Case report

Mastopathy of the accessory breast in the bilateral axillary regions occurring concurrently with advanced breast cancer

Kaoru Kitamura, Hiroyuki Kuwano,1 Kazumitsu Kiyomatsu, Koji Ikejiri, Keizo Sugimachi1 and Motonori Saku

Department of Surgery, National Kyushu Medical Center Hospital, Fukuoka 810; 1Department of Surgery II, Faculty of Medicine, Kyushu University, Fukuoka 812, Japan

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Summary

We herein report a 41-year-old Japanese woman who demonstrated advanced cancer in the left breast occurring concurrently with mastopathy of the accessory breast tissue in the bilateral axillary regions, which appeared to be metastatic lymphadenopathy. A preoperative examination, including a mammogram, US, and CT, did not provide us with a definite diagnosis of the axillary masses: it was essential to diagnose the masses preoperatively since a bilateral mastectomy with nodal dissection is called for if the right axillary masses are metastatic from a cancer in the right breast. An intraoperative cytological examination from the bilateral axillary masses revealed adenosis with fibrocystic changes in the accessory breast tissue. We therefore performed a modified radical mastectomy only on the left side. The patient was thus saved from an unnecessary mastectomy of the right breast.

Based on our experience, we wish to emphasize that the accessory breast tissue should be considered for a differential diagnosis when evaluating the axillary masses in order to avoid over-surgery, especially when a patient has been diagnosed to have massive breast cancer. An intraoperative cytological examination is strongly recommended to reach a final diagnosis in such confusing cases.

Introduction

Accessory breast tissue is occasionally encountered in the out-patient clinic [1]. There have been a few reports of neoplasms arising in ectopic breast tissue [2, 3], and most of these neoplasms are malignant and located in the axilla [4]. Benign tumors are not usually critical clinically; however, increased attention should be paid when benign neoplasms occur concurrently with a malignant lesion since an excessive resection should be avoided whenever possible.

The purpose of this case report is to warn surgeons that a mastopathy of the axillary breast tissue, which appears to be metastatic lymphadenopathy, can sometimes develop concomitantly with advanced breast cancer. The associated literature including the clinical features, diagnosis, and treatment for axillary breast masses is also reviewed.

Case report

A 41-year old Japanese woman presented with a tumor in her left breast which she had first noticed one and a half years previously. The tumor had become...
An irregular hard mass measuring 6 x 5 x 4 cm in size is observed located in the left internal-lower segment (arrow). Multiple hard masses (ranging from 1-3 cm in diameter) are palpable in the bilateral axillary region, one on the left and 4 on the right (circled arrows). These masses are also seen to adhere to the axillary skin.

gun to grow rapidly in the last 6 months, at which time she also noticed masses growing in her bilateral axillary regions. At the initial diagnosis, a tumor measuring 6 x 5 x 4 cm in size was observed in the internal-lower segment [5] of the left breast with multiple lymphadenopathy-like hard masses, which had clearly localized in the bilateral axillas (Fig. 1). Fine needle aspiration cytology from the main tumor demonstrated invasive ductal carcinoma. A mammogram and US showed an irregular tumor in the left breast and multiple calcifications in the bilateral breast; however, no findings specific enough to indicate a definite diagnosis of the bilateral axillary masses were observed. A CT scan, on the other hand, detected an axillary lump with a similar density to the normal breast tissue (Fig. 2). The following differential diagnoses were preoperatively proposed: 1) left breast cancer with bilateral lymph node metastases, 2) bilateral breast cancer (an occult cancer in the right breast) with lymph node metastases, or 3) left breast cancer with lymphadenopathy and other abnormal conditions in the right ectopic breast tissue. We initially evaluated the intraoperative cytological findings of the bilateral superficial axillary tumors with adhesion to the axillary skin, which revealed mastopathy without any malignancy. We therefore performed a modified radical mastectomy according to Kodama’s method [6] on only the left side. A histopathologic study showed the main tumor to be invasive ductal carci-

Fig. 1. An irregular hard mass measuring 6 x 5 x 4 cm in size is observed located in the left internal-lower segment (arrow). Multiple hard masses (ranging from 1-3 cm in diameter) are palpable in the bilateral axillary region, one on the left and 4 on the right (circled arrows). These masses are also seen to adhere to the axillary skin.

Fig. 2. A CT scan shows a lump (arrow) with a density similar to the normal breast tissue.