

섬유선종에서 발생한 침윤성 유관상피암 1예

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A Case of Invasive Ductal Carcinoma Arising Within Fibroadenoma

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Abstract

Fibroadenoma is a benign breast tumor that is commonly diagnosed in young women and usually not considered as meaningful premalignant lesion. But rare cases of carcinoma arising in a fibroadenoma are reported. The considered risk factors are older age than peak age of fibroadenoma, associated histologic findings, such as cyst, sclerosing adenosis, epithelial calcification or papillary apocrine changes, family history, or proliferative diseases in adjacent to the fibroadenoma. Cellular atypia, confined to a fibroadenoma does not belong to the risk factor. Therefore, fibroadenoma in older age needs the surgical excision or continuous follow-up with regard to the individual risk factor. We report a rare case, 35-year-old woman with invasive ductal carcinoma arising within fibroadenoma.

Key words : fibroadenoma, invasive ductal carcinoma, risk factor

INTRODUCTION

A fibroadenoma is one of the most common benign breast tumor in young women. A malignant change rarely occurs within a fibroadenoma and usually takes the form of a sarcoma.¹⁾ We report the rare experience of a invasive ductal carcinoma arising within a fibroadenoma.

CASE

A 35-year-old woman, noticed a palpable mass in her

right breast about one years prior to reporting to us. She had borne three children but had breast-fed neither. She had no family history of breast cancer and had received no hormonal therapy.

Ultrasonographic examination of outdoor hospital revealed a 1.5cm-sized, well-margined hypoechoic mass with central necrotic-cystic change. She was transferred for the exclusion of the possibility of malignancy.

Clinical examination revealed a 1cm-sized firm, freely mobile mass in the upper outer quadrant(UOQ) of the right breast. There was another 2cm-sized firm, irregular lump in the same breast.

Fine needle aspiration biopsy(FNAB) of the UOQ mass showed branching antler-horn ductal cell clusters with background of stripped elongated naked nuclei and stromal fragments. Ductal cells showed mild nuclear atypia, but

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neither marked cytologic atypia in ductal cells nor necrotic debris was identified. A few stromal fragment was hypercellular without significant cytologic atypia.(Fig 1)

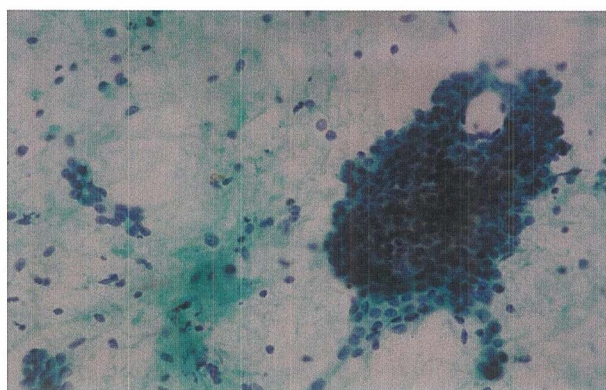


Fig. 1. Fine needle aspiration biopsy reveals antler-horn ductal cell clusters with background of stripped, elongated and naked nuclei and stromal fragments (not seen in this field). Ductal cells show mild nuclear atypia. (Papanicolaou, x400)

It suggested of fibroadenoma with possibility of benign phylloides tumor while that of the other lump was reported as non-proliferative breast lesion.

A excisional biopsy was performed. Histopathologic examination showed the UOQ mass to be a fibroadenoma of the intracanalicular variety with a focus of ductal carcinoma, limited to the fibroadenoma. (Fig 2)



Fig. 2. Whole mount of excisional biopsy. Ductal carcinoma within fibroadenoma is identified. (Hematoxylin and Eosin)

Ductal carcinoma in situ component was comedo and solid

type. And invasive component was arranged in solid clusters or sheets without tubule formation. Tumor cells were characterized by enlarged, vesicular and pleomorphic nuclei with small or large prominent nucleoli. Mitosis was frequent (upto 25/10 high power field), often atypical. (Fig 3)

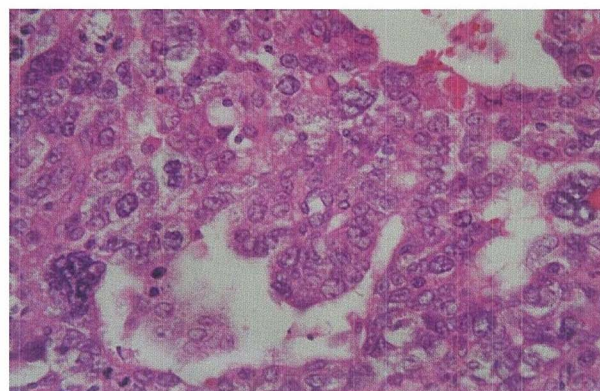


Fig. 3. High power of ductal carcinoma component. Tumor cells are characterized by enlarged, vesicular and pleomorphic nuclei with small or large prominent nucleoli. (Hematoxylin and Eosin, X400)

Additional right modified radical mastectomy was performed. Neither residual malignancy nor metastases were identified. Adjuvant chemotherapy was prescribed. The patient is well and shows no recurrence 24 months after the operation.

DISCUSSION

Fibroadenoma is benign breast tumor that are commonly diagnosed in young women in their 20's and early 30's. In about half of cases of fibroadenoma is associated with other pathological entities: sclerosing adenosis, duct ectasia, apocrine metaplasia, florid fibrocystic disease, duct papillomatosis and carcinoma.²⁾ Although fibroadenoma is not usually considered as meaningful premalignant lesion, occasional cases of carcinoma arising in a fibroadenoma are reported.

Azzopardi classified the carcinoma involving a fibroadenoma: first, carcinoma arising in the adjacent breast tissue engulfing and infiltrating a fibroadenoma; second,

carcinoma in the crevices of a fibroadenoma as well as in the adjacent breast tissue; third, carcinoma restricted entirely, or at least dominantly, to a fibroadenoma.¹⁾ Carcinoma arising within a fibroadenoma should be restricted to the latter. A carcinoma arising in a fibroadenoma may be considered as chance occurrence of location, as the epithelial component of a fibroadenoma is subject to the same stimuli as the rest of the breast parenchyma.³⁾ 0.30% of the fibroadenomas developed carcinoma within the epithelial component and 0.15% of the carcinomas originated in the fibroadenoma's epithelium.⁴⁾

Mean age of carcinoma arising in a fibroadenoma is 20 years older than the peak age of fibroadenoma.⁴⁾ So, different approach to fibroadenoma according to the age is needed in diagnosis and treatment.²⁾

In addition to the age, there are several discussed risk factors for breast cancer, associated histologic findings, such as cyst, sclerosing adenosis, epithelial calcification or papillary apocrine changes, family history, proliferative diseases in adjacent to the fibroadenoma.⁵⁾ Cellular atypia confined to a fibroadenoma does not incur a clinically meaningful risk of future breast carcinoma development greater than that fibroadenoma alone. Only 7% of women with well-developed atypia develop invasive carcinoma on follow-up and three women with minimal atypia developed invasive carcinoma.⁶⁾

CONCLUSION

Although the carcinoma arising within a fibroadenoma is rare, it is more commonly associated with a fibroadenoma in the older age groups than peak age of fibroadenoma. So, fibroadenoma in older age needs the surgical excision or continuous follow-up with regard to the individual risk factor. We report a rare case, 35-year-old woman with invasive ductal carcinoma arising within fibroadenoma.

국문초록

섬유선종은 젊은 여성에게서 흔히 나타나는 유방의 양성 종양이며, 대개는 의의있는 전암병변으로 여겨지지 않는다. 하지만, 섬유선종에서 발생한 암종의 드문 보고가 있다. 위험 인자로는 섬유선종의 호발연령보다 많은 나이, 수반된 조직학적 모습, 가족력, 주변 실질의 증식성 병변 등이 고려되며, 세포학적 이형성은 이에 속하지 않는 것으로 여겨진다. 그러므로 고령에서 발생한 섬유선종은 개인의 위험 인자에 따라 외과적 절제 또는 지속적인 추적 관찰이 필요하다.

저자들은 섬유선종에서 발생한 침윤성 유관상피암의 드문 증례를 경험하고 문헌 고찰과 함께 보고한다.

중심단어: 섬유선종, 침윤성 유관상피암, 위험 인자

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