Breast Health Education PANEL DISCUSSION



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Personal Experience Share





Screening Guidelines and Personalized Care Models

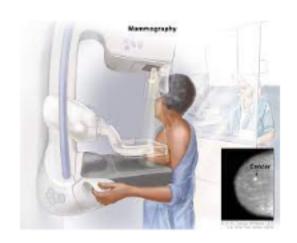




What is "Screening"

- Screening refers to tests and exams used to find a disease in people who don't have any symptoms (like a lump in the breast that can be felt).
- The goal is to find cancer early.
- Breast cancers found this way are usually smaller and less likely to be spread outside the breast.





How Do We Screen?



Mammogram

- Low-dose x-rays of the breast
- Find breast changes that could be cancer early
- If something is found on a screening mammogram, another test may be needed

Magnetic Resonance Imaging (MRI)

- Uses magnets and radio waves to take pictures of the breast
- Used with mammograms for those at higher risk
- MRIs may appear abnormal even when there is no cancer



Other Screening Tests



Clinical Breast Exam

- Examination by a provider, who uses their hands to check for concerning changes
- May be offered during shared decision-making approach

Breast Self-Awareness

- Being familiar with how your breasts look and feel
- Report any changes that you notice to your health care provider.
- Breast self-examination is not recommended*.

^{*}Having a clinical breast exam or doing a breast self-exam has not been found to lower the risk of dying from breast cancer

Personalization

Factors to Consider

- Family history
- Genetics
- Ethnicity
- Hormones: first and last period, birth control, HRT, pregnancies
- "Lifestyle"- smoking, alcohol
- Radiation exposure
- Breast density
- Personal preferences

Shared Decision-Making

- The different options for screening should be explained and made clear to you in conversation with a healthcare provider that you understand
- This includes the risks and benefits of all screening options
- Your opinion matters! Ask why
- All women need to be informed about the best screening options for them.

Screening Guidelines in Average Risk Women*

	Age to Start	Age to Stop	Interval	
ACR	40	<10 years left to live	Annual	
ACS	40-44 45-54 55+	<10 years left to live	Optional yearly Yearly Every year or every other year	No breast exams
ACOG	Consider at 40, not later than 50	75, then optional	Every year or every other year	Breast exam <i>may be</i> offered starting at 25
NCCN	40	optional	annual	
USPSTF	50 (40)	74	Every 2 years	

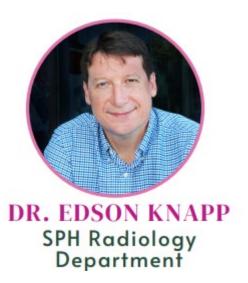
^{*}Does not include data on trans men or trans women, those at high risk, or men

Why the Discrepancies?



- False negative vs false positive
- Breast tissue density
- Emotional costs
- Costs to healthcare system
- Effect on outcomes (survival and treatment efficacy)

Mammogram Myths and What to Expect If You Have Abnormal Results





Mammogram Myths

A mammogram can cause breast cancer or spread it

Antiperspirants and deodorants cause breast cancer

Finding a lump in your breast means you have breast cancer

Men do not get breast cancer; it affects women only

Mammogram Myths

Mammograms are painful

• A man invented mammograms (Two French engineers Jean Bens and Emile Gabbay)

A mammogram will expose me to an unsafe level of radiation.

If I don't have a family history of breast cancer, I won't get it.

If you have a family history of breast cancer, you are likely to develop breast cancer, too

Mammogram Myths

A 3-D mammogram is the same as a traditional mammogram.

I had a normal mammogram last year, so I don't need another one this year.

I have dense breasts so mammograms don't work for me

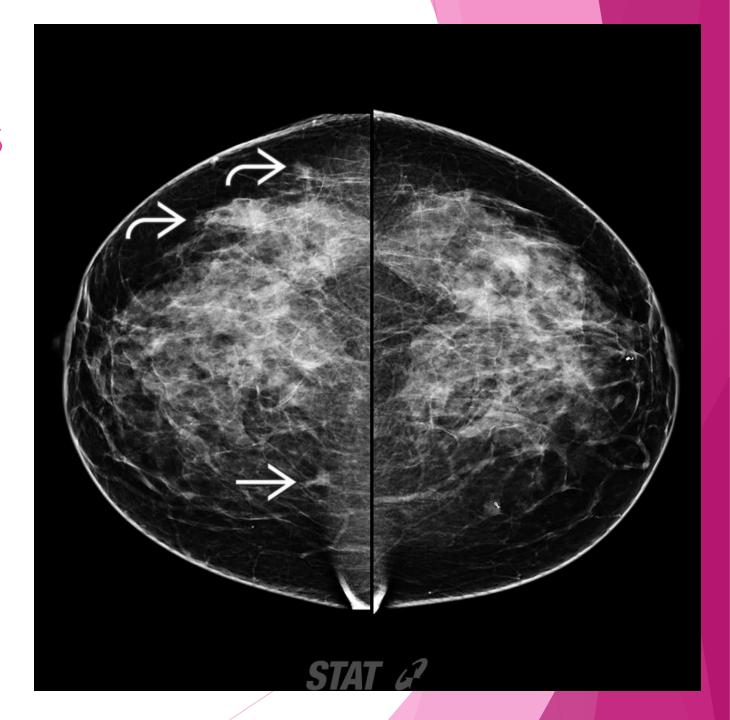
Screening vs. Diagnostic Mammograms

- Screening mammogram (Annual)
 - ▶ No concerns (lumps, discharge, new pain)
 - American College of Radiology (ACR), National Comprehensive Cancer Network (NCCN): Every year beginning at age 40 and continuing as long as in good health.
- Diagnostic mammograms (Diagnostic evaluation & can include ultrasound)
 - Patients or physicians have felt a change in the breast or have an area of concern
 - ► Had a recent abnormal screening mammogram
 - Are having follow up due to an abnormal finding or surgery (3,6,12 month follow up)



What to expect if you have abnormal results

- Overlapping Tissue
- Shark vs Dolphin
- Your breasts change every year. Change does not mean cancer.
- Special mammographic views and/or ultrasound specifically to evaluate the area of change or concern
- Other imaging or biopsies
 - Breast MRI
 - Stereotactic Biopsy
 - Ultrasound-guided Biopsy



References

- https://www.nationalbreastcancer.org/breast-cancer-myths/
- ► 6 Mammogram Myths | Johns Hopkins Medicine

Current Surgical Options









Breast Cancer Surgical Options

Breast Health Panel Discussion South Peninsula Hospital Dr. Sherry Johnson, DO, FACS 10/24/2023

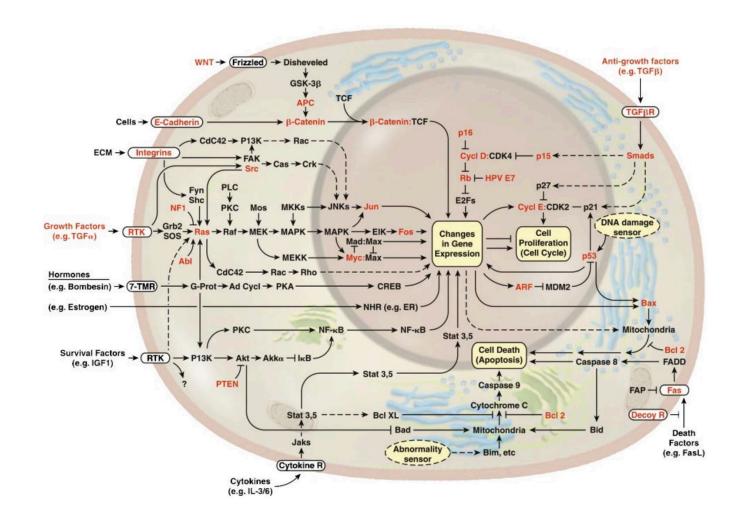








Cancer development, growth, survival and metastasis involves multiple interrelated pathways



Cell, Vol. 100, 57-70, January 7, 2000, Copyright ©2000 by Cell Press

New Breast Cancer Consultation

- 1. Name it
- 2. Stage it
- 3. Figure out if needs additional imaging
- 4. Refer to Medical Oncology
- 5. Refer to Radiation Oncology
- 6. Genetic testing
- 7. Surgical options (+ achieving an acceptable cosmetic outcome)

Surgical options

Breast conservation therapy

Partial mastectomy, lumpectomy, tumorectomy, breast reductions

Mastectomy

• Simple/total, unilateral/bilateral, with or without reconstructions







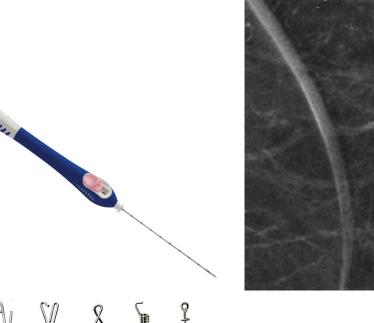








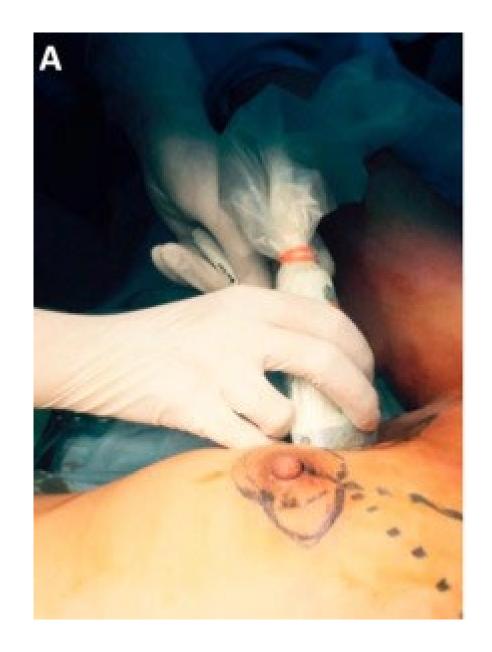
How do we find the tumor in the OR?





Ultrasound localization



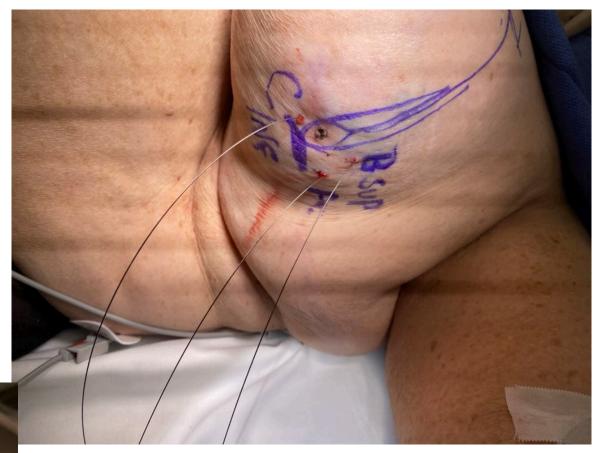


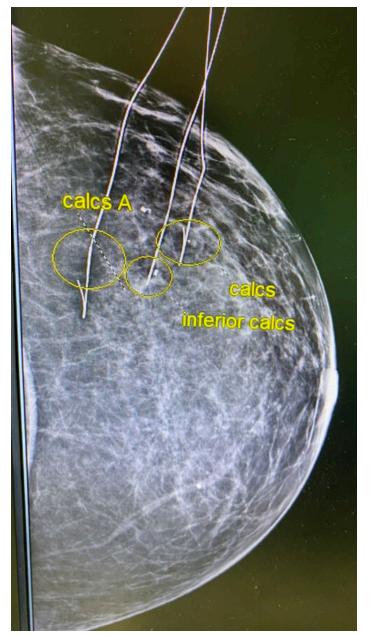
Wires

Cheap

Patients cannot start at 730am because radiology places wires in the morning





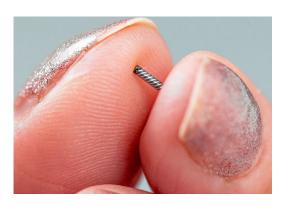


Wire free localization

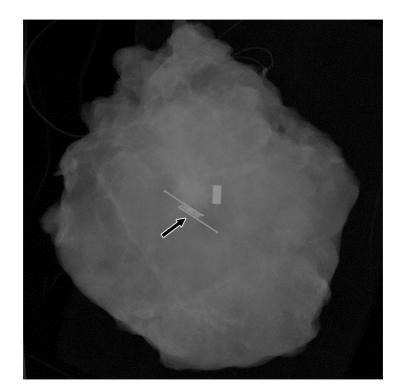








Uses radar signal or magnet, not radiation Can be placed days/weeks earlier than surgery

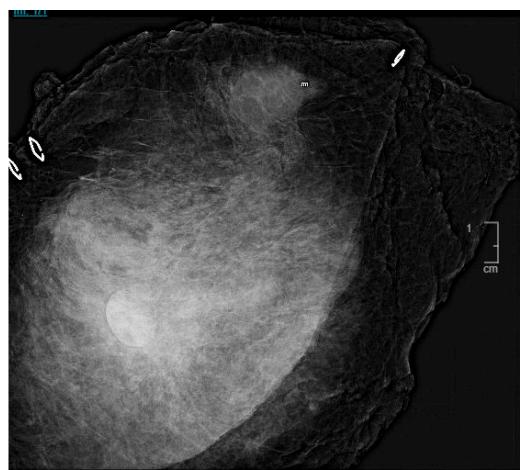




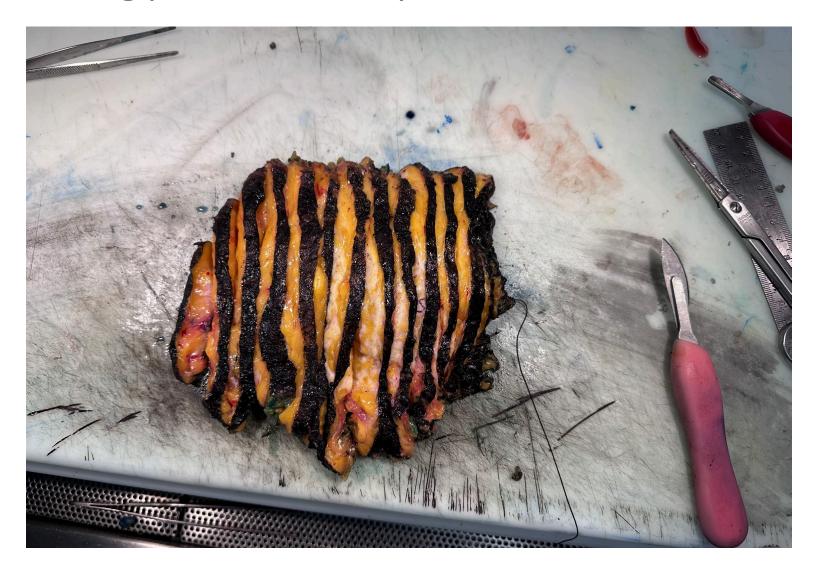
Intraop specimen imaging







Pathology Gross Inspection



Lymph nodes biopsies

Axillary node dissection used to be standard of care prior to landmark breast cancer trials in the 1990s

B Lymphatic drainage of the breast A Anatomical landmarks of the axilla Level 3 nodes Level 2 nodes Breast tissue Pectoralis major muscle Subclavian artery Brachial and vein Interpectoral (Rotter) nodes Pectoralis minor Axillary artery and vein Internal mammary Level 1 nodes nodes Latissimus dorsi muscle Thoracodorsal bundle (nerve, artery, vein) Long thoracic nerve

FIGURE 1. ANALOHIICAL LANGHARKS OF THE AXIIIA AND LYMPHAGE DIGHTAGE OF THE DEEDST

Complications of axillary node dissections

Lymphedema, chronic pain, nerve damage





Sentinel lymph node biopsy-staging the axilla



Technetium is a radioactive metal

Looking for the first nodes where cancer is likely to spread



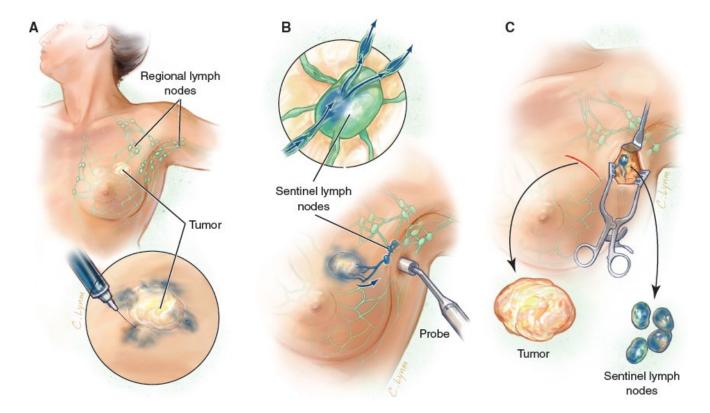






Dyes





Back to the OR for re-excision of margins

Journal List > Int J Clin Exp Pathol > v.16(2); 2023 > PMC9993018

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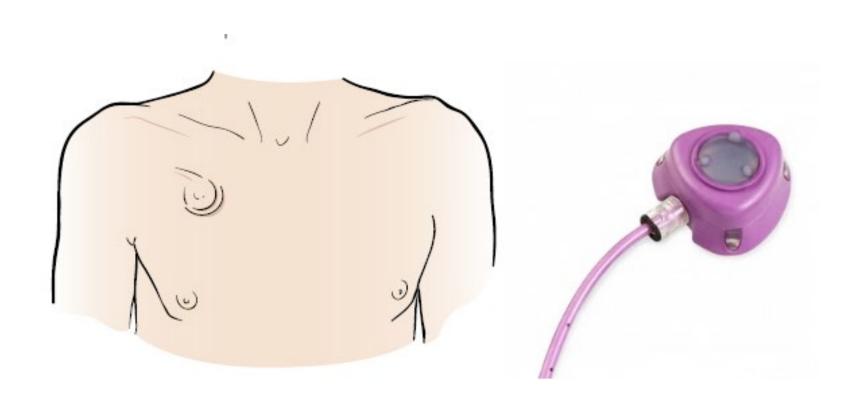
PMID: 36910891

Pathologic evaluation of lumpectomy resection margins for invasive breast cancer: a single institution's experience

Yong Zhang,1,* Jie Wu,2,* Wei Huang,1 Ying Wang,1 Lidys Rivera Galvis,1 Tiane Chen,1 Bing Han1

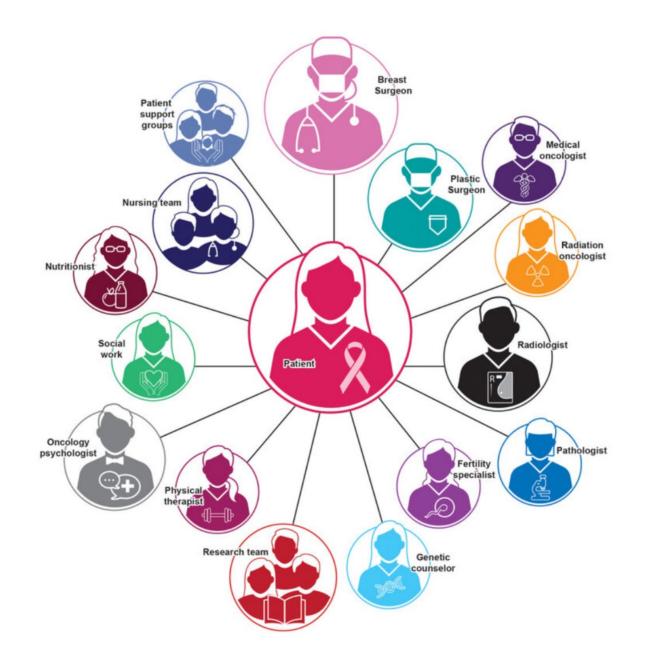
Our analysis on lumpectomy is representative of a typical high-volume breast surgical practice composed of more than 4 dedicated breast surgeons and 5 breast surgical pathologists for the patient population at the area of central Pennsylvania. In our current study, the rate of positive margin was slightly low at 13.5%, as the majority of studies have demonstrated a rate of positive margins ranging from 20% to 40% [22,23]. Due

Mediports



After surgery

- Pathology review
 - Breast Multi-disciplinary Cancer Conference
- Medical Oncology
- Radiation Oncology
- Surveillance Imaging





Thank you for coming tonight!

This presentation will be available online for later viewing

