

16:30-16:50

표준화된 판독보고서 작성: 유방초음파검사를 중심으로

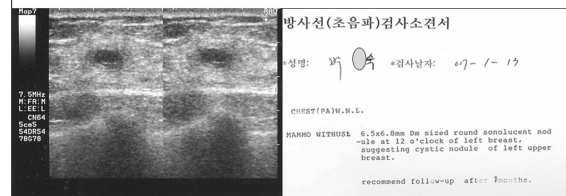
보라매병원 진단방사선과

이 은 혜

Nipple과 가까운 right upper outer breast(10시 방향)에 약 6mm 정도의 well defined, nodular hypoechoic lesion이 있으며 posterior sonic enhancement를 보임.
그 외의 both breast에 definite abnormal finding은 보이지 않음.

IMP: A about 6mm, probably fibroadenoma in the right upper outer breast.

REC: Follow up breast US after 3months later.



Overview

- Use of BI-RADS descriptors
- If US is performed with MG or MRI
 - integrated report
 - highest level of suspicion or most specific findings

The integrated report should be include:

1. Clinical Hx
2. Comparison w/ previous studies
3. Statement of scope of exam (screening or diagnostic) & technique used
4. Type & order of different studies, and brief statement of rationale for each
5. Findings
6. Correlation w/ physical, MG or MRI findings
7. Assessment
8. Management recommendations

Significant lesions & findings

- Brief description of type of breast ts.
- Lesion size (at least two dimensions)
- Location of lesions using consistent & reproducible system
- Succinct characterization of abnormal findings using BI-RADS descriptors
 - shape & margin: most important
 - most suspicious finding

Management recommendations

- Routine F/U for age
- Short-interval F/U for probably benign mass
- Annual F/U for mass
 - not seen on MG that has been biopsied
 - unchanged after completion of a short-interval F/U, needle or surgical bx, and clinical Tx
- Imaging-guided interventional procedure (stereotactic, US or MRI guidance)

MG-US Correlation

- Location of lesion
- Fibroglandular ts. and fat
- Size of mass or focal asymmetry: nearly the same

Final Assessment Categories

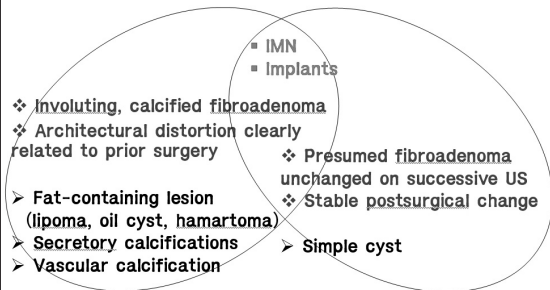
Category 0: Need additional imaging evaluation before final assessment

1. Almost always used in screening MG
 - spot compression, magnification, special views & US
2. In US, if MG or MRI studies are necessary
3. Not negative & not typically benign finding
 - need for previous studies for comparison to determine appropriate management

Category 1: Negative

- Nothing to comment
 - symmetric
 - no mass
 - no architectural distortion
 - no thickening of the skin
 - no suspicious calcifications
- For greater confidence, correlate US & MG patterns of breast ts. in the area of concern

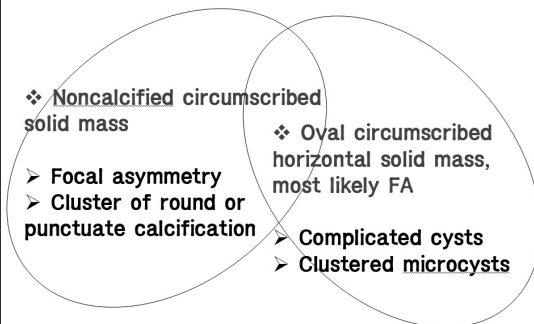
Category 2: Benign findings



Category 3: Probably benign finding

- < 2% risk of malignancy
- Short-interval F/U
- Need for complete diagnostic evaluation before making C3 assessment
→ inadvisable assessment in screening MG
- Exclude palpable lesions
- Bx rather than continued F/U when C3 mass increases in size or extent

Category 3: Probably benign finding



Category 4: Suspicious abnormality

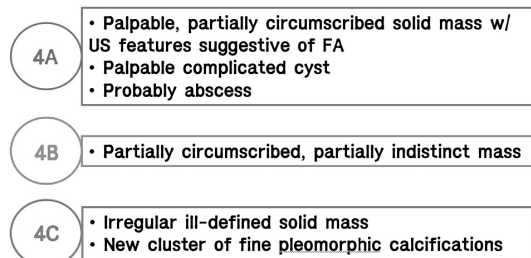
- Not classic appearance of malignancy but wide, intermediate range (3-94%) of probability of malignancy
- Require ts. Sampling
- Solid mass w/o all of criteria for FA & other probably benign lesions

Optional subdivision of Category 4

- 4A: low (2-10%) suspicion for malignancy
- 4B: intermediate (11-49%) likelihood of malignancy
- 4C: moderate (50-94%) likelihood of malignancy

From Ellen B. Mendelson
IBUS Satellite Symposium, WFUMB 2006

Subdivision of Category 4



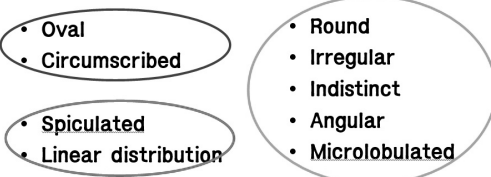
Category 5: Highly suggestive of malignancy

- Classic breast cancers, w/ $\geq 95\%$ likelihood of malignancy
- Spiculated irregular high-density mass
- Segmental or linear arrangement of fine linear calcifications
- Irregular spiculated mass w/ associated pleomorphic calcifications

Problems of BI-RADS

1. Specific descriptors & category
2. Observer variability
3. Communication w/ referring physicians

Specific descriptors & category



각 descriptors가 어떤 category에 해당되는지 명시되지 않음
→ 판독자의 지식과 경험에 따름

Observer variability

- Scale
: slight-fair-moderate-substantial-almost complete
- Interobserver variability
 - MG: fair-moderate (나쁘지 않거나 보통)
 - US: moderate-substantial (보통 혹은 우수)
 - Final assessment: fair (나쁘지 않은)
- Intraobserver variability < interobserver v.

From Lee EH, et al. J Korean Radiol Soc 2007

Communications w/ physicians

- 임상위가 BI-RADS를 얼마나 이해하고 있나?
 - 46%: I don't know the BI-RADS
 - 54%: I've heard about the BI-RADS
 - 64%: I've never had any education about it
 - 35%: I get it!

Vitiello SM, et al. AJR 2000

References

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