

16:20-16:40

표준화된 판독보고서의 작성

가톨릭의대 대전성모병원

항 보 설

ACR BI-RADS®
The ACR Breast Imaging Reporting
and Data System
MAMMOGRAPHY

I. Breast imaging Lexicon-mammography

1. Masses

- A. Size
- B. Morphology
- Shape : round, oval, lobular, irregular
 - Margin : circumscribed(well defined or sharply-defined), microlobulated, obscured, indistinct(ill-defined), spiculated
 - Density : high density, equal density(isodense), low density, fat containing(radiolucent)

2. Calcifications

- A. Morphology
- Typical benign : skin, vascular, coarse or popcorn-like, large rod-like, round, lucent centered, eggshell or rim-like, mild of calcium, suture, dystrophic calcification
 - Intermediate concern, suspicious calcifications : amorphous or indistinct, coarse heterogeneous calcification
 - High probability of malignancy : fine pleomorphic, fine linear or fine linear branching calcification
- B. Distribution
- diffuse/scattered, regional, grouped or clustered, linear, segmental

3. Architectural distortion

4. Special cases

asymmetric tubular structure/solitary dilated duct, intramammary lymph node, global asymmetry, focal asymmetry

5. Associated findings

skin retraction, nipple retraction, skin thickening, trabecular thickening, skin lesion, axillary adenopathy, architectural distortion

6. Location of lesion

use clock face or quadrant (upper inner quadrant, upper outer quadrant, lower outer quadrant, lower inner quadrant)

use subareolar, central and axillary tail

II. Reporting System-mammography

1. Indication for this exam

2. Breast Composition

Pattern 1 : The breast tissue is almost entirely fatty (< 25% glandular).

Pattern 2 : There are scattered fibroglandular densities (25 - 50% glandular).

Pattern 3 : The breast tissue is heterogeneously dense. This may lower the sensitivity of mammography (51 - 75% glandular).

Pattern 4 : The breast tissue is extremely dense, which could obscure a lesion on mammography (>75% glandular).

3. Description of any significant finding(s)

- A. Mass: size, morphology, associated calcifications, associated findings, location
- B. Calcification: morphology, distribution, associated findings, location
- C. Architectural distortion: associated calcifications, associated findings, location
- D. Special cases: associated calcifications, associated findings, location

4. Comparison to previous study**5. Overall assessment**

- A. Incomplete assessment
 - Category 0 : Need additional imaging evaluation and/or prior mammograms for comparison
- B. Complete assessment
 - Category 1 : Negative
 - Category 2 : Benign finding(s)
 - Involuting calcified fibroadenoma, secretory calcifications, fat-containing lesion(lipoma, oil cyst), galactocoele, mixed density harmartomas, intramammary lymph node, vascular calcifications, implants
 - Category 3 : Probable benign
 - Noncalcified circumscribed solid mass, focal asymmetry, cluster of round calcifications
 - Category 4 : Suspicious abnormality-Biopsy should be considered
 - Category 4a : low suspicious for malignancy palpable, partially circumscribed solid mass with US features suggestive of a fibroadenoma, a palpable complicated cyst or probably abscess
 - Category 4b : intermediate suspicious for malignancy
 - Category 4c : moderate suspicious for malignancy
 - Category 5 : Highly suggestive of malignancy
 - Category 6 : Known biopsy-proven malignancy

6. Management recommendations

ULTRASOUND

I. Breast imaging Lexicon- Ultrasound**1. Background echotexture**

- A. Homogeneous background echotexture - fat
- B. Homogeneous background echotexture - fibrog-

landular

- C. Heterogeneous background echotexture

2. Masses

- A. Shape
 - oval, round, irregular
- B. Orientation
 - parallel (wider-than-tall or horizontal), not parallel (taller-than-wide or vertical)
- C. Margin
 - Circumscribed
 - Not circumscribed
 - indistinct, angular, microlobulated, spiculated
- D. Lesion boundary
 - abrupt interface, echogenic halo
- E. Echo pattern
 - anechoic, hyperechoic, complex echoic, hypoechoic, isoechoic
- F. Posterior acoustic features
 - no posterior acoustic features, shadowing, combined pattern
- G. Surrounding tissue
 - ducts, changes in Cooper°Øs ligament, edema, architectural distortion, skin thickening, skin retraction

3. Calcifications

- A. Macrocalcifications
- B. Microcalcifications out of mass
- C. Microcalcifications in a mass

4. Special cases

clustered microcysts, complicated cysts, mass in or on skin, foreign body, lymph node (intramammry, axillary)

5. Vascularity

- A. Present or not present
- B. Present immediately adjacent to lesion
- C. Diffusely increased vascularity in surrounding tissue

II. Reporting System- Ultrasound**1. Clinical history****2. Comparison with previous studies**

3. Statement of scope of examination (targeted or survey) and technique used

4. Analysis of the significant lesions or findings

- A. Type of breast tissue
- B. Lesion size
- C. Location of lesion
- D. Characterization of abnormal finding(s)

5. Correlation of US with physical findings, mammography, MRI or other imaging studies, if performed

6. Overall final assessment

- A. Incomplete assessment
 - Category 0 : Need additional imaging evaluation
- B. Complete assessment
 - Category 1 : Negative
 - Category 2 : Benign finding(s)
 - Negative of malignancy
 - simple cyst, intramammary lymph nodes, breast implants, stable surgical changed and probable fibroadenomas unchanged
 - Category 3: Probable benign finding
 - solid mass with circumscribed margins, oval shape and horizontal orientation, most likely

fibroadenoma, nonpalpable complicated cysts, clustered microcysts

Category 4: Suspicious abnormality ? Biopsy should be considered.

- Category 4a: low suspicion of malignancy
- Category 4b: intermediate suspicion of malignancy
- Category 4c: moderate suspicion of malignancy

Category 5: Highly suggestive of malignancy

Category 6: Known biopsy-proven malignancy

7. Management recommendations

References

1. American College of Radiology.. Breast imaging reporting and data system (BI-RADS) 4th edition: American college of Radiology. 2003
2. Stavros AT. Breast Ultrasound. Lippincott Williams & Wilkins, 2004
3. Stavros AT, Thickman D, Rapp CL, Dennis MA, Parker SH, Sisney GA. Solid Breast Nodules: Use of Sonography to Distinguish between Benign and Malignant Lesions. Radiology 1995;196(1):123-134
4. Lazarus E, Mainiero MB, Schepps B, Koelliker S, Livingston LS. BI-RADS Lexicon for US and Mammography: Interobserver variability and positive predictive value. Radiology 2006;239(2):385-391