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(Biopsy/ Ethiconendo - surgery inc., Johnson & Johnson Co., Cincinnati, OH, U.S.A.)

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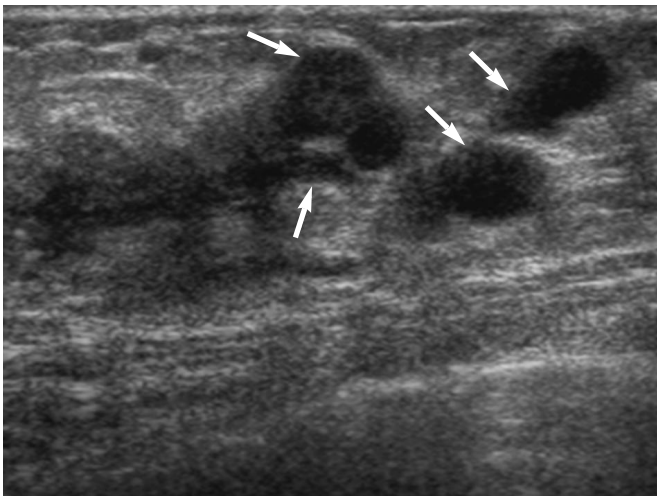
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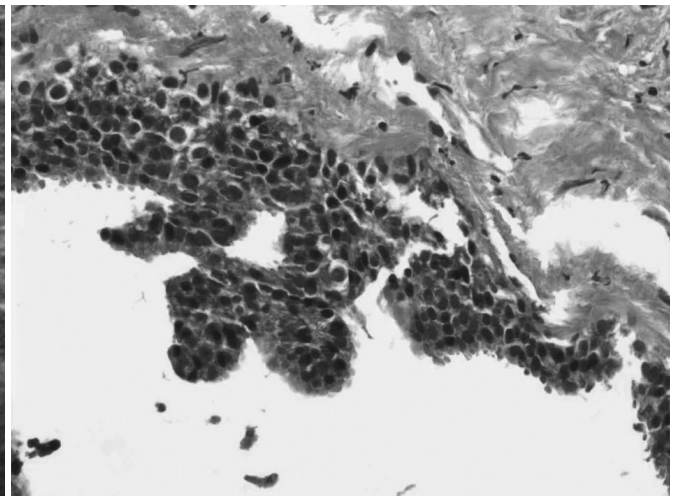
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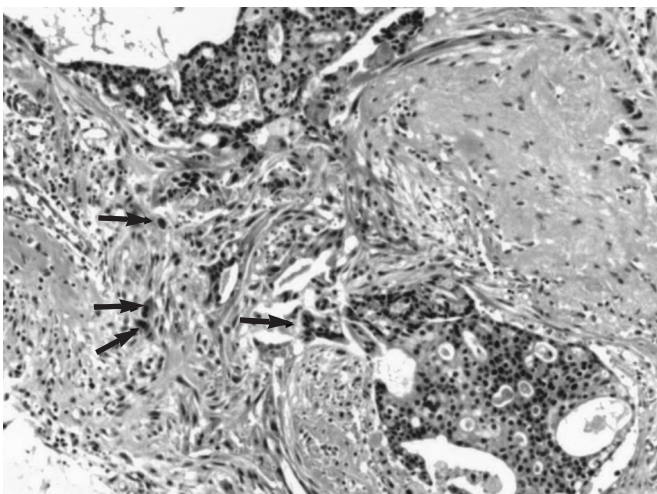
(Fig. 1).



A



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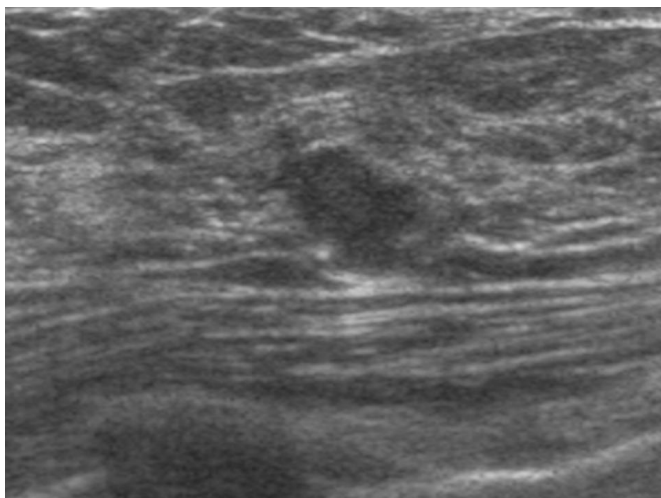
Fig. 1. 36-year-old woman with underestimated diagnosis at core needle biopsy.

A. The breast ultrasound shows ill-defined echogenic lesions within dilated ducts (arrows).

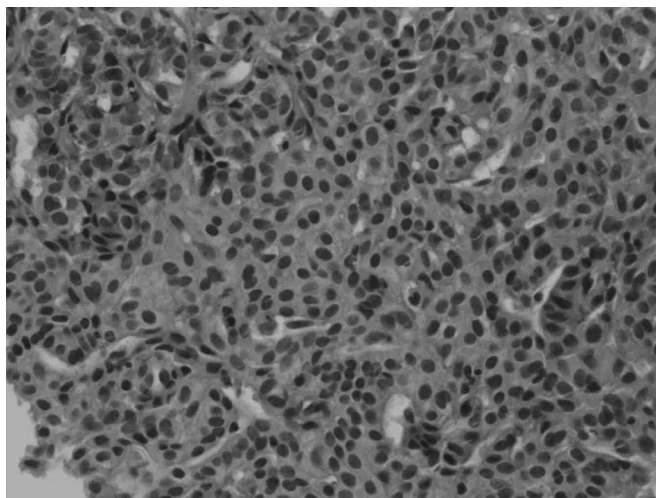
B. Core needle biopsy shows monotonous malignant cells within dilated ducts (H & E stain, $\times 200$). The pathologic diagnosis was ductal carcinoma in situ.

C. Stromal invasions are noted on the pathology of modified radical mastectomy, suggesting invasive ductal carcinoma (arrows) (H & E stain, $\times 100$).

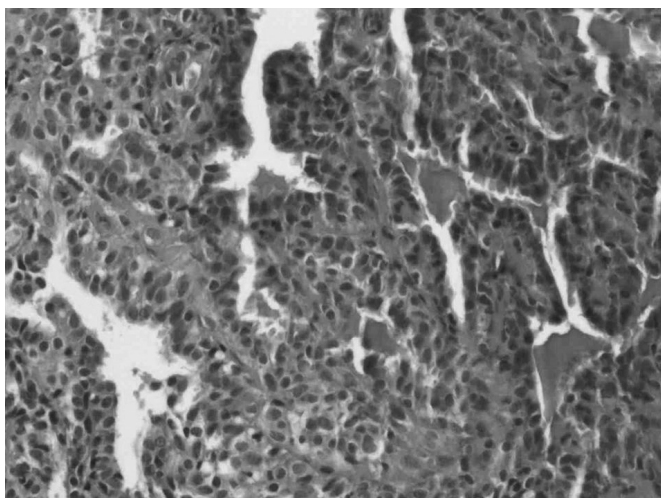
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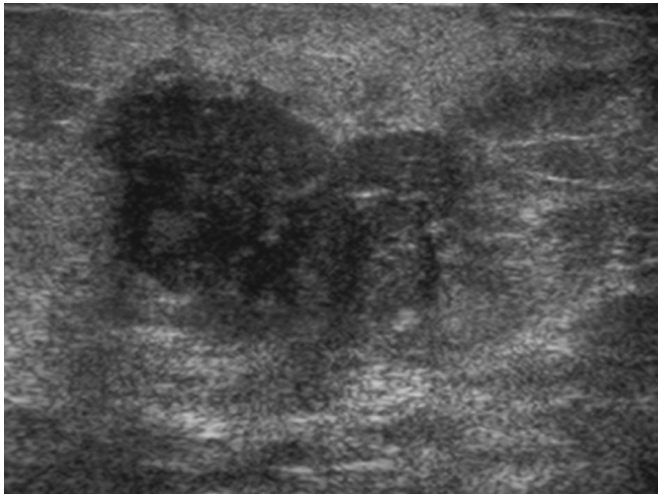
C

Fig. 2. 43-year-old woman with overestimated diagnosis at core needle biopsy.

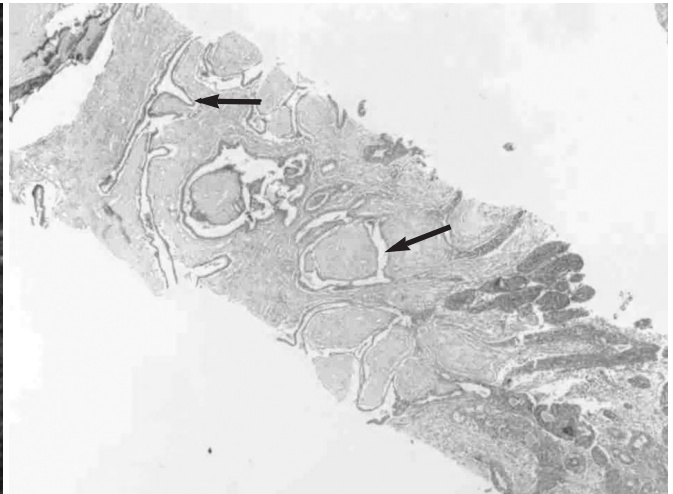
A. The breast ultrasound shows a lobulating low echoic nodule with taller than wide orientation.

B. Core needle biopsy shows sheet of monotonous cells with hyperchromatic nuclei without fibrovascular core structure (H & E stain, × 200). The pathologic diagnosis was atypical papilloma.

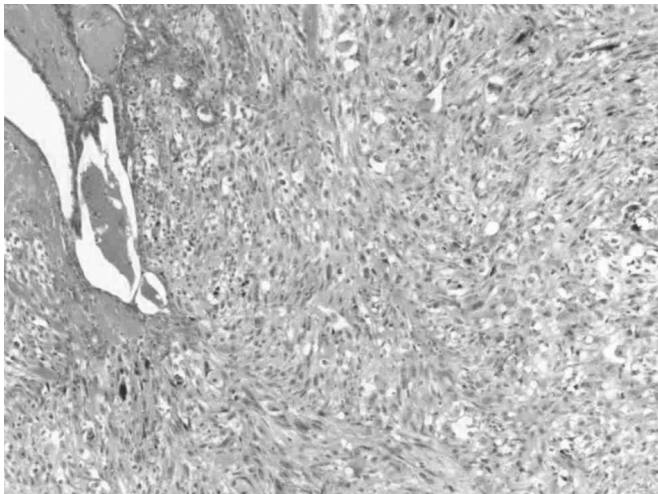
C. The specimen of excisional biopsy shows papillary lesions with fibrovascular core structures in all residual lesions, suggesting benign intraductal papilloma (H & E stain, × 200).



A



B



C

Fig. 3. 43-year-old woman with indeterminate diagnosis at core needle biopsy.

A. The breast ultrasound shows an irregular and partially ill-defined mass with heterogeneous low echogenicity and surrounding thick hyperechoic halo.

B. Core needle biopsy shows several clefts within the stroma (arrows). The pathologic diagnosis was a fibroepithelial tumor, a broad spectral diagnosis (H & E stain, × 40).

C. Excisional biopsy shows various degree of atypia and multinucleated cells, suggesting malignant phyllodes tumor (H & E stain, × 100).

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- 225

Breast Lesions with Discordant Results on Ultrasound-guided Core Needle Biopsy¹

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Purpose: We wanted to evaluate the characteristics of those lesions showing insufficient results on ultrasound-guided core needle biopsy.

Materials and Methods: We retrospectively reviewed the pathologic results of 131 lesions from patients who underwent ultrasound-guided core needle biopsy following Mammotome or surgical excisional biopsy from January 2004 to December 2004.

Results: Compared with excisional biopsy, ultrasound-guided core needle biopsy showed 14 lesions with discordant results and 9 lesions with indeterminate results. 5 lesions were overestimated and 9 lesions were underestimated on the core needle biopsies. According to the histological tumor types, the papillary tumors showed 66.6% discordance or indetermination, and the phyllodes tumors showed 50% discordance or indetermination.

Conclusion: On the results of core needle biopsy, discordant or indeterminate results were frequently reported for papillary and phyllodes tumor. Therefore, excisional biopsy is recommended for these types of tumor.

Index words : Breast, biopsy
Breast, US
Breast neoplasm, diagnosis
Ultrasound (US), guidance

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