Synthesized 2D Mammography + Breast Tomosynthesis

Update and Tips for Clinical Implementation

Recorded on June 9, 2016

A certified one-hour webinar for radiologists, radiologic technologists, and other healthcare providers who care for patients with breast disease

This activity qualifies for 1.0 hour of training for the Hologic Selenia® Dimensions® 3D Mammography™ System

Course Overview

In February 2011, the FDA approved 3D digital breast tomosynthesis (DBT) technology in combination with standard 2D full-field digital mammography (DM) for breast cancer screening. DM/DBT has been shown to improve sensitivity, substantially reduce recall rates, and increase visualization of breast cancers compared to DM alone. [1-3] DBT has also demonstrated utility in imaging dense breast tissue, which by nature can be challenging to adequately image and interpret using DM alone given the propensity for tissue overlap. [4] However, the combination of DM/DBT exposes patients to approximately two times the radiation dose of DM alone, although the amount of exposure remains well below FDA-defined limits. [1]

To address radiation dose concerns, the FDA has approved the use of synthesized 2D images (sDM) that are generated from the 3D data set. Synthetic 2D images by definition are produced without the need for the additional radiation required for standard DM images. [4] Recent studies have shown that sDM/DBT performed similarly to DM/DBT, concluding that sDM “may eliminate the need for DM as part of a routine clinical study,” while reducing radiation dose. [5, 6]

Educational Objectives

After completing this activity, the participant should be better able to:

- Evaluate the role of traditional 2D full field digital mammography (DM) in combination with digital breast tomosynthesis (DBT) for breast cancer screening
- Assess the quality and diagnostic value of traditional DM and synthetic 2D images (sDM) used in combination with DBT
- Discuss strategies for implementing sDM/DBT into clinical practice

Jointly provided by

This activity is supported by an independent educational grant from Hologic, Inc.

ACCME Accreditation Statement

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Postgraduate Institute for Medicine and International Center for Postgraduate Medical Education. The Postgraduate Institute for Medicine is accredited by the ACCME to provide continuing medical education for physicians.

Credit Designation

Physicians

The Postgraduate Institute for Medicine designates this enduring material for a maximum of 1.0 AMA PRA Category 1 Credit(s)™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

SA-CME: This activity meets the criteria for self-assessment toward the purpose of fulfilling requirements in the American Board of Radiology (ABR) Maintenance of Certification Program.

The European Accreditation Council for CME (EACCME®)

The UEMS-EACCME® has mutual recognition agreements with the American Medical Association (AMA) for live event and e-learning materials. For more information, go to http://www.uems.eu/uems-activities/accreditation/eaccme

Radiologic Technologists

This program has been approved by the American Society of Radiologic Technologists (ASRT) for 1.0 hour of ARRT Category A continuing education credit.
How to Participate

There are no fees or prerequisites to participate in this program.

- Click ENROLL NOW, CONTINUE, CONFIRM ORDER, and ACCESS COURSE NOW.
- Click on the blue link. Complete the precourse questions and SUBMIT.
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Faculty

Emily F. Conant, MD
Division Chief, Breast Imaging
Vice Chair, Faculty Development, Radiology
Professor of Radiology at the Hospital of the University of Pennsylvania

After attending medical school at the University of Pennsylvania School of Medicine, Dr. Conant went on to complete her residency and fellowship in thoracic and breast imaging at Penn. She began her career at Thomas Jefferson University Hospital and nine years later returned to Penn as Chief of Breast Imaging.

Dr. Conant, a pioneer in the development of digital mammography, is a leader in research on the use and benefits of early mammography screening and on the role of multimodality breast imaging. As an internationally known clinician and researcher, Dr. Conant has received grants from the National Institutes of Health to compare standard surgical biopsy with digital mammography and stereotactic core breast biopsy. She has published more than 150 peer-reviewed articles on topics ranging from novel imaging technologies; the assessment of disparities in access to imaging; and quantitative analysis of multimodality breast images to guide personalized screening. In addition to her clinical and research responsibilities, Dr. Conant continues to guide faculty governance and organizational change at the Perelman School of Medicine at Penn.

Dr. Conant is a fellow of the Society of Breast Imaging and a member of a multitude of professional organizations, including the American Roentgen Ray Society, National Association of University Radiologists, International Digital Mammography Development Group, and the Radiological Society of North America.

Dr. Conant has also been recognized for her outstanding contributions to the field of breast imaging by Philadelphia Magazine, America’s Top Doctors, and Best Doctors in America. She has been a featured expert in the national media, including appearances on Good Morning America, CBS News, USA Today, The New York Times, and Redbook.
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