Evaluating Locally Advanced Disease
Imaging Modalities

- Ultrasound
  - Axilla
  - Ipsilateral quadrant
- Diagnostic mammography
- MRI – If available
  - Limited
  - Enhanced
  - Maximal
Breast Ultrasound

- Palpable masses (+/- mammography)
- In US, initial study for palpable masses
  - Pregnant
  - Lactating
  - Less than age 40
- Cyst versus solid
- Solid masses: benign versus malignant features
Directed Breast Ultrasound
Diagnostic Ultrasound

RIGHT BREAST RADIAL 10 O'CLOCK 10 CM FN
Extent of Disease

Total Extent now 4.1 cm
Axilla
DIAGNOSTIC MAMMOGRAPHY

• Patients with breast signs or symptoms
• Patients with abnormality detected on screening mammogram
• Performed under the supervision of a radiologist

• Techniques:
  • Tailored exam using specialized views
  • Spot compression magnification mammography
  • Supplemented by targeted ultrasound
Breast MRI: Indications

- High Risk Screening
- Patients with diagnosed breast cancer
  - Extent of disease in breast with known cancer
    - Additional unsuspected disease in approximately (16%)
  - Contralateral breast screening for occult disease (4-5%)
  - Evaluation of treatment response
- Axillary metastatic adenopathy, unknown primary
  - Primary in the breast detected in approximately 60%
- Implant evaluation
Limitations

- Technical expertise to produce high quality images and interpret them
- Different equipment vendors and models
  - Delayed repair and maintenance
- Limited access, particularly in rural communities
Conclusions