Breast Cancer Screening/Imaging

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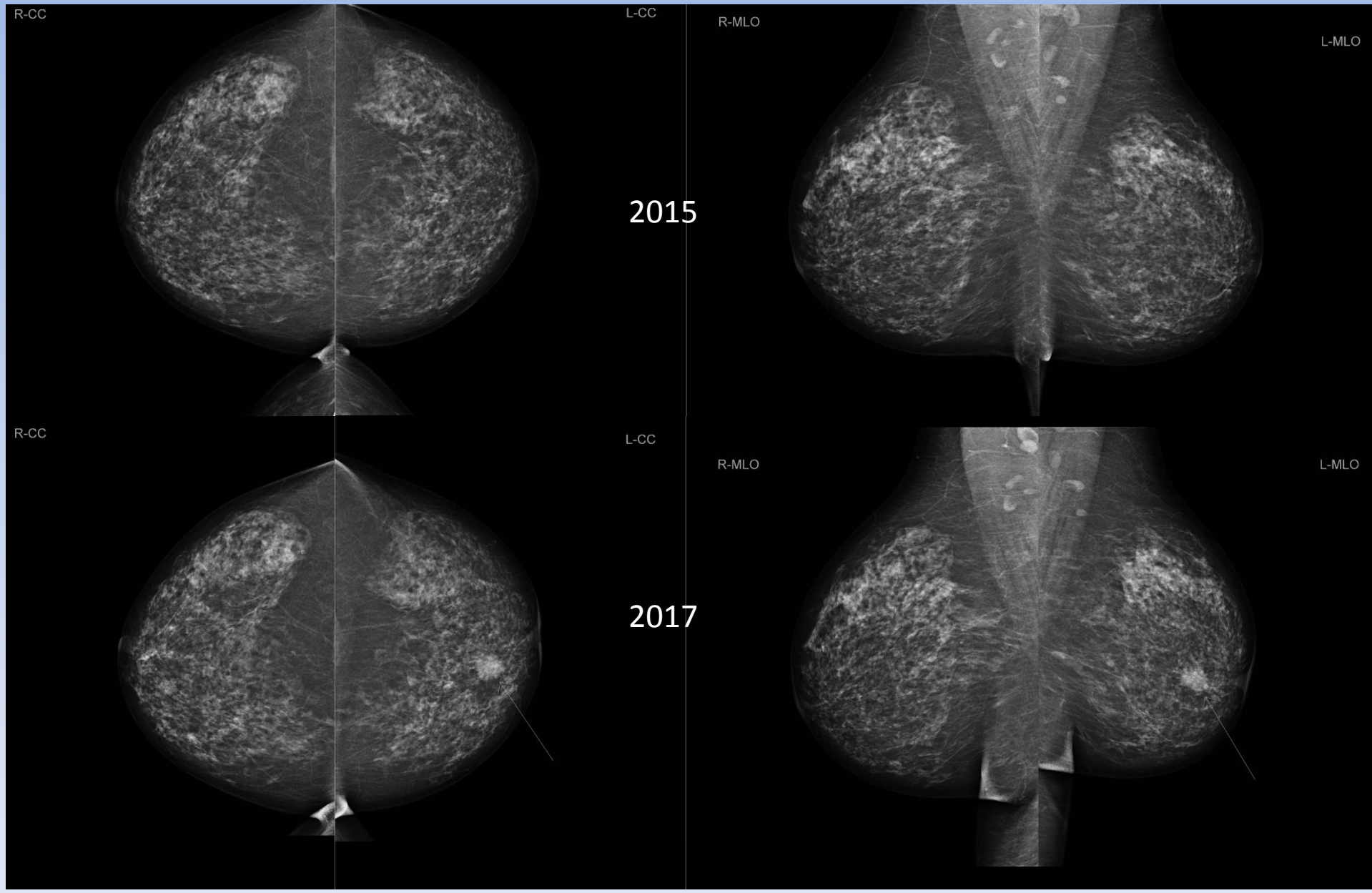
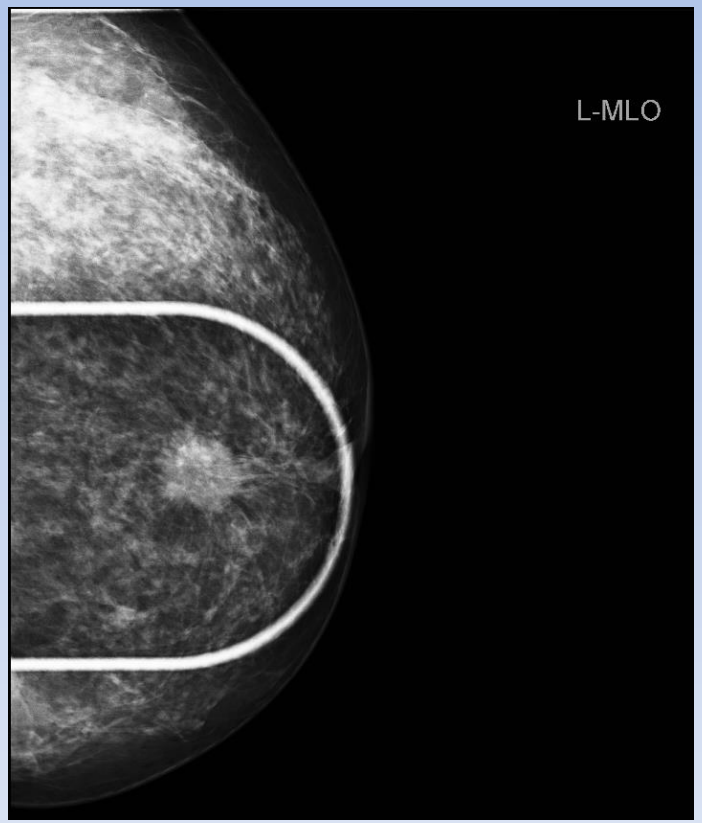
Patient Case

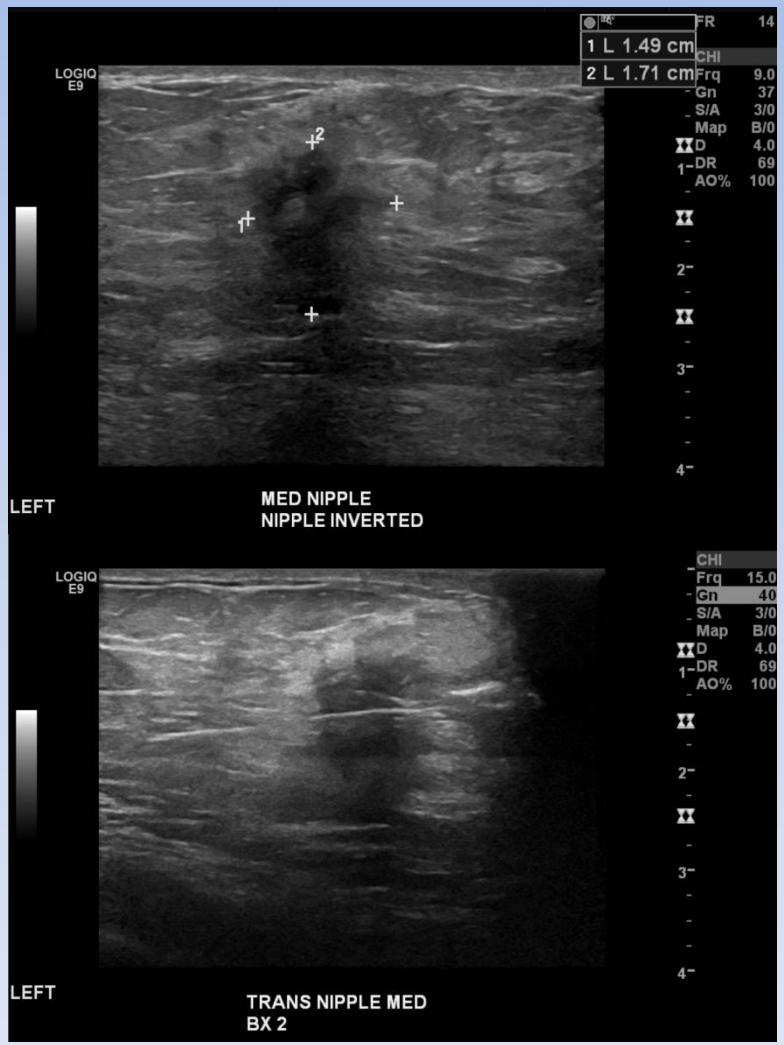
- F 60 years young.
- Routine screening @ 2 years.
- No symptoms reported.


R-CC
L-CC
R-MLO
L-MLO
2015
R-CC
L-CC
R-MLO
L-MLO
2017

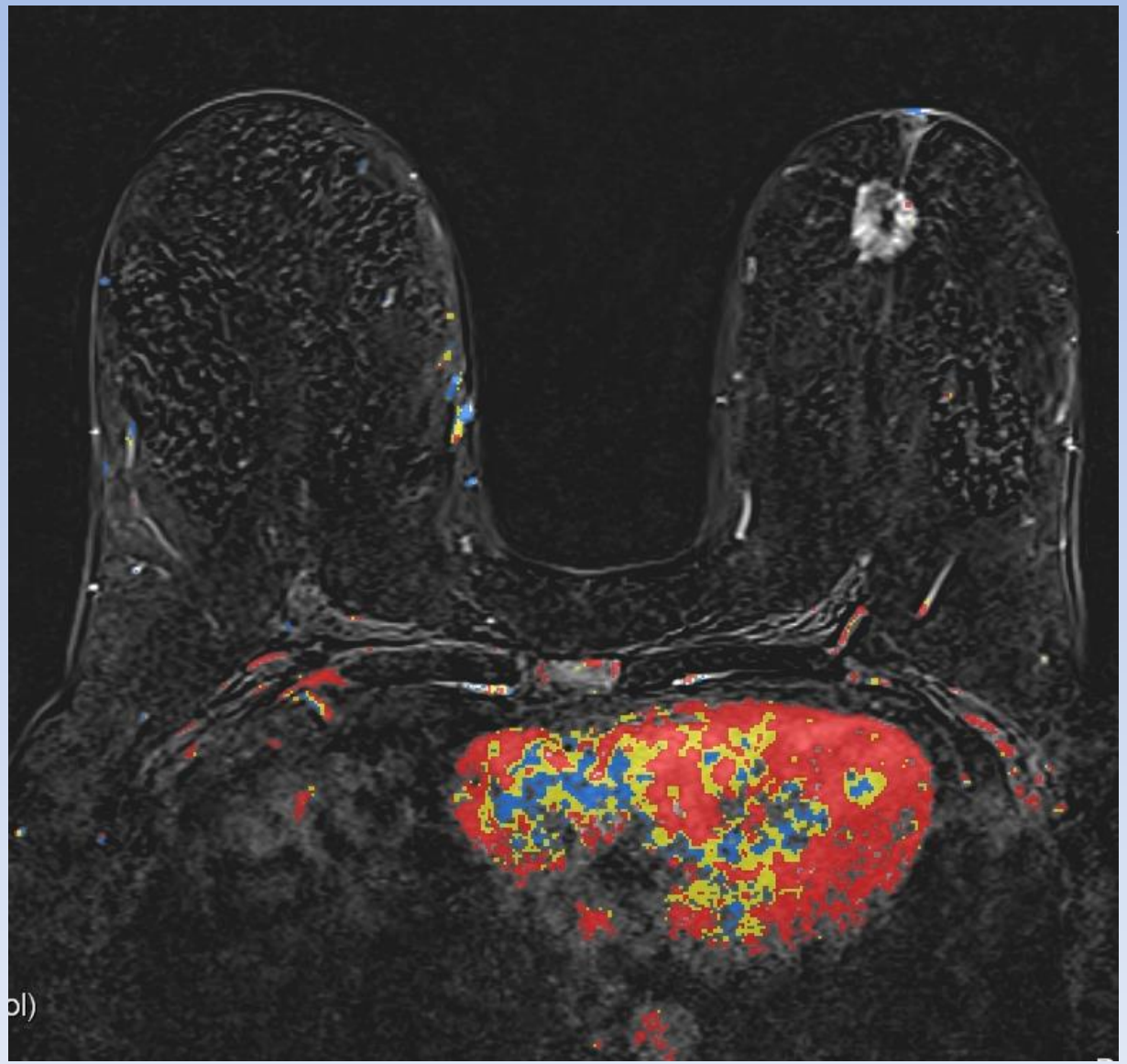
Same Day Workup and Biopsy

- Coned views and U/S





MRI



Objectives (in 10 minutes)

- Breast Cancer/Screening Data.
- Screening Guidelines for:
  - Average Risk Women
  - Past Breast Cancer Patients
  - 40-50 years old age group.
- Breast Assessment Program.
- Mammography Reporting Guidelines
  - What do I do with this report?!

Breast Cancer Data and Screening

- Breast CA most common female CA worldwide. Breast CA is second only to lung CA for cancer deaths in women.
- In ON in 2016, 9,900 new cases. 1,850 deaths.
- 1 in 8 Ontario affect – lifetime.
- OBSP (organized screening as oppose to opportunistic screening).
- Effectiveness of screening with mammography
  - 21% reduction in breast cancer mortality with regular screening in 50-69 years old who are at average risk (85% of breast CA is in average risk women).

Breast Screening

Presenting without screening

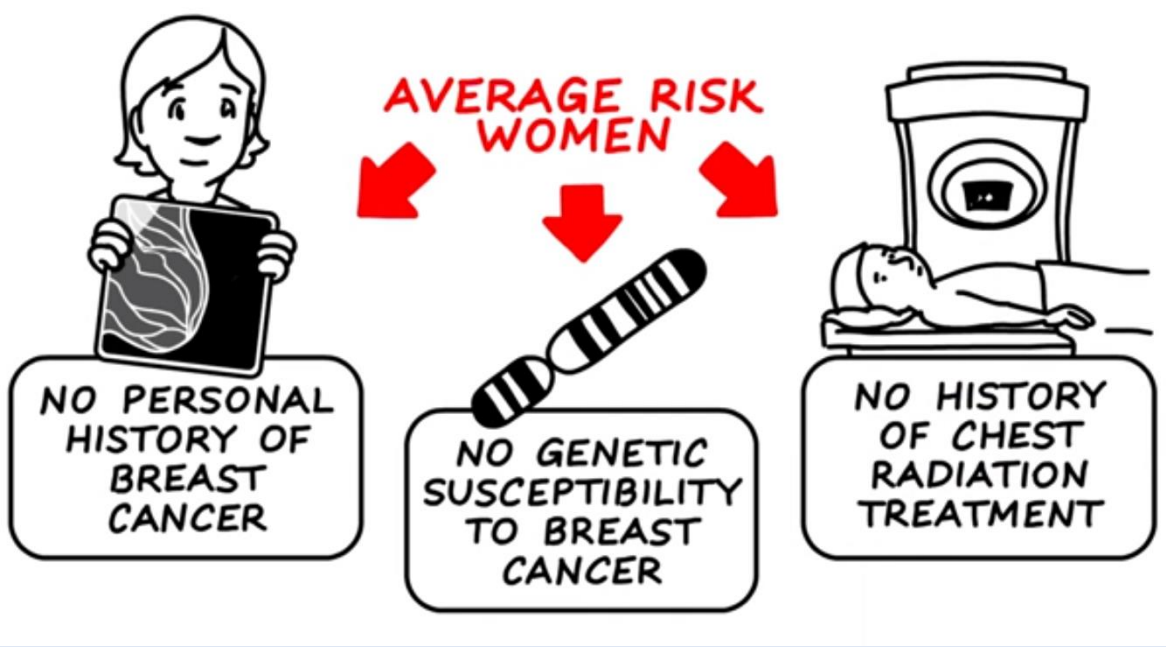
Getting to keep things where they belong …. With screening

Role(s) of Primary Care in Screening

- Identify screen-eligible populations and recommend appropriate screening based on guidelines and patient history.
- Manage follow-up of abnormal screening test results.
- Manage post recovery/surviorship, or end-of-life care.

Screening Recommendations

- Average Risk (majority of women):
  - Women 50 to 74 y.o. – biannual mammography.
  - 51% of CA in women 50-69 y.o.
  - 32% of CA in women 70 and older.



Screening Recommendations

- High risk women (screening 30-69 y.o.) 1 of the following (needs MD referral):
  - Are known to be carriers of a deleterious gene mutation (e.g., BRCA1, BRCA2)
  - Are the first degree relative of a mutation carrier (e.g., BRCA1, BRCA2) and have declined genetic testing
  - Are determined to be at ≥ 25% lifetime risk of breast cancer -- must have been assessed using either the IBIS or BOADICEA risk assessment tools, at a genetics clinic
  - Have received chest radiation treatment (not chest x-ray) before age 30 and at least 8 years previously.

Breast Assessment Program

- ~ Separate from OBSP screening.
- Referrals from MDs
  - Patient symptomatic
    - E.g. palpable lump.
  - For work-up of abnormal findings on mammography or ultrasound with same visit results +/- biopsy.
- Automatic referral from Radiology (in hospital)
  - Work-up of abnormal imaging.

Breast Reporting – what on earth is "BIRADs"

Breast Imaging Reporting and Data System

Final Assessment Categories			
Category		Management	Likelihood of cancer
0	Need additional imaging or prior examinations	Recall for additional imaging and/or await prior examinations	n/a
1	Negative	Routine screening	Essentially 0%
2	Benign	Routine screening	Essentially 0%
3	Probably Benign	Short interval-follow-up (6 month) or continued	>0 % but ≤ 2%
4	Suspicious	Tissue diagnosis	4a. low suspicion for malignancy (>2% to ≤ 10%) 4b. moderate suspicion for malignancy (>10% to ≤ 50%) 4c. high suspicion for malignancy (>50% to <95%)
5	Highly suggestive of malignancy	Tissue diagnosis	≥95%
6	Known biopsy-proven	Surgical excision when clinical appropriate	n/a

Survivor Imaging

- Evidence Summary 15-15 Breast Screening for Survivors of Breast Cancer - September 2017 CCO paper
- Limited evidence leads to the conclusion that surveillance mammography on an **annual basis** is reasonable for survivors of breast cancer who have undergone breast-conserving surgery.
- There was insufficient evidence to recommend the use of mammography for surveillance of women who have undergone breast reconstruction; however, there may be a theoretical benefit in women who have received autologous tissue reconstructions and who have a moderate to high risk of recurrence.

Thank you!

Perceived 'Barriers' to Mammography

Problem	*Response*
Too Painful	Can take whatever pain medication they normally use one hour prior to screening or discuss with MRT and work together for best images.
Breast Tenderness	• Decrease caffeine consumption (coffee, tea, soda, etc.) • Book appointment for after last period when breasts least tender
Breast Tear	Does happen occasionally – skin gets thinner with age. Have patient notify Tech at appointment of concern
Wheelchair	Can be done in seated position (specialty chair)
Location Change	Records are transferrable between sites. Previous image comparison is a radiology best practice and are done at part of quality assurance.
Pacemaker	Notify site when booking
Other Helpful Tips to Advise Patient	
Do not wear deodorant or powder (can appear as calcifications on x-rays and cause unnecessary work-up)	
Wear two piece outfit for ease of testing	
Not required to bring medications	
Can always call site to ask any questions prior to appointment	
Mammography take approximately 10 – 15 minutes to complete	