BREAST INTERVENTION
AND
NEW AND EMERGING TECHNOLOGIES IN DIAGNOSTIC IMAGING

BARBARA M. PRESTON, M.D.
IMAGE GUIDED CORE BIOPSY

- STEROTACTIC CORE BIOPSY
  - SEATED VS. PRONE
  - AUTOMATED VS. VACUUM
  - 8, 11, OR 14 G
IMAGE GUIDED CORE BIOPSY

- ULTRASOUND
  - 14 G AUTOMATED
  - 11/8 G VACUUM
IMAGE GUIDED CORE BIOPSY

- MRI
IMAGE GUIDED CORE BIOPSY

THE CORE BIOPSY IS BENIGN—IS EXCISION NECESSARY?

- ATYPICAL DUCTAL HYPERPLASIA
- ATYPICAL LOBULAR HYPERPLASIA
- LCIS
- RADIAL SCAR
- CELLULAR FIBROADENOMA
- ?PAPILLOMAS
IMAGE GUIDED TUMOR MARKING

- FOR PATIENTS WHO WILL UNDERGO NEO-ADJUVANT CHEMOTHERAPY
- MARK AT TIME OF BIOPSY OR WHEN FIRST BECOMES NON-PALPABLE
NEEDLE LOCALIZATION

- GUIDANCE:
  - MAMMOGRAPHY
  - ULTRASOUND
  - MRI
- ONE OR MORE WIRES
TUMOR MARKING FOR NEOADJUVANT CHEMOTHERAPY

NEO-ADJUVANT CHEMOTHERAPY: GIVEN PRIOR TO DEFINITIVE SURGERY TO SHRINK THE TUMOR
UNPROVEN/ NOT USEFUL TECHNOLOGY

- THERMOGRAPHY
NEW TECHNOLOGIES

- DIGITAL MAMMOGRAPHY
- ABLATION THERAPY
- FISH GENE PROFILING
- ELASTOGRAPHY
- LASER IMAGING
NEW TECHNOLOGIES

- FUSION IMAGING
NEW TECHNOLOGIES

- PET
NEW TECHNOLOGIES

- TOMOSYNTHESIS
  - Elimination of overlapping structures and shadows
  - Clearer lesion margins
  - Reduced call-backs
  - Single compression examinations
TOMOSYNTHESIS- THE NEW FRONTIER IN DIGITAL MAMMOGRAPHY