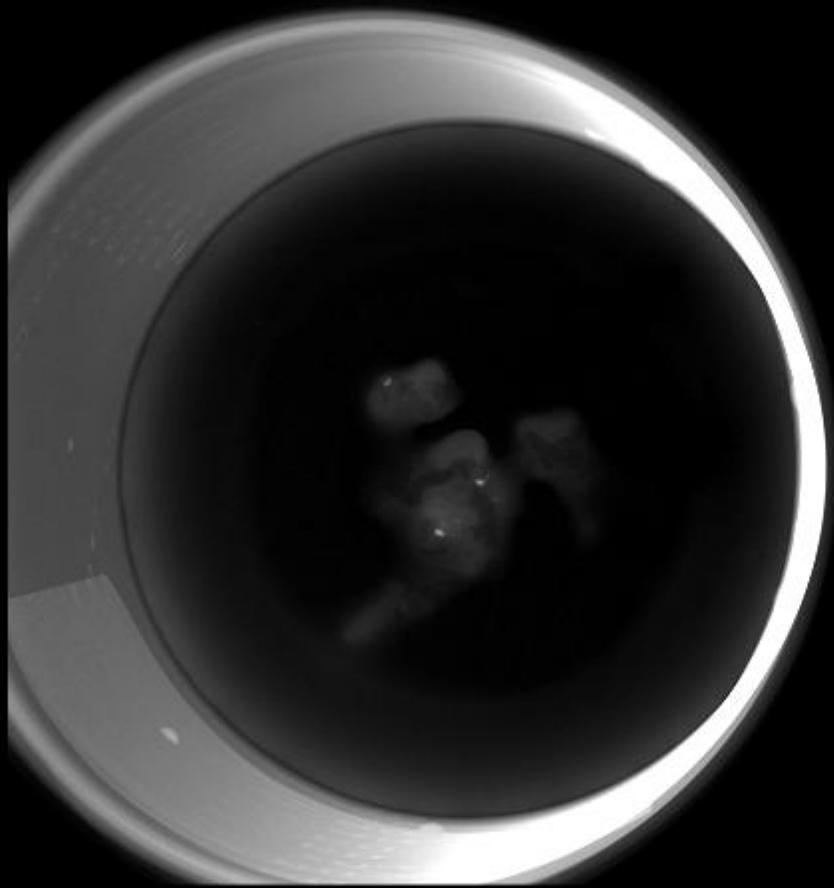
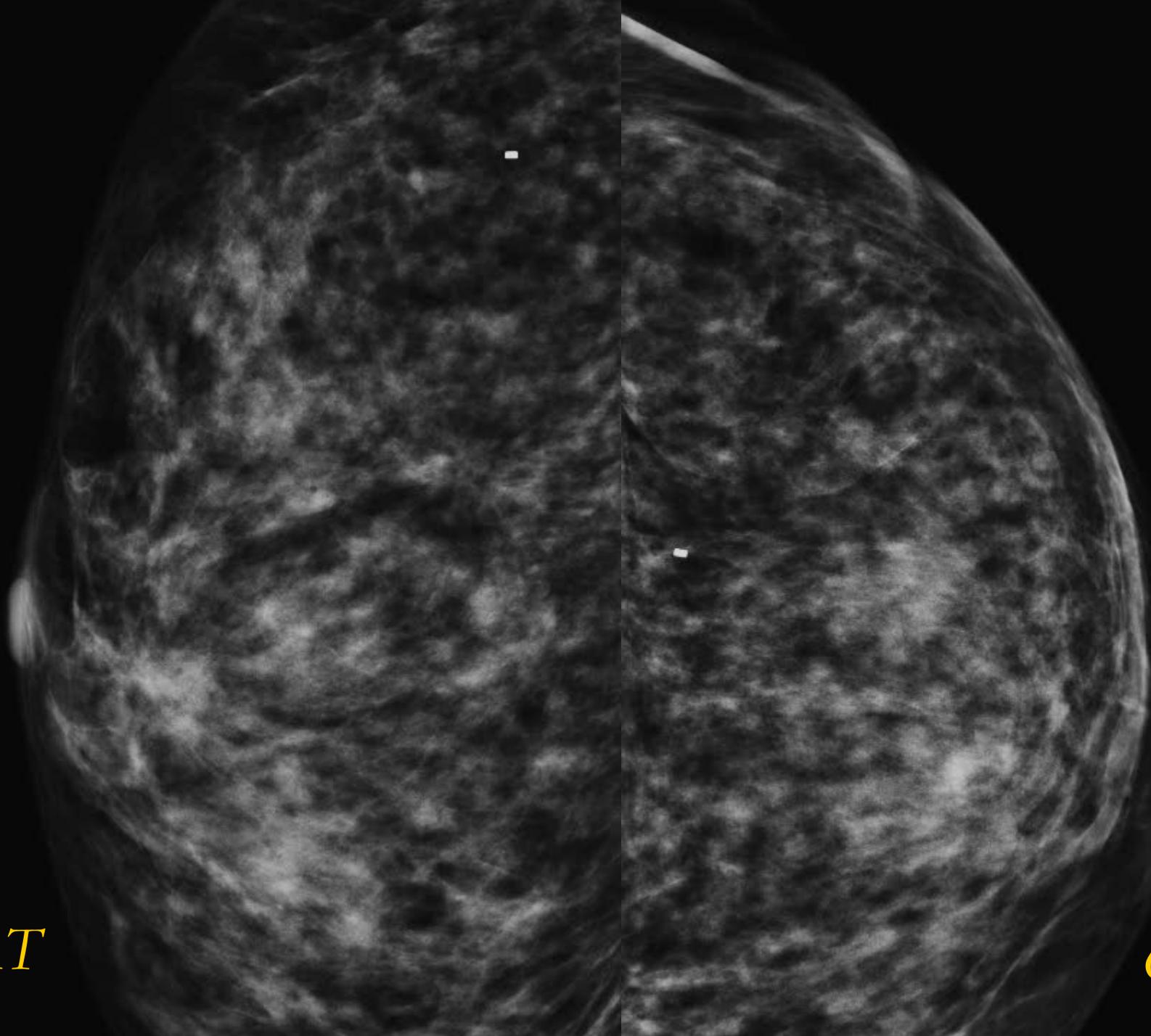


12/10/99

1.00x

Control





LAT

CC

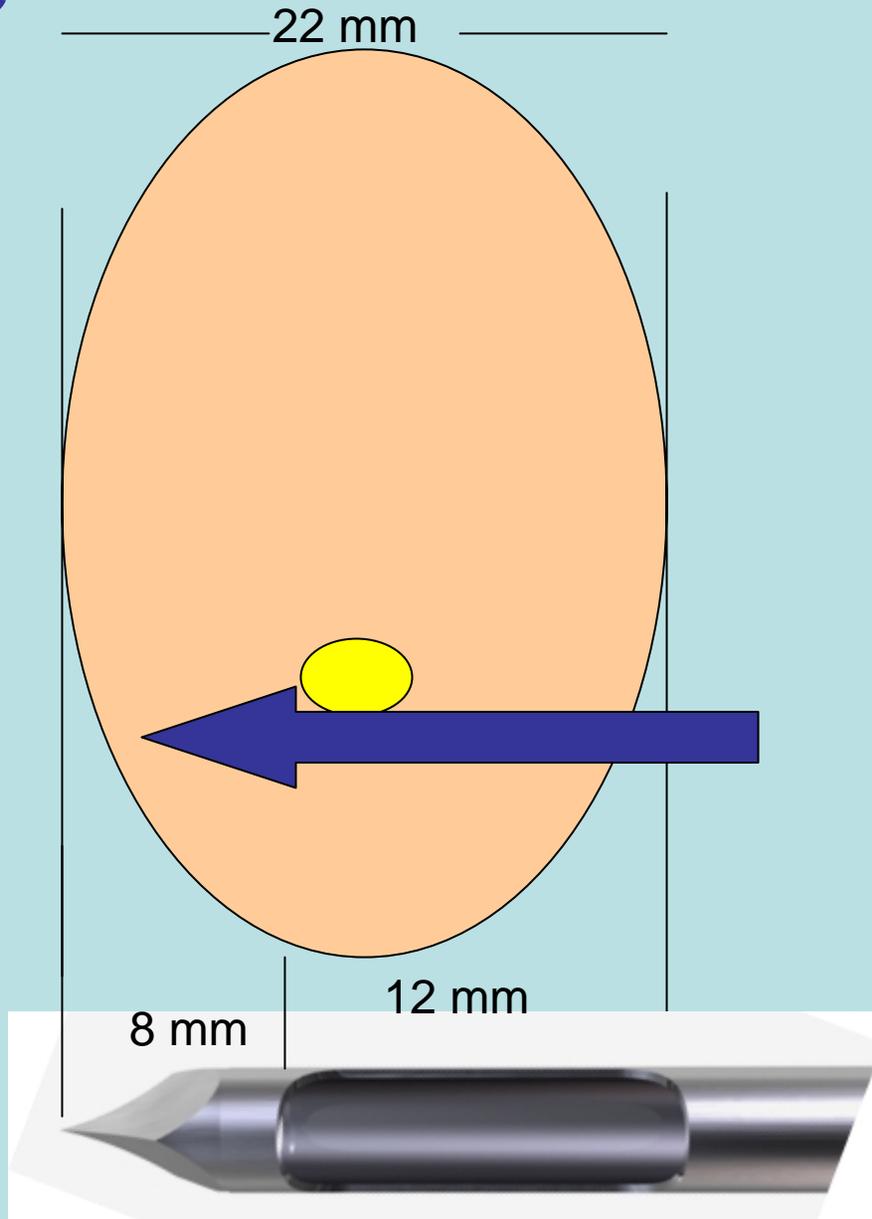
Percutaneous Core Breast Biopsies

- Exclusion criteria
 - Patient weight > 300 lbs
 - Bleeding diathesis
 - Anticoagulation treatment that can not be temporarily stopped

Percutaneous Core Breast Biopsies

- Technical reasons for inability to perform stereo
 - Lesion inadequately seen
 - Breast less than 20mm thick in compression

Petite Probe



Percutaneous Core Breast Biopsies

- Technical reasons for inability to perform stereo
 - Proximity to chest wall
 - Patient can't lie prone

Percutaneous Core Breast Biopsies

- Limitations
 - Sampling underestimates
 - Histological underestimates

Percutaneous Core Breast Biopsies

- Sampling underestimates
 - Geometry of lesions
 - Heterogeneity of lesions

Percutaneous Core Breast Biopsies

- Sampling Underestimates
 - Calcifications must be seen in specimen
 - Specimen radiograph

Percutaneous Core Breast Biopsies

- Larger volume of tissue
 - Vacuum assisted probes
 - Placement of clip with small lesions

Percutaneous Core Breast Biopsies

- Cancer misses by Stereo related to
 - Biopsy experience of each MD doing procedure
 - Number of samples obtained

Percutaneous Core Breast Biopsies

- Histological Underestimates
 - DCIS/ADH
 - LCIS/ALH
 - Radial scars
 - Missed Carcinomas

Percutaneous Core Breast Biopsies

- Histological Underestimates – ADH
 - 20-56% malignant at surgery
- DCIS
 - 16-30% will be invasive Ca at surgery

Percutaneous Core Breast Biopsies

- Breast Biopsy utilization Jan/88 – Dec/99
- All surgical and image guided core biopsies
- Total of 2940 breast biopsies
- Annual utilization rate of breast biopsies stayed stable at 62.6/10 000 women

Percutaneous Core Breast Biopsies

- Rate of utilization did not change in 40-49 yr age group despite introduction of screening mammo in 1997
- Utilization rate of operative biopsies declined from 58.8 to 26/10 000
- Image guided biopsies increased from 0.2 to 27.7/10 000

Percutaneous Core Breast Biopsies

- At end of study 52% of biopsies were image guided and 48% were operative
- Each year 44% were for palpable lesions, 3% for nipple lesions and 53% for imaging abnormality
- Rate of benign lesions stayed stable (39.1/10000)

Percutaneous Core Breast Biopsies

- Rate of malignant results ranged from a low of 14.6/10 000 in 1989 to 21.9/10 000 in 1995
- Benign-malignant ratio (2.2:1) remained stable
- Advent of MR guided biopsies for suspicious lesions could change utilization in the future

*Ghosh et al; Arch Intern Med
2005; 165:1593-1598*

BIRADS

- Breast
- Imaging
- Reporting
- And
- Data
- System

BIRADS

- Standardized lexicon
- Final assessment categories 0-6
- Final assessment categories related to recommendations for future action

BIRADS

- 0 – evaluation incomplete; needs further imaging
- 1- Negative
- 2- Benign
- 3- Probably benign
- 4- Suspicious
- 5- Highly suspicious
- 6- Biopsy proven malignancy

CALCIFICATIONS

TYPICALLY BENIGN

- dermal
- vascular
- coarse or popcorn-like
- large rod-like
- round
- lucent centered