

Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

ScienceDirect

The Surgeon, Journal of the Royal Colleges  
of Surgeons of Edinburgh and Ireland[www.thesurgeon.net](http://www.thesurgeon.net)

## Round block technique is a useful oncoplastic procedure for multicentric fibroadenomas

Hung-Wen Lai<sup>a,b,c,d</sup>, Yao-Lung Kuo<sup>e</sup>, Chin-Chen Su<sup>b,c</sup>,  
Chih-Jung Chen<sup>f,g,h</sup>, Sou-Jen Kuo<sup>b,c</sup>, Shou-Tung Chen<sup>b,c,i,\*</sup>,  
Dar-Ren Chen<sup>a,b,c,g,\*</sup>

<sup>a</sup> Endoscopic & Oncoplastic Breast Surgery Center, Changhua Christian Hospital, Changhua, Taiwan

<sup>b</sup> Division of General Surgery, Changhua Christian Hospital, Changhua, Taiwan

<sup>c</sup> Comprehensive Breast Cancer Center, Department of Surgery, Changhua Christian Hospital, Changhua, Taiwan

<sup>d</sup> School of Medicine, National Yang Ming University, Taipei, Taiwan

<sup>e</sup> Department of Surgery, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan and Dou-Liou Branch, Taiwan

<sup>f</sup> Department of Surgical Pathology, Changhua Christian Hospital, Changhua, Taiwan

<sup>g</sup> School of Medicine, Chung Shan Medical University, Taichung, Taiwan

<sup>h</sup> Department of Medical Technology, Jen-Teh Junior College of Medicine, Nursing and Management, Miaoli, Taiwan

<sup>i</sup> Department of Surgery, YuanSheng Hospital, Changhua, Taiwan

### ARTICLE INFO

#### Article history:

Received 10 November 2013

Received in revised form

23 February 2014

Accepted 11 March 2014

Available online 22 April 2014

#### Keywords:

Multicentric fibroadenomas

Round block technique

Donut mastopexy

Oncoplastic breast surgery

### ABSTRACT

**Purpose:** Multicentric fibroadenomas, defined as multiple fibroadenomas located at different quadrants of the breast, occur in 10–20% of women with fibroadenoma. The surgical management of multicentric fibroadenomas may be troublesome for surgeons and patients. In this study, we report our preliminary experience using the “round block technique” in the management of women with multicentric fibroadenomas of the breast. **Materials and methods:** Records of patients with breast diseases managed with the round block technique were searched for in the Changhua Christian Hospital oncoplastic breast surgery database. The patients’ clinicopathologic characteristics, type of surgery, operation time, blood loss, and complications were recorded. The cosmetic outcome was evaluated by the patient and operating surgeon two months after the surgery.

**Results:** Twenty patients with multicentric fibroadenomas managed by the round block technique comprised the current study cohort. The mean age of the subjects was  $36.5 \pm 10.4$  years. Twelve (60%) patients had tumors on one side of the breast, and eight (40%) had bilateral breast lesions. The average number of tumors removed was  $3.3 \pm 1.2$  (range 2–6) per breast, and mean tumor size was  $2.2 \pm 0.5$  cm. Three (15%) patients developed mild ecchymosis of the breast undergoing operation, which resolved spontaneously. One (5%) patient had partial nipple ischemia/necrosis due to 2 tumors excised near the nipple–areolar complex. The aesthetic results were evaluated as good in 19 (95%) patients and fair in 1 (5%).

\* Corresponding authors. Comprehensive Breast Cancer Center, Changhua Christian Hospital, 135 Nanhsiao Street, Changhua 500, Taiwan. Tel.: +886 4 723 8595; fax: +886 4 723 3715.

E-mail addresses: [1886@cch.org.tw](mailto:1886@cch.org.tw) (S.-T. Chen), [115045@cch.org.tw](mailto:115045@cch.org.tw), [143809@cch.org.tw](mailto:143809@cch.org.tw) (D.-R. Chen).

<http://dx.doi.org/10.1016/j.surge.2014.03.009>

1479-666X/© 2014 Royal College of Surgeons of Edinburgh (Scottish charity number SC005317) and Royal College of Surgeons in Ireland. Published by Elsevier Ltd. All rights reserved.

**Conclusions:** The round block technique is a useful oncoplastic procedure for the management of multicentric fibroadenomas excised at the same time.

© 2014 Royal College of Surgeons of Edinburgh (Scottish charity number SC005317) and Royal College of Surgeons in Ireland. Published by Elsevier Ltd. All rights reserved.

## Introduction

Fibroadenoma is a common cause of discrete breast lumps in young females,<sup>1,2</sup> and occurs in 25% of asymptomatic women. Benign, asymptomatic fibroadenomas usually are managed with non-operative follow-up.<sup>3,4,5</sup> However, in some complicated situations, such as giant fibroadenoma,<sup>6,7,8</sup> juvenile fibroadenoma,<sup>9,10</sup> phyllodes tumor,<sup>11</sup> or multiple fibroadenomas,<sup>12,13</sup> considerable concern is warranted due to anxiety, pain and cosmesis of the breast. Surgical excision may be needed, and could be a challenge in some circumstances. The goal of surgical treatment is to remove the fibroadenoma completely with a thin rim of normal breast tissue.<sup>1,2,5</sup> The surgical approach varies from local wide excision to mastectomy,<sup>6,11,14,15,16,17</sup> depending on the situation. Most (70%) fibroadenomas are single and unilateral, with sizes ranging from 1 to 3 cm.<sup>1,3,5</sup> Breast conservation is usual feasible, even with giant fibroadenomas.

Multicentric fibroadenomas, defined as multiple fibroadenomas occurring in different quadrants of the breast, have occurred in 10%–25% of women with fibroadenoma.<sup>1,5</sup> Multicentric fibroadenomas may be troublesome for patients, and pose a challenge for surgeons.<sup>10,12,18</sup> Separate incisions may be needed when tumors are located at different quadrants of the breast. However, the aesthetic outcomes might be sub-optimal, and not satisfactory to the patients and surgeons. Surgical techniques such as the infra-mammary incision approach,<sup>8,16</sup> or reduction mammoplasty techniques<sup>2,10,13,14</sup> have been reported to treat multicentric fibroadenomas successfully. However, long and apparent operative scars may limit their use in women with non-ptotic or small to medium-sized breasts.

The round block technique (or “donut mastopexy”), with an incision made around the areola, is a common breast lift operation and could be used to excise tumors located at different quadrants of the breast.<sup>19,20</sup> Wide surgical exposure, minimal postoperative scarring and favorable aesthetic results make the round block technique a popular oncoplastic procedure for the management of breast cancer.<sup>19,20,21,22</sup> Herein, we report our preliminary experience using the round block technique in the management of multicentric fibroadenomas.

## Material and methods

### Patients

Records of patients with benign breast tumors managed by the round block technique were searched for in the oncoplastic breast surgery database in Changhua Christian

Hospital (CCH). The patients’ clinicopathologic characteristics, type of surgery, operation time, blood loss, hospital stay, and complications were recorded.

### Surgical technique

Intra-operative ultrasound was routinely used to locate the breast tumors,<sup>23,24</sup> and a small amount of gel containing blue dye was injected to mark the planned resection line on the mammary gland, to ensure adequate removal of the breast tumors, which sometimes were non-palpable.<sup>25</sup> A detailed description of the round block technique, which is a widely used oncoplastic surgical procedure for the management of breast cancer, follows.<sup>19,20,21,22</sup> A pair of concentric circum-areolar skin incisions was made, one placed at the areolar margin and a second at a radius of about 0.5 cm–1 cm further out. The intervening ring of skin was excised in a full thickness or partial thickness fashion. Then, wide skin flaps were developed over the index and flanking quadrants to enable wide local excision of the tumors. Once all the tumors were resected, reconstruction of the gland was undertaken by undermining, advancing, and performing a layered closure of the flanking glandular breast tissue using 3–0 absorbable sutures. For skin closure, a non-absorbable purse-string suture was placed at the outer skin margin to reduce its diameter to that of the normal areola. Skin closure was then completed with the suturing of these two skin margins together, forming the new areolar margin.

The aesthetics results were evaluated by the patient and the operating breast surgeon two months after operation, when the wound conditions had stabilized. The aesthetic result was evaluated by comparing the pre- and post-op breast shape, nipple position and volume symmetry of the bilateral breasts. The overall aesthetic result was graded as good, fair, and unsatisfactory.

## Results

From May 2011 to June 2013, 26 females with benign breast disease underwent the round block technique to excise their breast tumors at CCH. Twenty (77%) of the 26 patients had multicentric fibroadenomas and comprised the current study cohort. (Six patients received round block technique due to single breast tumor, such as large benign fibroadenoma or phyllodes tumor, and were excluded from current study.) The mean age of these 20 patients was  $36.5 \pm 10.4$  years (range 14–50 years). Twelve (60%) of the 20 patients had unilateral breast tumors, and 8 (40%) had bilateral breast lesions. The average number of tumors removed was  $3.3 \pm 1.2$  (range 2–6) per breast, and mean tumor size was  $2.2 \pm 0.5$  cm (ranging

Download English Version:

<https://daneshyari.com/en/article/3178508>

Download Persian Version:

<https://daneshyari.com/article/3178508>

[Daneshyari.com](https://daneshyari.com)