



LETTER TO THE EDITOR

Simple recommendation for cases requiring re-excision on breast surgery

Meme cerrahisinde re-eksizyon gerektiren vakalar için basit bir öneri

Yasin Dalda¹, Emrah Şahin¹, Koray Kutlutürk¹

¹Department of General Surgery, Inonu University Faculty of Medicine, Malatya, Turkey

To the Editor,

Breast cancer is a major cause of cancer-related deaths and the most commonly diagnosed malignant disease in women worldwide¹. A multidisciplinary treatment approach with medical oncology, radiation oncology and surgical oncology is required to reduce mortality². Treatment options in breast surgery can be categorized into two general groups mastectomy and breast-conserving surgery³. In recent years, breast-conserving surgery (BCS) has become more popular, especially in cosmetically appropriate patients. With the addition of radiotherapy in the postoperative period, disease-free survival rates are similar to mastectomy, making it an alternative to mastectomy procedures⁴.

Re-excision may be required in case of positive surgical margins and recurrences after excision of malignant or benign lesions in the breast. One of the problems that may be encountered during re-excision is the capsular structure due to scar formation around the dead space caused by the previous operation and the decrease in wall tension caused by the opening of this structure⁵. As a result, the dissection plan may be misinterpreted and excess tissue may be removed or incomplete tissue may be removed, leading to positive surgical margins and recurrences. In this article, we aimed to present a simple technical suggestion that can be used to increase the wall tension again in these cases with a case report.

A 57-year-old woman was admitted to our clinic with a right breast mass. Her medical history included diabetes mellitus and hypertension, and her surgical

history included total abdominal hysterectomy and cholecystectomy. A tru-cut biopsy of the mass (BI-RADS 5) in the inner mid-quadrant of the right breast was reported as invasive breast carcinoma. The patient underwent breast-conserving surgery and sentinel lymph node sampling. The pathology report was interpreted as tumor diameter 1 cm, closest surgical margin 0.2 cm posteriorly and 7 lymph nodes with no metastasis in axillary tissue. The patient received radiotherapy for 30 days postoperatively and aromatase inhibitor was started. At the follow-up visit approximately 1 year later, a lesion of approximately 3 cm in size was palpated where the mass was removed. No lesion was palpated in the left breast. Breast ultrasonography showed a 37x17 mm cystic lesion under the incision line (Figure 1). It was reported as papillary solid lesions in breast imaging reporting and data system classification (BIRADS) 4 extending into the cyst in its wall and septa, the largest of which was approximately 2 cm in size. Tru-cut biopsy revealed no malignancy, but re-excision was planned considering the previous history and suspicious findings on imaging.

Re-operation revealed a fluid-filled cystic lesion in the area of the previous mass excision (Figure 2). The operation was aimed to remove the cyst with intact and clean margins without damaging the cyst wall in case of malignancy. However, during dissection, the cyst wall opened and the contents were aspirated. As a result, the tension of the cyst decreased and it became difficult to see the macroscopic surgical margin. In order to create a proper dissection line again, gauze was placed inside the cyst to restore the

Address for Correspondence: Dr. Yasin Dalda, Department of Surgery, Inonu University Faculty of Medicine, Malatya, Turkey. E-mail: yasindalda@gmail.com

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cyst wall tension (Figure 3). In this way, the image of a palpable mass was created, dissection plans were more clearly and accurately demonstrated, and the cyst was excised while preserving wall integrity. No evidence of malignancy was detected on the frozen section of the excised cystic structure (Figure 4). No tumor focus was detected in the pathology report and no recurrence or metastasis was suspected in the two-year follow-up.

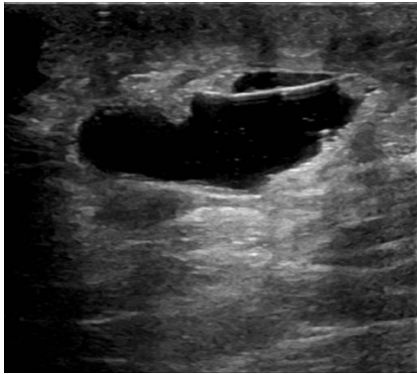


Figure 1. Ultrasonographic image of the lesion.

Surgical removal of the primary tumor is the most preferred method in breast cancer treatment⁶. In terms of local control of the disease and survival, the surgical treatment procedures of BCS and mastectomy have similar results, especially in early stage breast cancers⁷. Therefore, BCS has become the accepted method in breast cancer surgery. Although different techniques are used, the main goal of BCS is to remove the tumor by obtaining a negative margin and to achieve a good cosmetic result. There is no consensus on the ideal distance for a negative surgical margin. In a meta-analysis of 33 studies, The Society of Surgical Oncology and The American Society of Radiation Oncology agreed that the absence of dye on the tumor should be used as the standard for the surgical margin⁸. Positive or contiguous surgical margins are known to significantly increase local recurrence⁹.

Although mastectomy is generally accepted as the general approach in the event of local recurrence in patients who have received BCS and radiotherapy, re-excision can be performed in appropriate patients. Although survival rates in recurrence cases are similar between the two procedures, patients who undergo re-excision are at risk of local recurrence¹⁰. Since tru-cut biopsy showed no malignancy in our patient, we

preferred the less aggressive re-excision method instead of mastectomy.



Figure 2. Cystic lesion in the previous operation area.

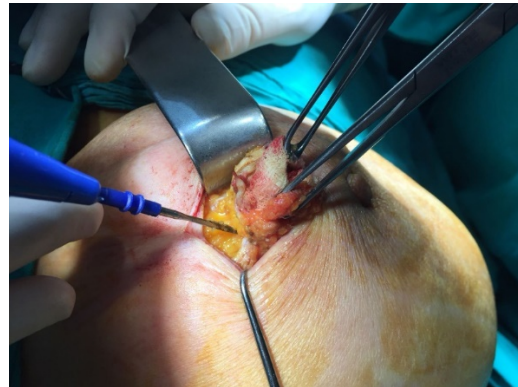


Figure 3. Mass formation formed by placing gauze inside.

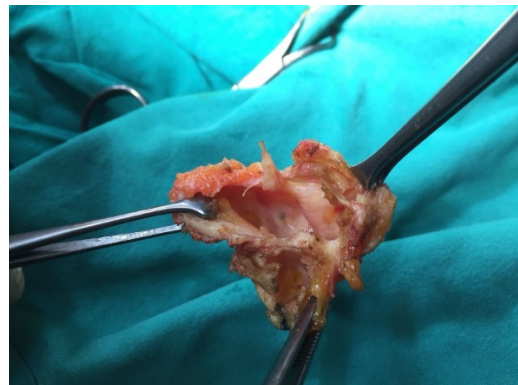


Figure 4. Cyst removed with intact wall.

In conclusion, re-excision may be required in patients who underwent excisional biopsy due to a mass in the breast or who underwent BCS for cancer in case of positive surgical margins or recurrence. During surgery, the wall tension may be lost due to the opening of the cavity formed by the dead space and surrounding scar formation in the first operation area and may cause dissection to become difficult. This method was used to determine the dissection site accurately and to see the negative surgical margins more clearly. In such cases, we think that filling this cavity with gauze and turning it back into a mass formation may provide a better dissection plan.

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