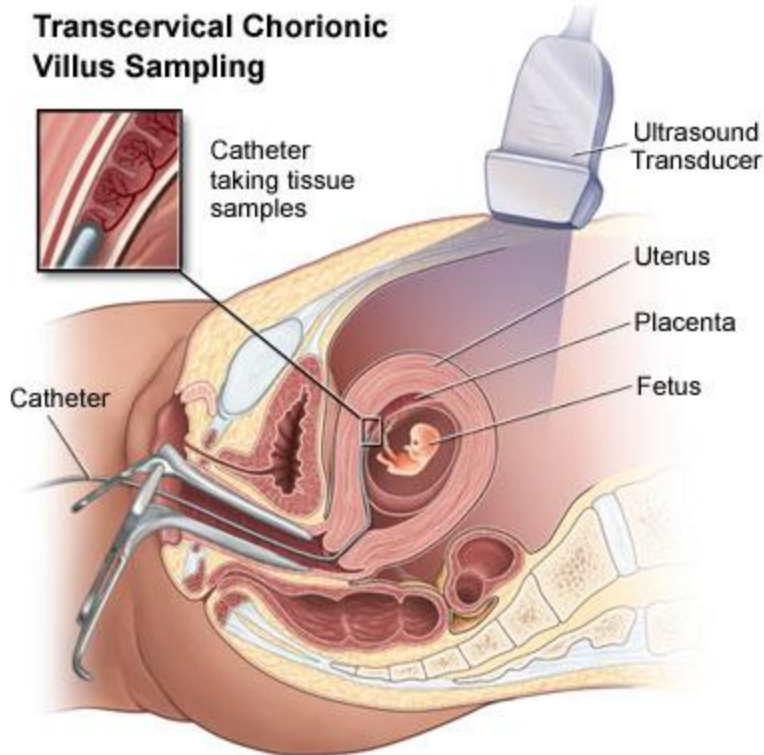
Treating gestational diabetes

Here is how to treat gestational diabetes:

- You'll need to check your blood sugar regularly. You can do this at home by pricking your finger and checking a drop of blood on a glucose monitor. Your healthcare provider will show you how and when to check your blood sugar and discuss your target blood sugar level.
- To manage your blood sugar, you will be given a special plan. It will likely involve planning your meals and getting regular exercise. Some women need to take a hormone called insulin, or an oral hypoglycemic medicine to help control their blood sugar.

CVS (Chorionic Villus Sampling)

CVS is a prenatal test that helps you learn if a fetus has health problems. The test is most often done after 10 weeks of pregnancy. Discuss with your healthcare provider whether CVS is right for you.



Should you have CVS?

If the fetus has a higher than normal chance of birth defects or other problems, you may want to have this test. The following risk factors can increase chances of fetal health problems:

- You're 35 or older.
- There's a history of inherited (genetic) problems in your family.
- Other tests have shown that the fetus may have health problems.

How CVS is done

The test can be done through your belly (transabdominal). Or it may be done through your cervix (transcervical). It is common to feel some cramping during and after the CVS test.

Transabdominal CVS

- The healthcare provider puts a needle through your belly (abdomen) and into the uterus.
- The provider uses ultrasound to guide the needle into place near the placenta. Ultrasound is sound waves that make an image on a screen.
- The provider takes a small amount of tissue with a syringe.

Transcervical CVS

- First, the fetus is located with ultrasound.

- The healthcare provider puts a thin tube into your vagina and guides it to your uterus.
- The provider removes a small amount of cells from the tissue that will become the placenta (chorionic villi) by gentle suction.

You can go home right after the test. But you may need to take it easy for a day or so.

When to call your healthcare provider

Call your healthcare provider right away if you notice:

- Severe pain or cramping
- Vaginal bleeding (spotting)
- Fever or chills
- Fluid leaking from your vagina

Getting test results

You'll learn your CVS results a few days after the test. CVS is a very accurate test, but in a few cases, results may be inconclusive. Most results are normal. Even if yours aren't, it doesn't always mean there's a problem. You and your healthcare provider can talk about other tests or special care you may want.

Nonstress and Contraction Stress Tests



Nonstress and contraction stress testing is a simple way to check the well-being of your baby. The tests let your healthcare provider know whether it is best to deliver your baby right away, or to wait.

Be sure to talk to your healthcare provider if you have questions about these procedures.

What to expect during your test

- At your healthcare provider's office or hospital, you lie down on your back or side in bed, or you recline in a chair.
- A fetal heart monitor is placed around your stomach, held in place by a belt or strap, in the area where the baby's heartbeat is the loudest.
- Another device, held in place by a second belt or strap, is placed on your stomach to measure contractions of your uterus.

Nonstress test

A nonstress test allows your healthcare provider to monitor your baby's heartbeat. If the heartbeat increases normally during the test, it means that your baby is probably getting enough oxygen and nutrients from your blood.

Contraction stress test

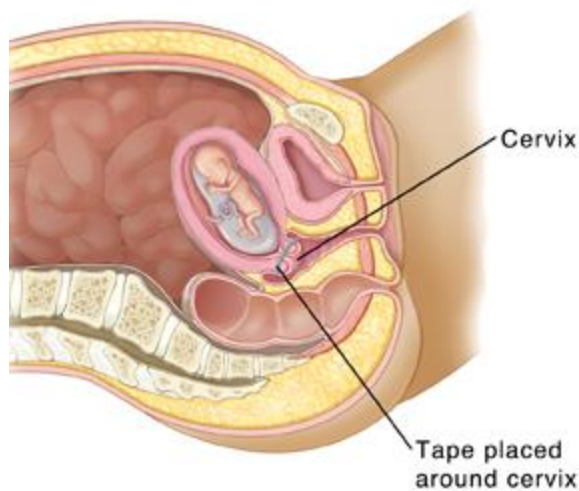
The contraction stress test (CST) tells your healthcare provider whether your baby's heartbeat is reacting normally during mild, labor-like contractions. This offers a preview of how well your baby will withstand the stress of labor.

During CST

To stimulate mild contractions in your uterus, your healthcare provider will give you an IV medicine. Oxytocin is almost always used.

Pregnancy and Childbirth: Abdominal Cerclage

Your healthcare provider suggests that you have cerclage. This procedure closes the cervix during a pregnancy. It is done to help prevent miscarriage or premature birth. Abdominal cerclage involves making one or more incisions in the abdomen to reach the cervix. The cervix is then stitched closed.



The cervix and pregnancy

The uterus (womb) is where the baby grows during pregnancy. The cervix is the opening from the uterus to the vagina. The cervix normally remains firmly closed until the baby is ready to be born. A short or weakened cervix may not be able to stay closed as the baby grows larger. This is called cervical insufficiency or cervical incompetence. If the cervix fails and opens too soon, miscarriage or premature birth may result.

How abdominal cerclage works

The goal of cerclage is to hold the cervix closed. This allows the baby to fully develop before leaving the womb. Abdominal cerclage is done when other procedures to close the cervix have failed. It is done at about week 12 of pregnancy. The healthcare provider reaches the cervix through the abdomen. The cervix is then stitched closed. Following the procedure, you must give birth by cesarean. Future births will also need to be cesarean.

Risks and possible complications of abdominal cerclage

The procedure is considered safe. But like all procedures, it carries some risks. These include the following:

- Bleeding
- Infection
- Premature contractions
- Premature labor or delivery
- Premature rupture of membranes
- Pregnancy loss

- Tearing or rupture of the cervix
- Injury to bladder or other nearby organs
- Risks of anesthesia

Preparing for the procedure

Tips for getting ready include the following:

- Tell your healthcare provider about all medicines you take. This includes over-the-counter medicines like vitamins and pain medicines.
- Do not put anything in your vagina for 24 hours before the procedure. This includes having intercourse.
- If instructed, do not eat or drink anything (including water) after the midnight the night before the procedure. (If you have diabetes, ask your healthcare provider whether you need special preparations.)

The day of the procedure

What to expect on the day of the procedure:

- Just before the procedure begins, an intravenous (IV) line is placed in your hand or arm. It delivers fluids and medicine into the body.
- You will be given medicine (anesthesia) to keep you free of pain during the procedure. Depending on what type of anesthesia you get, you may be relaxed, drowsy, or fully asleep during the procedure.
- The surgery may be done using either open surgery or laparoscopy.
 - Open surgery. One larger incision is made in the abdomen. The healthcare provider sees and works through this incision.
 - Laparoscopy. The healthcare provider makes 2 to 4 small incisions in the abdomen. A thin lighted tube called a laparoscope is then used. The scope allows the healthcare provider to work through the small incisions. The scope is put through one of the incisions. The scope sends pictures of the abdomen to a video screen. This allows the healthcare provider to see inside the abdomen. Surgical tools are placed through the other small incisions. The abdomen is filled with carbon dioxide. This gas makes space for the healthcare provider to see and work.
- For either technique:
 - Surgical tools are used to release (cut) the tissue that connects the bladder and the lower part of the uterus, including the cervix. This gives access to the cervix.
 - A special surgical tape is wrapped around the cervix. The tape is tied in a knot.

- The incision is closed with stitches (sutures) or staples. A tube may be placed in the incision to drain fluids, and then be removed.

After the procedure

What to expect after the procedure?

- You will be taken to a room where you'll recover from the anesthesia. Nurses will check on you as you rest.
- You will be watched for signs of premature labor. You will also be given medicine that helps prevent premature labor.
- Your baby's heart rate will be monitored.
- You will have some light bleeding and cramping. This is normal. You will likely be given pain medicine. If you are still in pain, tell the nurse.
- You may be able to go home later that day. Or you may stay overnight in a hospital room to be sure you do not go into premature labor. When you leave the hospital, have an adult friend or family member drive you home.

Recovering at home

What to expect during home recovery?

- You will probably be prescribed pain medicine to take at home. You may also be prescribed medicine to prevent labor. Take any medicine as prescribed.
- Take it easy for 4 days to 5 days after the procedure. Plan to have others help you as needed. If instructed to do so, you will need to stay in bed. Otherwise, you can get out of bed and do light activities.
- You will need to avoid intercourse until told you can resume by the healthcare provider. This will likely not be until 2 to 6 weeks after the procedure.
- Ask your healthcare provider when you can return to work and exercise.
- Care for your incision as instructed by your healthcare provider. You will have a dressing (bandage). Be sure you have instructions for when and how to change the dressing. Also be sure you know whether you can get the incision wet when you bathe. If you have a drain that was not removed in the hospital, be sure you know how to care for it at home.

When to call the healthcare provider

Call your healthcare provider if you notice any of the following:

- A fever of 100.4°F (38°C) or higher
- Pain that does not go away even after taking pain medicine

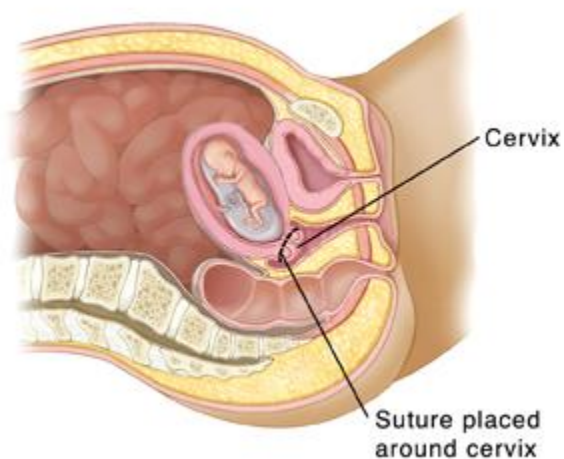
- Worsening contractions or abdominal cramping
- Unexpected vaginal spotting or bleeding
- Fluid leaking from the vagina
- Bleeding from the vagina
- Foul-smelling drainage from the vagina
- Back or abdominal pain
- Signs of infection at the incision site or sites, such as redness or swelling, warmth, worsening pain, or foul-smelling drainage.

Follow-up

Make a follow-up appointment as directed by our staff. During your follow-up visit, your healthcare provider will check your healing. You can also discuss how your pregnancy is progressing.

Pregnancy and Childbirth: Transvaginal Cerclage

Your healthcare provider suggests that you have a cerclage. This procedure closes the cervix during a pregnancy. It is done to help prevent miscarriage if it's because of cervical incompetence, or premature birth. Miscarriage is loss of a fetus early in pregnancy. Premature birth is delivery before the 37th week. Transvaginal cerclage involves reaching the cervix through the vagina to stitch it closed. Read on to learn more.



The cervix and pregnancy

The uterus (womb) is where the baby grows during pregnancy. The cervix is the opening from the uterus into the vagina. The cervix normally remains firmly closed until the baby is ready to be born. A short or weakened cervix may not be able to stay closed as the baby grows larger. This is called cervical insufficiency or cervical incompetence. If the cervix fails and opens too soon, miscarriage or premature birth may result.

How cervical cerclage works

The goal of a cerclage is to hold the cervix closed. This allows the baby to fully develop before leaving the womb. The healthcare provider stitches the cervix closed at about week 12 of the pregnancy. At week 37, the baby should be ready for life outside the womb. So the healthcare provider removes the stitch. This allows the cervix to open when labor begins. Once you have a cerclage, you will likely have one in future pregnancies.

Risks and possible complications of transvaginal cerclage

The procedure is considered safe. But like all procedures, it carries some risks. These include the following:

- Infection
- Premature contractions
- Premature labor
- Premature delivery
- Premature rupture of membranes
- Pregnancy loss
- Tearing or rupture of the cervix if labor begins before the stitch is removed
- Injury to bladder
- Risks of anesthesia

Preparing for the procedure

How to get ready for the procedure:

- Tell your healthcare provider about all medicines you take. This includes over-the-counter medicines like vitamins and pain medicines.
- Do not put anything in your vagina for 24 hours before the procedure. This includes having intercourse.
- If instructed, do not eat or drink anything (including water) after the midnight the night before the procedure. (If you have diabetes, ask your healthcare provider whether you need special preparations.)

The day of the procedure

Here is what to expect on the day of the procedure:

- Just before the procedure begins, an intravenous (IV) line is placed in your hand or arm. It delivers fluids and medicine into the body.
- You will be given anesthesia. This is medicine to keep you free of pain during the procedure. Depending on what type you are given, you may be relaxed, drowsy, or fully asleep during the procedure. If you are given spinal anesthesia, you will be numb from the waist down.
- During the procedure:
 - A speculum will be put into your vagina to hold it open.
 - Local anesthesia may be injected into the cervix to numb it.
 - The healthcare provider uses instruments through the vagina to stitch the cervix closed. Surgical thread is used. Knots are made to hold the thread tight until it is cut later in your pregnancy. In many cases, the thread is wrapped around the cervix and pulled tight.

After the procedure

Here is what to expect after the procedure:

- You will be taken to a room where you'll recover from the anesthesia. Nurses will check on you as you rest.
- You will be watched for signs of premature labor. You will also be given medicine that helps prevent premature labor.
- Your baby's heart rate will be monitored.
- You will have some light bleeding and cramping. This is normal. You will likely be given pain medicine. If you are still in pain, tell the nurse.
- You may be able to go home later that day. Or you may stay overnight in a hospital room to be sure you do not go into premature labor. When you leave the hospital, have an adult friend or family member drive you home.

Recovering at home

Tips for home recovery include:

- You may be prescribed medicine to take at home. This may be medicine to relieve pain. It may also be medicine to prevent labor. Take all medicines as prescribed.
- Take it easy for 2 to 3 days after the procedure. Plan to have others help you as needed. Unless you are instructed to do so, you do not need to stay in bed.

- Avoid having intercourse for at least 7 days after the procedure.
- Ask your healthcare provider when you can return to work and exercise.

Follow-up care

During your follow-up visit, your healthcare provider will check your healing. You can also discuss how your pregnancy is progressing. You will be told when to schedule an appointment to have the stitch removed.

When to call the healthcare provider

Call your healthcare provider if you notice any of the following:

- A fever of 100.4°F (38°C) or higher
- Pain that does not go away even after taking pain medicine
- Contractions or stomach cramping
- Fluid leaking from the vagina
- Bleeding or spotting of blood from the vagina
- Foul-smelling drainage from the vagina
- Back or stomach pain

Rh-Negative Screening



If you have Rh-negative blood, your baby may be at risk for health problems. This is true only if your baby has Rh-positive blood. A simple test followed by treatment can help prevent problems.

What are the risks?

If the blood of your baby is Rh positive, your Rh-negative blood may form antibodies. These antibodies will attack the Rh-positive blood. This is called Rh disease. Rh disease can cause your baby to lose blood cells or have other health problems. Medical treatment can prevent Rh disease by keeping antibodies from forming.

How are you tested?

A simple blood test shows if you're Rh negative. This test is done very early in your pregnancy. If you're Rh negative, you'll have a second blood test near week 28 of pregnancy. This test will check whether or not your blood contains Rh antibodies.

When You Need Fetal Echocardiography

Fetal echocardiography (echo) is a test that shows pictures of a baby's heart before birth. The pictures are formed using harmless sound waves. This is called ultrasound. The test checks for problems in the baby's heart structure, function, or rhythm. Finding these heart problems before birth means that they can be managed early. This may also help in planning for what to do after birth. Many heart problems can be found with fetal echo. But some can't be seen until after the baby is born. The test is painless. It is also noninvasive, meaning nothing is put into your body.



With fetal echocardiography, a transducer is moved across your abdomen to take pictures of your baby's heart.

Why might I need a fetal echo?

The test is usually done when you are at least 16 weeks pregnant. Your doctor may advise this test if you:

- Had a pregnancy ultrasound that showed a possible heart problem
- Had problems found by other tests, such as amniocentesis or chorionic villus sampling (these check for genetic diseases and chromosomal problems)
- Have a family history of congenital heart disease
- Are taking certain medicines that may affect your baby's development
- Have a family history of certain genetic diseases linked with heart defects and disease

- Have diabetes or other conditions

How should I prepare for a fetal echo?

Follow any instructions you are given.

What happens during a fetal echo?

The test takes about 30 to 60 minutes.

- You lie on an exam table with your abdomen uncovered.
- Clear, non-greasy gel is applied to the skin on your belly.
- A hand-held probe (transducer) is moved across your belly.
- Sound waves from the transducer go to a computer. Pictures of your baby's heart are seen on a screen.

What happens after a fetal echo?

- You can return to your normal routine and diet.
- Your doctor may talk to you about the early results right after the test. You will get the final results when the images have been fully looked at.

What are the risks and complications of fetal echo?

There are no known risks or complications associated with fetal echo.