



Comitetul de patologie mamara  
Workshop - 12 ianuarie 2018

# Biopsia ganglionului santinela

A.C. Rancea

# Intrebari

- Definitia - cN0 (eco?, punctie?)
  - tentatia N1
- Tehnica - colorant (CO) - albastru de metilen (AM)
  - limfazurin (LZ)
  - izotop (IZ) -  $\gamma$  detector operator
    - limfoscintigrafie +  $\gamma$  detector
  - asociere, comparatii (AM vs LZ, CO vs IZ)

# Intrebari

- Factori care influenteaza - rata detectiei
  - rata fals negativa
  - pacienta - virsta, IMC
  - chirurgul - experienta - curba de invatare
    - mentinerea tehnicii
  - tehnica - injectare, timing, etc.
  - anatomopatologul
  - ghid, control institutional

# Intrebari

- BGS - preoperator
  - dupa tratament neoadjuvant
  - 2 GS pozitivi - atitudine?
  - idicatii
  - utilizari controversate
  - contraindicatii

# Evitarea abordului axilar

## CDIS

- N+ = 1-2% (microinvazie nedagnosticata)
  - 9 studii
    - 754 cazuri CDIS → 1,7% N+
    - Recidiva axilara izolata (fara chir. axilara) ≤0.1% (NSABP B17 si B24)
- Abordul axillar = nejustificat

**Burstein HJ, DeVita 2011, p.1411**

**Frykberg ER et al. – *Surg Gynecol Obstet*, 1993, p.425-440**

# Evitarea abordului axilar

## Cancere invazive cN0

- T1a - N+  $\leq$  5%
- T1b
  - lez. nonpalpabila
  - G1 nuclear
  - fara inv. SLV
  - N+ = 3,4%



Fara LA

Silverstein MJ et al. - *Cancer*, 1994, p.664-667

Barth A et al. - *Cancer*, 1997, p.1918-1922



# Evitarea abordului axilar

## Cancere invazive cN0

- T1a-T1b → carcinom tubular sau coloid  
→ N+ ≤ 5%
- Femei in virsta → sectorectomie  
→ risc anestezic ↑  
→ TAM indiferent de N

 Fara LA

# Core-Needle Biopsy of Breast Cancer Is Associated With a Higher Rate of Distant Metastases 5 to 15 Years After Diagnosis Than FNA Biopsy

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**BACKGROUND:** The literature offers discordant results regarding whether diagnostic biopsy is associated with the dissemination of cancer cells, resulting in local and/or distant metastasis. The long-term outcomes of patients with breast cancer were compared between those who were diagnosed using either fine-needle aspiration biopsy (FNAB) or core-needle biopsy (CNB) during 2 decades: the 1970s and 1990s. **METHODS:** In the 1970s, the only diagnostic needle biopsy method used for breast cancer in Sweden was FNAB. CNB was introduced 1989 and became established in Stockholm Gotland County in the early 1990s. The authors compared the clinical outcomes of patients diagnosed using FNAB from 1971 to 1976 (n = 354) versus those of patients diagnosed using CNB from 1991 to 1995 (n = 1729). Adjusting for differences in various treatment modalities, mammography screening, tumor size, DNA ploidy, and patient age between the 2 decades, 2 strictly matched samples representing FNAB (n = 181) and CNB (n = 203) were selected for a 15-year follow-up study. **RESULTS:** In a comparison of the rates of distant metastasis in the strictly matched patient groups from the FNAB and CNB cohorts, significantly higher rates of late-appearing (5-15 years after diagnosis) distant metastasis were observed among the patients who were diagnosed on CNB compared with those who were diagnosed on FNAB. No significant difference in local metastasis was observed between the 2 groups. **CONCLUSIONS:** At 5 to 15 years after diagnosis of the primary tumor, CNB-diagnosed patients had significantly higher rates of distant metastases than FNAB-diagnosed patients. *Cancer Cytopathol* 2017;125:748-56. © 2017 American Cancer Society.

**KEY WORDS:** core-needle biopsy; distant metastasis; fine-needle aspiration biopsy; local metastasis; tumor cell seeding.



# Estrogen Receptor, Progesterone Receptor, and Human Epidermal Growth Factor Receptor 2 Expression in Breast Cancer FNA Cell Blocks and Paired Histologic Specimens: A Large Retrospective Study

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Cancer Cytopathology November 2016

**BACKGROUND:** Molecular analysis represents an increasingly important component of the pathologic examination of tumor specimens. Notably, the characterization of estrogen receptor (ER), progesterone receptor (PR), and human epidermal growth factor receptor 2 (HER2) expression in breast cancer specimens provides critical prognostic and predictive information. The objective of the current study was to compare the concordance of these markers as determined on fine-needle aspiration (FNA) cell blocks compared with tissue blocks prepared from surgical specimens. **METHODS:** A total of 134 cases of breast carcinoma were identified from 2002 through 2014 with both FNA cell blocks (fixed in 10% formalin) and corresponding available tissue blocks and ER, PR, and HER2 were characterized in both specimens. Negative and positive concordances were determined for ER and PR in cell blocks compared with tissue blocks, and for HER2 immunohistochemistry on cell blocks and tissue blocks versus the corresponding reference method, fluorescence in situ hybridization (FISH). **RESULTS:** Concordance for ER expression evaluated on a cell block compared with the corresponding tissue block was 96.2%. Concordance for PR expression was 77.5%. Overall agreement of HER2 FISH testing between cell blocks and tissue blocks was 96.7%. For both cell blocks and tissue blocks, HER2 expression by immunohistochemistry demonstrated  $\geq 98\%$  positive and negative concordance with the FISH reference method. **CONCLUSIONS:** ER, PR, and HER2 determination on FNA-acquired cell block (fixed exclusively in 10% formalin) showed excellent agreement for ER and HER2 and moderate agreement for PR with the corresponding tissue block. These findings support the equivalency of ER and HER2 evaluation performed on FNA cell blocks compared with surgical tissue blocks. *Cancer Cytopathol* 2016;124:828-35. © 2016 American Cancer Society.

**KEY WORDS:** breast cancer; estrogen receptor (ER); fluorescence in situ hybridization (FISH); human epidermal growth factor receptor 2 (HER2); immunohistochemistry; progesterone receptor (PR).

