

Pearls in Surgery: Women's Health Edition

October 21, 2017



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No Disclosures

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during their lifetime



Second leading cause of cancer
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Objectives

- When?
 - Screening guidelines
- How?
 - Digital breast tomosynthesis, aka “3D” mammogram
- Who?
 - High risk patients

SCREENING GUIDELINES

Biannual screening starting at 50 - USPSTF 2009

Annual screening from 45-54,
Biannual screening from 55+ - ACS 2015

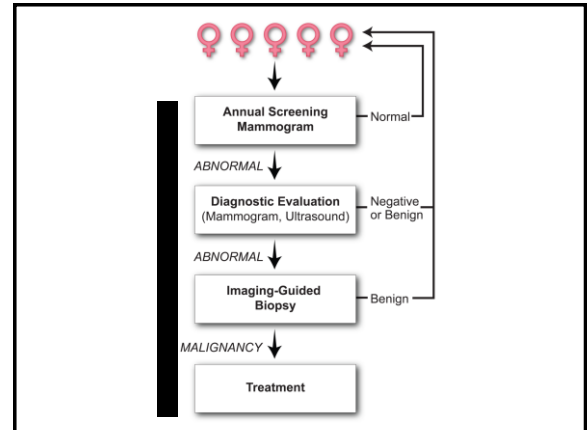
All recommendations state that annual screening
starting at age 40 saves the most lives.

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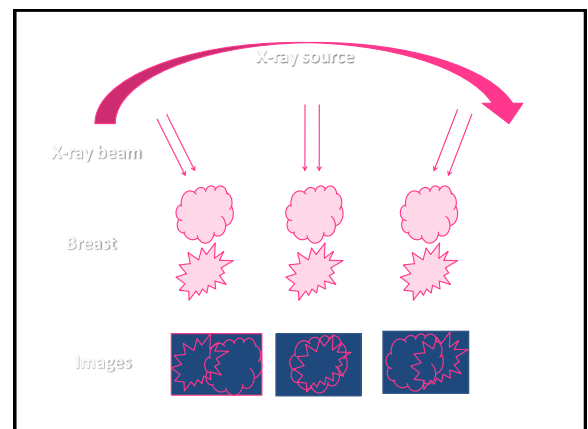
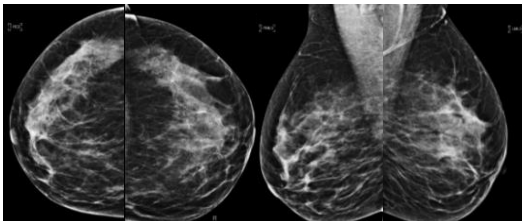
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screening at 40, and obtain annual screening, if
desired.



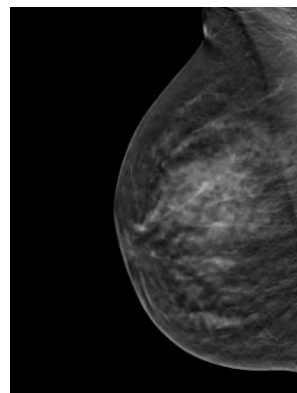
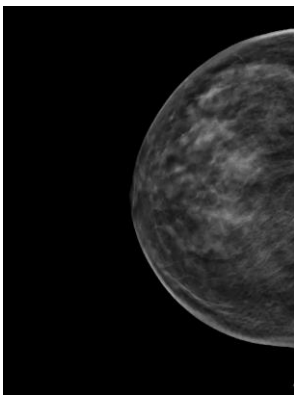
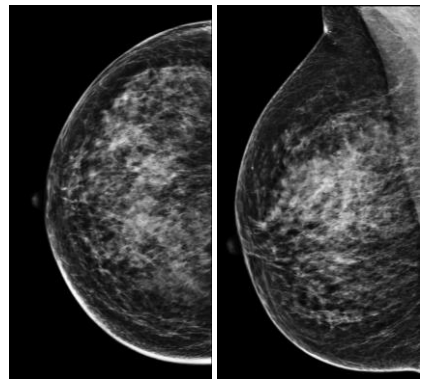
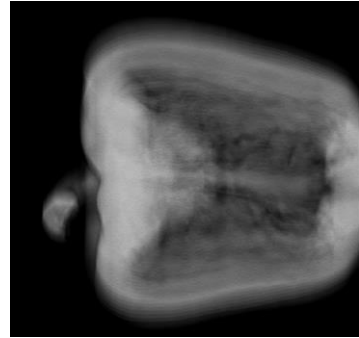
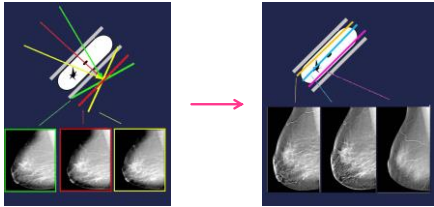
HOW? DIGITAL BREAST TOMOSYNTHESIS: AKA 3D MAMMOGRAM

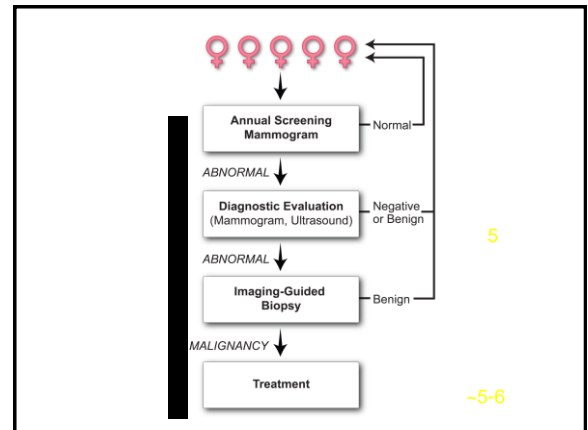
Screening MG – now in 3D



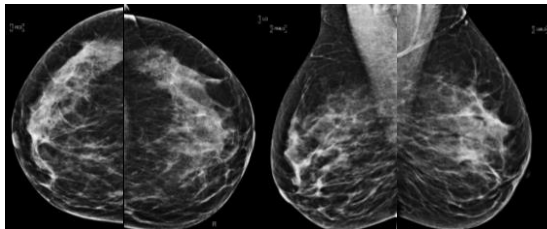
Digital tomosynthesis

Those views are then used to reconstruct the image into 1 mm "slices"





Screening MG – better in 3D



WHO? HIGH RISK WOMEN

Risk → screening paradigm

Average risk

- Annual screening mammography*

High risk

- Annual screening mammography*
- PLUS
- Annual screening breast MRI

* w/digital tomosynthesis

Who is high risk?

- BRCA mutation
 - 1st degree relative of BRCA carrier, but untested
- Radiation to chest between ages 10 & 30
- Cancer syndromes
 - Li Fraumeni; Cowden; Bannayan-Riley-Ruvalcaba
- Calculated lifetime risk >20%
 - Gail, Tyrer-Cuzick, BRCAPRO, Claus

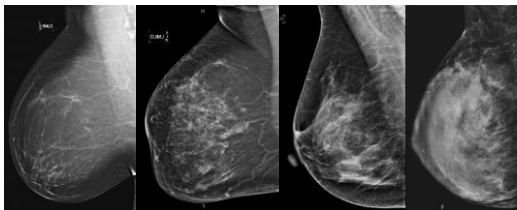
Elements of breast cancer risk

- ☐ Age
- ☐ Family history
- ☐ Reproductive factors
 - ☐ Menarche, childbearing, menopause
- ☐ BMI
- ☐ Breast density
- ☐ EtOH use, smoking
- ☐ Breast procedures: age/results

Elements of breast cancer risk

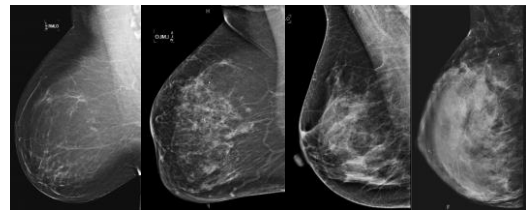
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Breast density: a spectrum



1. Almost entirely fat
2. Scattered areas of fibroglandular density
3. Heterogeneously dense
4. Extremely dense

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Screening for Breast Cancer

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Question#1

- At what age should screening mammography be offered for average risk women?
- A. 30
 - B. 40
 - C. 50
 - D. 60

Question#2

- What modality is considered the best screening modality to rule out breast cancer?
- A. MRI
 - B. Ultrasound
 - C. 3D mammography
 - D. Breast Exam

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