DUCTAL CARCINOMA IN SITU (DCIS) IN THE MALE BREAST

— A CASE REPORT —

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Abstract : Ductal carcinoma in situ (DCIS) of the breast has become a relatively common disease in women, while it remains a rare disease in men. We described a case of DCIS in a 67-year-old man. The patient had a painless, defined, elastically firm and even tumor without skin retraction at his left retroareolar region. After excisional biopsy, he underwent mastectomy with dissection of axillary lymph nodes. All lymph nodes sampled were negative. The patient is free of disease without adjuvant-therapy at present.

Key words : DCIS, Male breast cancer
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INTRODUCTION

Male breast carcinoma is not common. The incidence is 0.5-1.0% of that in women^{1,2)}. We experienced a case of ductal carcinoma in situ of the breast in male, whose diagnosis had been given after excisional biopsy. We discuss the clinicopathological features of male ductal carcinoma in situ of the breast.

CASE REPORT

A 67-year-old man noticed a painless lump on his left breast. His family and past history concerning cancer was unremarkable. He consulted a private clinic in his neighborhood. He had no gynecomastia. A painless, defined, elastically firm, even tumor without skin retraction and 1.2×1.2cm in size was recognized at his left retroareolar region, then it was excised. The mass measured 1.0×1.0×0.9cm. Histologically, the predominant architectural pattern of the tumor was non-invasive papillotubular carcinoma and low papillary carcinoma. It was suspected to be positive at the surgical margin. The tumor partially showed papillary

and comedo pattern (Figure). He visited our hospital. There was an excisional scar and no definite lump at his left mammary areola, and there were no palpable axillary or supraclavicular lymph nodes. An ultrasonography and a mammography showed no definite nodules and no calcifications. The patient underwent mastectomy with dissection of axillary lymph nodes. Histological examination showed no evidence of residual carcinoma in the excised specimen and no lymph node metastases. He is healthy, without adjuvant treatment, as of 13 months postoperatively.

DISCUSSION

Although Ductal carcinoma in situ (DCIS) of the breast has become a relatively common disease in women, however it remains a rare disease in men. 129 cases of male DCIS have been reported in the world until 1997, they were accounting for approximately 5 % of all male breast carcinomas³⁾. In Japan, only 14 cases of male DCIS have been reported until 1998⁴⁾.

In the 1970s, the incidence of noninvasive carcinoma was about 2 % of all carcinoma of the breast in

Microscopic features of the resected specimen. The predominant architectural pattern was non-invasive papillolobular carcinoma and low papillary carcinoma. It was suspected to be positive at the surgical margin (arrow) (HE, $\times 15$) (A). The tumor partially showed papillary (B) and comedo pattern (C) (HE, $\times 150$).

women⁵). Two types of noninvasive carcinoma were described: lobular carcinoma in situ and DCIS. The widespread use of screening mammography has resulted in a vast increase in the discovery of DCIS^{1,6}. This increase in noninvasive disease has almost exclusively been in asymptomatic DCIS, whereas the ratio of lobular carcinoma in situ and the rate of symptomatic DCIS (mass, nipple discharge, Paget's disease) has remained relatively stable⁷.

Breast carcinoma is not common in men. Male breast carcinoma has a tendency to be presented at higher clinical stages, displays more frequent lymph node metastases^{8,9}. However, for comparable stages of this disease, significant prognostic differences do not exist between male and female breast carcinoma^{9,10}. Despite the information accumulated to date regarding invasive carcinoma of the male breast, very little is known regarding the precursor lesion DCIS.

Clinically, male DCIS most often presents two most characteristic symptoms, one is a slowly growing subareolar mass and the other is serosanguineous nipple discharge^{4,11}. Other symptoms such as bilateral gynecomastia and mastitis were rare¹¹. Because of its

rarity, this disease is associated with a lack of some examinations and a risk of error in diagnosis. In our case, the tumor was removed before the patients was seen at our hospital. Therefore we could not have any important informations, such as the findings of mammography or ultrasonography.

As to the histological subtypes of male DCIS, there is predominance of the papillary forms: pure, intracystic or with an associated cribriform component. In contrast, comedocarcinoma seems rare³, whereas in women it accounts for approximately 20-30% of DCIS⁶.

As in women, DCIS in the male breast has a good prognosis. Some treatments of DCIS in male cases have been reported, such as lumpectomy alone, lumpectomy with irradiation and mastectomy alone, mastectomy with axillary dissection. Camus et al reported according to the past literature about male DCIS that 0 of 39 patients who had axillary node dissection had involved nodes¹². Cutuli et al also reported that 19 patients who had axillary dissection had no positive nodes³. In men, the cosmetic aspect is of minor importance and local relapse sometimes

occurs after lumpectomy alone¹²⁾. In conclusion, total mastectomy without axillary dissection is the standard approach to DCIS in the male patient. No adjuvant treatment is required³⁾. However we have to consider axillary dissection if the lesion is suspected to be positive at the surgical margin after excisional biopsy. Because the risk of microinvasion would be undeniable.

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