Understanding 3D Mammography

With the arrival of 3D Mammography this Fall/Winter, 2015 at Anna Jaques locations in Newburyport, Amesbury and Haverhill, we’ve asked Dr. Jonathan Arnow, AJH Radiologist with special expertise in breast imaging, to share more about this sophisticated screening and diagnostic imaging technology with you.

Q. What is 3D mammography and how does it work?

A. 3D Mammography, also known as tomosynthesis (or “tomo”), is an FDA-approved screening and diagnostic breast-imaging tool that is proven to improve the early detection of breast cancer. For each view, the special mammogram machine sweeps over the breast, taking multiple images in seconds. Images are formatted by the computer and displayed as a series of thin slices (3D) and a composite 2D digital image which are viewed by the radiologist.

Q. What are the benefits of having a 3D mammogram?

A. With greater accuracy and clarity, 3D Mammography supports earlier detection and reduces the need for additional testing. When capturing the 3D images, the technology takes up to 180 pictures of a breast in about the same time it takes 2D to take four pictures. The resulting images make it possible for a radiologist to view breast tissue one thin slice at a time, almost like turning pages in a book. Fine details are more visible and are less likely to be hidden by overlapping tissue. As a result, the need for additional tests is decreased.

Q. How is 3D Mammography different than 2D?

A. 3D Mammography has proven to be more accurate than 2D mammography. Several large studies have shown that 3D mammography detects 41% more invasive breast
cancers which is 1-2 more cancers caught per 1,000 tests. It was also shown to reduce the chance that a patient will need to be called back for additional views by up to 15%. This increased accuracy enhances the ability to detect cancer earlier with fewer false alarms, and fewer biopsies, which gives patients a more accurate diagnosis and peace of mind.

Q. What can I expect during a 3D mammogram?

A. The experience will be very similar to a traditional 2D mammogram. Additional breast compression is not required and a 3D mammogram only takes a few more seconds than a 2D mammogram. As is typical with any mammogram exam, some women experience minor discomfort while others don’t experience any discomfort.

Q. Will I be exposed to more radiation if I have a 3D mammogram?

A. The three sites where we will be providing 3D Mammography services use the lowest dose of radiation available for 3D Mammography. A very low X-ray dose is used during the 3D mammogram, just about the same as a standard 2D mammogram, and lower than a traditional film mammogram. Anna Jaques Hospital has purchased the latest technology available, so the total dose is well within the FDA safety standards for mammography.

Q. Should I continue to be screened as often as I have been with 3D mammography?

A. Continue to follow your existing screening plan unless there is a change in your health. Changes or new knowledge of family-related history may also require that you re-evaluate the plan. Be sure to communicate with your physician(s). A risk assessment is an extremely valuable tool for determining your custom plan. It considers your personal and family health history. The plan should continue to be evaluated and adjusted as necessary with your entire care team.

Q. Do patients need a referral for a 3D mammogram?

A. No. 3D mammograms are approved and available to all women for routine screening
mammograms and diagnostic mammograms, regardless of age or breast type. American Cancer Society guidelines for screening mammography can be found at www.cancer.org.

If you haven’t scheduled your next mammogram yet now is the time. Call 978-834-8210 or visit ajh.org/breastcare for more information. And don’t forget, women may self-refer for a screening mammogram.

*Anna Jaques mammography possesses a valid license and certificate of inspection issued by MDPH.*