Breast Cancer Screening and Treatment 2009

Mrs Belinda Scott
Breast Surgeon
Breast Associates
Auckland
BREAST CANCER
THE PROBLEM

- 1.1 million women per year
- 410,000 deaths each year
- Increasing incidence
Breast Cancer: Facts

- Lifetime risk 1 in 9
- Mean age 61 yrs
- 34% are under 40 yrs
- 66% are OVER 50 yrs
- Only 8% are under 40 yrs
- On the increase
Breast Cancer: Facts

- Leading cause of death in women 30 to 50 yrs
- Leading cause of death from Cancer in non-Maori women
- Second after Lung Cancer in Maori women
Mammogram

- 1. Diagnostic

- 2. Screening appropriate referral!!

- 3. Digital
Screening

- Well women
- Breast Screen Aotearoa 45yrs to 69yrs
- Personal advise 40yrs to 70yrs
- Different for high risk group
Mammogram how often

- Density is a term used to describe the amount of breast tissue showing well on a mammogram.
- High density means it is more difficult to see through and thus more likely to “miss” a cancer.
- 1 to 2 yrly depends not just on age but also therefore on density of the breast tissue.
Density breast tissue

- HRT use more dense
- Low body mass index more dense
- Younger
- Pregnant
- Just before period
- ( evidence for MRI after period when tissue is less dense )
Breast Screen Aotearoa

196,111 women screened
(61% of those eligible)

9830 called back
(of which one third had a needle sample)

1789 with breast cancer

75% node negative

40% < 10mm
40 TO 49 SCREENING MAMMOGRAPHY

- SAVES LIVES
- Lower risk of dying by 15 to 20%

- Benefits
- Harms
- Cost Effectiveness
## 40 to 49 TRIALS

<table>
<thead>
<tr>
<th>STUDY</th>
<th>No. Women</th>
<th>Follow Up (yrs)</th>
<th>AGE</th>
<th>Relative Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIP</td>
<td>29,133</td>
<td>18</td>
<td>40 to 49</td>
<td>0.77</td>
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<tr>
<td>Edinburgh</td>
<td>22,396</td>
<td>12.6</td>
<td>40 to 49</td>
<td>0.81</td>
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<tr>
<td>Kopparberg</td>
<td>14,659</td>
<td>15.2</td>
<td>40 to 49</td>
<td>0.67</td>
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</table>
### 40 to 49 TRIALS

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<tr>
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<th>Follow Up (yrs)</th>
<th>AGE</th>
<th>Relative Risk</th>
</tr>
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<tbody>
<tr>
<td>Malmo</td>
<td>25,770</td>
<td>12.7</td>
<td>45 to 49</td>
<td>0.64</td>
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<td>Stockholm</td>
<td>22,170</td>
<td>11.4</td>
<td>40 to 49</td>
<td>1.01</td>
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<tr>
<td>Gothenburg</td>
<td>25,938</td>
<td>12</td>
<td>40 to 49</td>
<td>0.56</td>
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<tr>
<td>Canadian</td>
<td>50,430</td>
<td>13</td>
<td>40 to 49</td>
<td>1.06</td>
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<tr>
<td>Swedish</td>
<td>129,750</td>
<td>15.8</td>
<td>40 to 49</td>
<td>0.80</td>
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40 to 49 BENEFITS

• Need to screen 1792 women to prevent one breast cancer death
• ( over 50  screen 838 to prevent one )

• Start screening at 40 shows a 16% reduction 10 yrs later and 27% by 15yrs
WHY LESS BENEFIT UNDER 50 YEARS?

• Reluctance of women to screen

• Lower incidence in this group

• Denser breasts harder to find tumours

• Faster tumour growth
40 to 49yrs HARM

- Unnecessary Biopsies (False Positives)
  1792 screens To save ONE life

- Anxiety
- Over diagnosis (DCIS)
- False Negatives
## False Positive 40 to 49

<table>
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<tr>
<th></th>
<th>False Positive</th>
<th>Biopsy</th>
<th>diagnose</th>
<th>Life saved</th>
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<tr>
<td>40yrs</td>
<td>560</td>
<td>190</td>
<td>15</td>
<td>2</td>
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<tr>
<td>50yrs</td>
<td>470</td>
<td>190</td>
<td>28</td>
<td>4</td>
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<tr>
<td>60yrs</td>
<td>360</td>
<td>190</td>
<td>37</td>
<td>6</td>
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</table>
WHY FINDING CANCER EARLY IMPORTANT

- Less aggressive treatment after surgery i.e. Less need for Radiotherapy and Chemotherapy
- More possibility of conserving the breast
- Productivity
40 to 49 COST EFFECTIVE?

- Five times the cost of older age group
- $105,000 per year of life saved
- Improved life expectancy by 2.5 days at a cost of $676 per women.
- Reassurance cost
- Productivity loss
Breast Lumps - Investigations

- >30 yrs – mammogram +/- ultrasound
- <30 yrs – ultrasound

- Imaging is not enough!
- Triple Test – clinical, imaging and biopsy
- Concept of concordance
Breast Thickening

- Review again after period
- Compare side to side
- Note any other features? Skin change or nipple changes sit up hands above head
- Watch out for the LOBULAR cancer missed on imaging and sometimes on biopsy
- Review!
Referral

- Mention age, family history, pain, growth
- If worried about cancer then say so !!
- Over 40 yrs will be offered mammogram
- In private over 30 yrs with symptom will have mammogram
- Only Ultrasound if under 30 yrs ( evidence of damage from radiation in younger women from mammogram)
Breast Examination

- Physician
- Nurse
- Self

- Now promote self awareness rather than examination
Who should you examine??

• Those with a symptom
• Then send to diagnostic clinic NOT screening
• High risk
• Anyone asking you to
First Point

• Spend you time and effort on getting well women aged 50 to 70 yrs to breast screening

• We need the rate to be above 70% to make a difference

• Older women get breast cancer
Breast cancer & family history

- Genes-BRCA1
  - BRCA2
  - 5-10% women with breast cancer
  - Increased risk of breast/ovarian Ca
    Breast Ca 60-80% lifetime risk

- Identify at risk, as screening altered
High risk family history

• 2 or more 1st/2nd degree relatives on the same side of the family <50

+ 1 or more high risk features:

<40 at diagnosis

bilateral breast cancer

breast and ovarian Ca in same pt

Ashkenazi Jewish ancestry
High risk family history

• Women at high risk need to be referred for assessment/counselling
• Screening is commenced 10 years younger than age of youngest FDR at diagnosis.
• Combination of mammogram, MRI and ultrasound depending on age
• Gene testing if appropriate
Breast lumps-characteristics

- Position and size
- Dominant mass vs lumpiness

**BENIGN**
- Discrete
- Soft
- Mobile
- Smooth

**MALIGNANT**
- Ill-defined
- Firm/hard
- Fixed
- Irregular
Clinical Examination
Clinical Examination

- Take top cloths off
- Examine sitting up hands above head
- Examine lying down
- Warm hands warm heart
- Use gentle massage four fingers
- Don’t forget nipple area under arm
Clinical Examination

- Axilla
- All of breast
- Both breasts
- Time of month
- Compare sides
- Listen to patient
Triple Test

• Still important

1. Clinical Examination
2. Imaging:
   - Ultrasound
   - Mammogram
   - MRI (dense breasts, young, family history)
3. Biopsy:
   - FNA
   - Core
Imaging of limited use

- Thermography see statement
- PET scan not for screening most useful for detection of mets
Second point

• Do not do FNA unless it is done with imaging

• Triple test do not forget

• Listen to your patient
Breast Lumps - Overview

• Always examine patient

• Imaging < 30, ultrasound scan
  > 30, mammogram +/- US

• Imaging is not enough!
  - if lump discrete or suspicious, refer to breast specialist for assessment +/- biopsy

• Referral to Breast Screen is not appropriate!
Treatment Breast Cancer

- Breast : Surgery
  - Radiotherapy
- The Body : Chemotherapy
  - Anti oestrogen
  - Immune therapy

The Self : yoga meditation counselling
Fibroadenoma - Management

- FNA or core biopsy usually advised
- Simple FA - no increased risk of Ca

- Excision is not advised unless:
  - Rapidly growing eg juvenile FA
  - Complex fibroadenoma
  - Unexpected histology eg Phyllodes
  - Patient request
Cysts - Management

• FNA considered if
  – Palpable lump
  – Pain / tenderness
  – Atypical features on imaging

• FNA should not be performed prior to imaging!

• 3/12 review if atypical features
Surgery

- Partial Mastectomy
- Full Mastectomy
- Axilla surgery: sentinel node: level 2 dissection
- Reconstruction: Immediate vs Delayed
SLNB  How I Do It?
Adjuvant Treatment

- Size  T1 (0 to 2 cm) T2 (2 to 5 cm)
- Grade  1, 2, 3
- Nodal status  ( N0 N1 N2 )
- Oestrogen /Progesterone Receptor
- Margins
- Her2 other markers
New Therapy

• Herceptin debate

• Aromatase Inhibitors
Ancillary programmes

- Pink Pilates
- Encore
- Sweet Louise (metastatic)
- Look Good Feel Better
- Counselling, lymph oedema specialist, yoga, mediation (Cancer Society)
- Other lymph oedema specialists
Auckland Breast Cancer Register

- All patients in Auckland area public and private
- Data with consent gathered for stats to improve future management within our community