# Fetal Imaging



https://www.ohsu.edu/womens-health/ultrasound-and-fetal-monitoring Welcome to your pregnancy ultrasound at OHSU. This brochure describes the most common ultrasounds that we perform in our ultrasound unit. In this pamphlet, we use the words "fetus" and "fetal". These are the medical terms for a baby prior to birth.

Out of every 100 pregnancies, 3-5 will have a fetus with a birth defect. Many problems can be seen on ultrasound, while others may not be found until after birth.

### What is ultrasound?

- Ultrasound uses sound waves to make a picture of structures inside of the body.
- During an ultrasound, a "probe" (or "transducer") is placed against your skin. Gel is used to help the sound waves travel. There are two types of probes used frequently in pregnancy ultrasound: abdominal and transvaginal.



• In order to get the best picture, the person doing the ultrasound must press the ultrasound probe against your skin. How much pressure is needed depends on both what position the fetus is in as well as the anatomy of the pregnant person. The amount of pressure usually varies throughout the exam as needed. Sometimes the pressure can become uncomfortable. We welcome feedback during the scan so that we can make adjustments.

## What are common ultrasound tests in pregnancy and why are they recommended?

| Type of<br>ultrasound                                | Best<br>gestational<br>age | Why it is done  | Who should have one   |
|--|----------------------------|---|---|
| Pregnancy<br>location/heartbeat                      | <11 weeks                  | <ul> <li>To show that the pregnancy is in the uterus and that it is growing as expected</li> <li>To help confirm the due date</li> <li>To check for twins or triplets</li> </ul>  | <ul> <li>People with symptoms of pregnancy loss, like bleeding</li> <li>People with history of early pregnancy loss or ectopic pregnancy</li> <li>When requested</li> </ul> |
| Nuchal<br>translucency/First<br>trimester<br>anatomy | 12-13 6/7<br>weeks         | <ul> <li>To look for early<br/>signs of chromosomal<br/>problems, like Down<br/>Syndrome (Trisomy<br/>21)</li> <li>To check the early<br/>development of the<br/>fetus</li> <li>To check for twins or<br/>triplets</li> </ul> | Offered routinely in all<br>pregnancies   |

| Standard or<br>detailed anatomy | 20+ weeks | <ul> <li>To check that the fetus's anatomy has developed normally</li> <li>To check placental location</li> </ul>                    | <ul> <li>Recommended in all<br/>pregnancies</li> </ul>   |
|---------------------------------|-----------|--|--|
| Growth and<br>follow up         | 22+ weeks | <ul> <li>To check that the fetus is growing normally</li> <li>To recheck the placenta</li> <li>To recheck certain anatomy</li> </ul> | <ul> <li>Only recommended in people<br/>with risk factors for fetal<br/>growth problems, factors that<br/>make it difficult to measure<br/>fetal growth with fundal<br/>heights in the office, or with<br/>certain findings at the anatomy<br/>ultrasound</li> </ul> |

There are additional, specialized ultrasounds that we do as well in certain high-risk situations. Those will be described by your obstetric provider if relevant to your pregnancy.

There are many things that slightly increase the risk of fetal growth problems or make it difficult to monitor growth using measurement of your growing uterus. This is a list of some of the more common ones.

- Older age (>35 years)
- Younger age (<20 years)
- High blood pressure
- Diabetes
- Tobacco, marijuana, alcohol, or other substance use
- Higher weight



- Growth problems or preeclampsia in a previous pregnancy
- Stillbirth in a previous pregnancy
- Large fibroids
- Kidney disease

### What are limitations to ultrasound?

Ultrasound is the best test in pregnancy to figure out what the anatomy looks like. However, there are some things it cannot do:

- Ultrasound is not a genetic screening test. Although many fetuses with genetic problems will have abnormal anatomy seen on ultrasound, many have normal ultrasound exams. That said, if we do find problems on ultrasound, we may offer additional genetic testing.
- Ultrasound can tell you what structures look like, but it does not tell you the function. There may be problems with a normal appearing organ that we cannot test for with ultrasound.
- Ultrasound cannot tell you how anatomy will develop in the future. Fetuses continue to develop and grow throughout pregnancy, and many organs continue to develop even after birth. An ultrasound at 20 or even 32 or 36 weeks cannot predict the future.

### What will happen during my ultrasound appointment?

- The person who brings you to the ultrasound room and takes the majority (or all!) of the pictures is the sonographer. A sonographer is someone with training and certification in taking ultrasound pictures.
- The sonographer will confirm your name and birthday and then start your ultrasound. They may recommend using the transvaginal probe if you are in your first trimester, if they need to see your cervix or placenta better, or if the fetus is in a position that is challenging to see using the abdominal probe.

- The sonographer is not allowed to tell you your results.
- Once they are done taking pictures, the sonographer will show your pictures to the doctor. Often, that doctor



will come to review your results with you. When the doctor comes in, it does not mean there is a problem – they are usually just there to tell you your results! Sometimes the doctor will take a few extra pictures, especially at your anatomy ultrasound. Sometimes you will not see the doctor during your ultrasound appointment. Instead, you will either get your results at your appointment later that day or through MyChart.

- If there are any concerns, the doctor will talk to you about them. They will then notify your provider and help you figure out what next steps are needed.
- Depending on the results of your ultrasound and your individual pregnancy information, the doctor may recommend additional ultrasounds. If they do recommend another ultrasound, you can schedule it at the same desk where you just checked in or call (503) 418-4200.

#### OHSU Ultrasound and Fetal Monitoring (503) 418-4200

Physicians Pavilion, 4<sup>th</sup> floor 3270 SW Pavilion Loop

Kohler Pavilion, 7<sup>th</sup> floor 808 SW Campus Drive Portland, OR 97239