

## WHAT IS A BREAST ULTRASOUND?

The primary use of breast ultrasound today is to help diagnose breast abnormalities detected by a physician during a physical exam (such as a lump or bloody or spontaneous clear nipple discharge) and to characterize potential abnormalities seen on mammogram. Ultrasound imaging can help to determine if an abnormality is solid (which may be a non-cancerous lump of tissue or a cancerous tumor) or fluid-filled (such as a benign cyst) or both cystic and solid. Ultrasound can also help show additional features of the abnormal area. Doppler ultrasound is used to assess blood supply in breast lesions. Ultrasound examinations are painless, fast and easily tolerated by most patients.

## HOW IT WORKS

Ultrasound imaging involves the use of a small transducer and ultrasound gel to expose the body to high-frequency sound waves. Ultrasound is safe and painless, and produces pictures of the inside of the body using sound waves. Because ultrasound images are captured in real-time, they can show the structure and movement of the body's internal organs, as well as blood flowing through blood vessels. Ultrasound imaging of the breast produces a picture of the internal structures of the breast. During a breast ultrasound examination the sonographer or physician performing the test may use Doppler techniques to evaluate blood flow or lack of flow in any breast mass. In some cases this may provide additional information as to the cause of the mass.

## WHAT TO EXPECT

You will lie on your back on the examining table and may be asked to raise your arm above your head. A clear water-based gel is applied to the area of the body being studied to help the transducer make secure contact with the body and eliminate air pockets between the transducer and the skin that can block the sound waves from passing into your body. The sonographer (ultrasound technologist) or radiologist then presses the transducer firmly against the skin in various locations, sweeping over the area of interest or angling the sound beam from a farther location to see an area of concern better. Doppler sonography is performed using the same transducer.

The test takes approximately 30 minutes. The technologist will give you discharge instructions after the completion of the test.

## RESULTS

A radiologist will review your images and send a report to your doctor who ordered the test in 48 hours. You'll get a call from your doctor's office to discuss the results and next steps. To check your results in our secure, online patient portal, My UNC Chart, visit [www.myuncchart.org](http://www.myuncchart.org).