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Milk Fistula after Core Biopsy in Lactating Breast: A Case Report

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= Abstract =

Milk fistula is a tract between the skin and a lactiferous duct that may occur as a complication after core biopsy using a large needle for the diagnosis of the breast lesion during pregnancy or breast feeding, this complication. We report a case of milk fistula developed after a core needle biopsy in lactating breast.

Index Words : Breast, US
Breast, biopsy
Biopsies, complications

Introduction

Milk fistula is a tract between the skin and a lactiferous duct that may occur often during lactation. Usually, the excisional biopsy has been known to be associated with this complication. With the increased use of the large core needle biopsy for the diagnosis of the breast lesion, this complication has been reported in a few literatures [1-3]. We report a case of milk fistula developing after a large core needle biopsy of a mass in lactating breast.

Case Report

A 37-year-old woman with a 2-month history of lactation presented with a palpable mass in the left breast. She visited our breast center with severe anxiety because she had already heard at a local clinic that it could be breast cancer. Physical examination showed an about 1cm sized, soft and movable mass without tenderness in the left upper outer breast. Skin changes such as dimpling or the peau d'orange and axillary or supraclavicular lymph node enlargement were absent.

On sonography, a palpable mass was demonstrated as an about 5×4 mm sized, oval-shaped hypoechoic nodule at the superficial portion (Fig. 1A). Simultaneously, another 13 mm sized, ill-defined hypoechoic nodule was noted at the deeper portion of the corresponding site (Fig. 1B). Both lesions were located 3 cm from the nipple. Under sonographic guidance, 14-gauge core biopsies were performed using a biopsy gun (Bard, Covington, Ga., U.S.A.), and four tissue samples were obtained from each lesion through the same skin entry point. Pathologic examination revealed lactating adenoma in both lesions.

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About ten days after, the patient revisited with a problem of milkish discharge from the biopsy site persisting about 1-week. She complained that she had to cease nursing because of too excessive milk leak from the unwanted site. Sonography confirmed a tract between the skin entry site of needle and dilated lactiferous duct in the left breast (Fig. 2). We recommended her to suppress lactation using a dopamine agonist, because of continuous leak in spite of breast binding and weaning period. After all, the discharge shrank by degrees, and the lesion site was sealed off completely on the two weeks.

Discussion

Breast conditions unique to pregnancy and lactation are usually discovered by patient self-examination and most of them are benign, consisting of lactating adenoma, galactocele, gigantomastia, and benign bloody nipple discharge [4]. During lactation, the major problems encountered often are part of a spectrum of inflammatory and infectious complications. Nevertheless, breast malignancy must be excluded by a thorough work-up as done in a non-pregnant patient. Because breast carcinoma complicates 1:3000 deliveries in the US and is one of the most common carcinomas in pregnant and lactating women (3%) [5]. The prognosis for breast cancer in pregnancy and lactation was regarded as grave, possibly because of delayed diagnosis. It is currently suggested that pregnant women with early breast carcinoma may be treated in the same way as women without pregnancy [6]. That is why we have to take up an active attitude on any breast lesion in pregnant women.

First of all, fine needle aspiration biopsy has been recommended for breast lesions in pregnant or lactating women. However, fine needle has an inherent disadvantage such as small amount of sample because of smaller gauges and fewer passes, even though it reduces the occurrence of the fistula formation. If a diagnosis cannot be made with aspiration biopsy, core biopsy is necessary but is not recommended as the initial procedure because of the possibility of milk fistula formation [2].

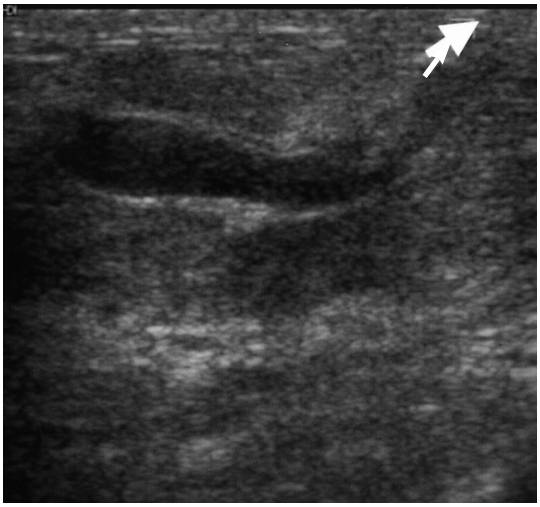
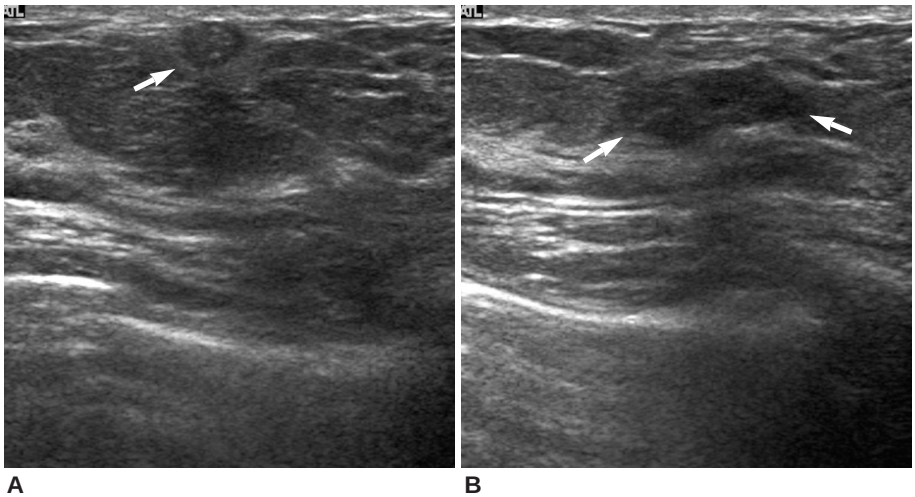


Fig. 2. Follow-up sonogram obtained when the milk was leaking from the biopsy site at 3 o'clock position demonstrates the fistulous tract formed between the skin entry point (arrow) and a dilated lactiferous duct on the transverse scan.



A **B**

Fig. 1. A. Transverse sonogram of palpable mass shows an about 5mm-sized, circumscribed oval hypoechoic nodule (arrow) in 2 o'clock position of the left breast.
B. Transverse sonogram shows another 13 mm-sized, oval hypoechoic nodule in deeper portion of the same position (arrows). Under sonographic guidance, core biopsy using 14-gauge needle was performed for each lesions.

Schackmuth et al. reported a case of milk fistula as a complication after core breast biopsy in a nursing mother [1]. The authors performed core biopsy, because the results of fine needle aspiration biopsy in their patient were equivocal. Sumkin et al. also emphasized that core biopsy is warranted when fine needle aspiration biopsy cannot render a specific histopathologic diagnosis. In their study to describe the ultrasonographic features of 11 lactating adenomas, they remarked that they had not encountered such a complication [2].

Once milk fistula is formed, the lactation should be suppressed because keeping the breast empty of milk promotes healing, even though a fistula can dry up spontaneously. Breast binding and drug such as dopamine agonist may help the leak to cease [1, 2].

We suggest a prompt histologic diagnosis using large core needle when a suspicious for malignant breast mass is found in lactating breast, even though it has a little risk developing a milk fistula. At this time, surely the patient should be informed of the possibility of this complication by a radiologist and should consent to perform a core biopsy.

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=초록=

수유 중 유방의 핵생검 후 발생한 유즙누공 형성: 1예 보고

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박선영 · 김은경 · 김민정 · 오기근

임신 또는 수유 중 발생한 유방병변을 진단하기 위한 조직검사의 합병증으로 드물게 피부와 유관이 연결되는 유즙 누공이 발생할 수 있다. 저자는 수유중 발견된 유방 종괴에 대하여 초음파 유도하 경피적 핵생검후 발생한 합병증인 유즙 누공 1예를 보고하고자 한다.