

BREAST TOMOSYNTHESIS

Breast tomosynthesis, also known as digital breast tomosynthesis or DBT, is a method of three-dimensional screening that provides a clearer view of the breast during screening for breast cancer.

HOW DOES BREAST TOMOSYNTHESIS WORK?

A typical mammogram provides twodimensional images of the breast from top to bottom and side to side. The breast is pulled away from the body and compressed, and the resulting images are put on film.

In contrast, DBT takes X-rays from many angles, producing images of tiny slices of the breast that are assembled to provide a better overall picture. Only enough pressure is applied on the breast to keep it stable during the procedure as an X-ray tube moves in an arc around the breast. A computer then compiles the images into a 3-D image.

In a typical mammogram, overlapping tissue can hide small tumors. DBT solves this problem, making it easier to find cancer at earlier stages.

WHY DO YOU NEED BREAST TOMOSYNTHESIS?

Mammography has proved to be the most effective method of screening for breast cancer, allowing doctors to find tumors much earlier than they would be able to feel them, and breast tomosynthesis has been shown to provide more accuracy than a typical mammogram. This allows for the possibility of earlier detection and treatment, providing a greater chance of complete recovery.

Also, DBT provides the likelihood of fewer false positives – a mammogram appearing to indicate that cancer is present when it actually isn't.

WHAT TO EXPECT DURING A TOMOSYNTHESIS EXAM

Your breast will be compressed while the X-ray tube moves around it. You will be asked to hold still, because movement can blur the image.

A tomosynthesis exam will feel much like a usual mammogram, except that it takes just 4 seconds longer.

IS BREAST TOMOSYNTHESIS SAFE?

Be sure to inform your doctor if there is a possibility that you are pregnant. Exposure to the minimal amount of radiation used during DBT carries a small amount of risk, but the benefit of the exam likely outweighs the risk.

RESOURCES

The Comprehensive Breast Care Center at the UK Markey Cancer Center offers stateof-the-art digital tomosynthesis for breast cancer screening and diagnostic services. UK HealthCare is one of only a few medical centers in the state to offer this technology. ukhealthcare.uky.edu/breast-cancer 859-323-2222

Radiological Society of North America www.radiologyinfo.org