

1

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 : 1999 1 2000 12 441
 241 , 200 ,
 (195/241, 80.9%), (22/241, 9.1%), (24/241,
 10.0%),
 가 , 2 가
 : 441 68 (15.4%) ,
 46 (19.1%) , 28 (60.9%) ,
 25 , 1 , 2
 , 22 (11.0%) ,
 5 (22.7%) .

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Lorad M - IV(Trex, Danbury, U.S.A.) Senographe
 800T(GE medical, Milwaukee, U.S.A.) , AI -
 5200(Acoustic Imaging, Phoenix, U.S.A.) HDI -
 5000(ATL, Bothell, U.S.A.) ,

(2, 3) (Fig. 1),

(Table 2).

(4, 5) (Fig. 2).

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441 ()
 , 68 (15.4%) , 가
 , 241 46 (19.1%) , 28 가
 (60.9%) , 200 22 ,
 (11.0%), 5 (22.7%) , (6),
 241 195 , (7, 8),
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 (60.9%) , 40 ,)
 27 (67.5%) ,
 (Table 1).
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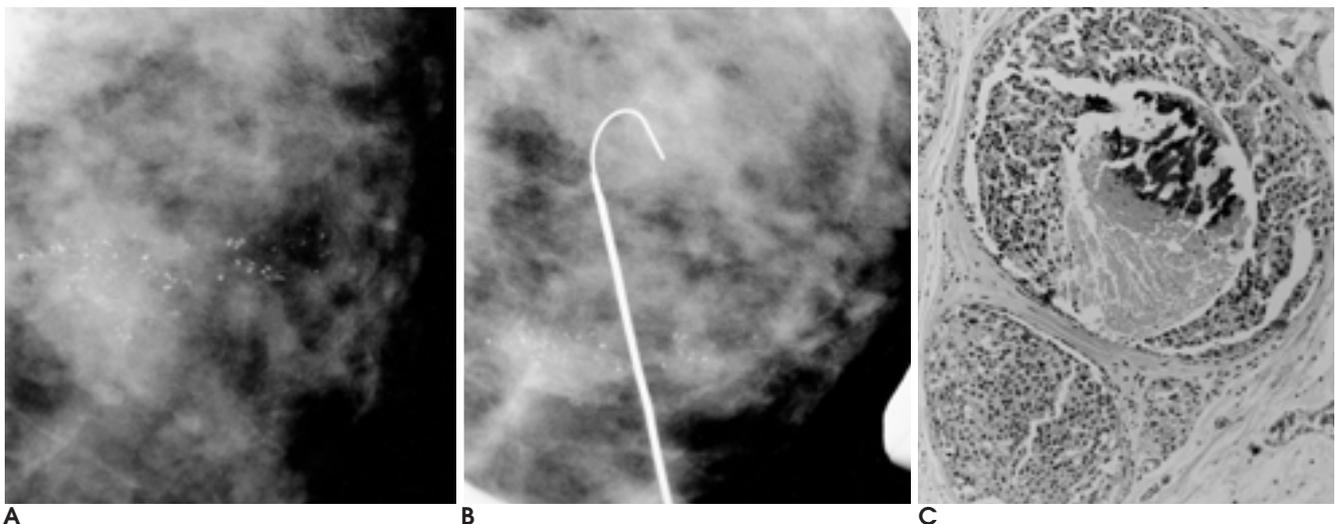


Fig. 1. Mammography guided localization.
A. Mammography shows pleomorphic clustered microcalcifications.
B. Localized under mammography guidance.
C. High-power photomicrograph shows comedo type ductal cancer in situ with central calcification.

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(5, 9 - 12).

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(13 - 16).

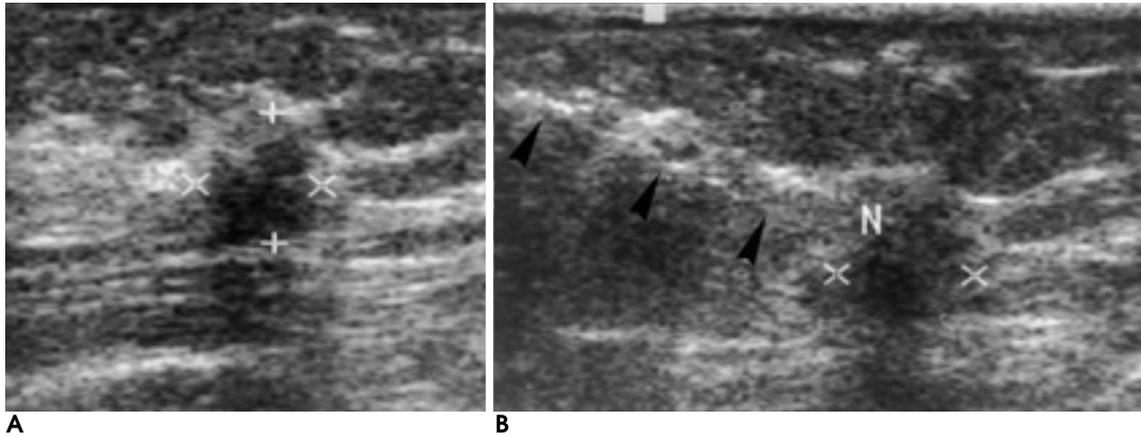


Fig. 2. Ultrasound guided localization.

A. Ultrasonogram shows vertically oriented solid mass.

B. Localized under ultrasound guidance, arrowheads indicate needleshaft parallel to transducer. N: marks needle tip.

C. High-power photomicrograph shows low grade ductal cancer in situ with microcalcifications.

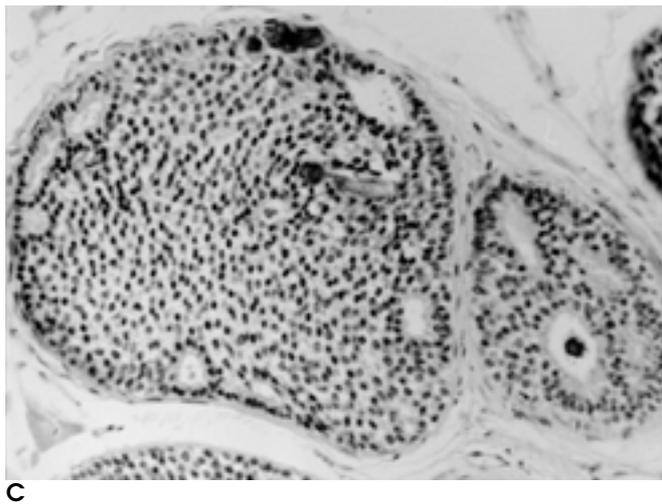


Table 1. Indication and Pathology of Mammography Guided Biopsy of Nonpalpable Lesions in Breast

	Noninvasive carcinoma		Invasive carcinoma		Total
Clustered microcalcification only (N = 95)	DCIS	24	Tubular carcinoma	1	40
	DCIS+ LCIS	1	Invasive ductal carcinoma	12	
	DCIS+ microinvasion	2			
Subtotal		27		13	
Mass (N = 22)			Tubular carcinoma	1	2
			Invasive ductal carcinoma	1	
Subtotal				2	
Mass + calcification (N = 24)	DCIS	1	Tubular carcinoma	1	4
			Invasive ductal carcinoma	2	
Subtotal		1		3	
Total (N = 241)		28		18	46

DCIS : Ductal Cancer In Situ
 LCIS : Lobular Cancer In Situ

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The Results of Mammography and Ultrasound-Guided Localization Biopsy of Nonpalpable Breast Lesions, and the Differences between Them¹

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Purpose: To evaluate the results of mammography and ultrasound-guided localization biopsy of nonpalpable lesions, and the differences between them.

Materials and Methods: Between January 1999 and December 2000, localization biopsies of 441 nonpalpable breast lesions were performed immediately after preoperative localization using a wire hook. Localization was mammography guided in 241 cases and ultrasound guided in 200. The former group included clustered microcalcifications (195/241, 80.9%), mass (22/241, 9.1%) and mass with microcalcifications (24/241, 10.0%), while the latter were almost all mass, or mass with microcalcifications (198/200, 99%). Only two lesions (1%) showed clustered microcalcifications only, and these were previously demonstrated at mammography.

Results: Overall, 68 lesions (15.4%) were confirmed as malignancy. Forty-six of 241 mammography guided localization biopsies indicated malignancy: there were 28 noninvasive carcinomas (60.9%), 25 ductal cancers *in situ* (DCIS), one DCIS combined with lobular cancer *in situ* (LCIS), and two DCIS combined with microinvasion. Twenty-two of 200 ultrasound-guided localization biopsies revealed malignancy; five such lesions (22.7%) were noninvasive carcinomas.

Conclusion: The malignancy rate and proportion of noninvasive breast cancers indicated by mammography and ultrasound-guided localization biopsy differed, and this was because the former involved mainly microcalcifications and the latter, masses.

Index words : Breast neoplasms
Breast, biopsy

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