



ELSEVIER



Patient age and breast resection weight affect immediate postmastectomy breast reconstruction in ductal carcinoma *in situ*

Pierre Burnier ^{a,b,*}, Delphine Hudry ^{b,c}, Leslie-Ann See ^{a,b,c},
Alain Duvernay ^b, Matthieu Roche ^b, Catherine Loustalot ^b,
Narcisse Zwetyenga ^{a,c}, Charles Coutant ^{b,c}

^a Department of Plastic, Reconstructive and Aesthetic Surgery, 14 Rue Paul Gaffarel, Dijon, Côte d'Or, France

^b Department of Oncologic Surgery, Georges-François Leclerc Cancer Institute, 1 Rue du Professeur Marion, Dijon, Côte d'Or, France

^c Dijon University, 7 Boulevard Jeanne d'Arc, Dijon, Côte d'Or, France

Received 14 January 2015; accepted 27 September 2015

KEYWORDS

Immediate breast reconstruction;
Breast cancer;
Ductal carcinoma *in situ*;
Mastectomy;
Breast reconstruction

Summary Purpose: Mastectomy is necessary for 40% of the ductal carcinoma *in situ*. If immediate breast reconstruction (IBR) is systematically proposed, 81% of the patients would choose immediate versus delayed breast reconstruction, but the actual IBR rate is only approximately 50% of them. Therefore, the aim of this study was to identify objective characteristics that distinguish the patients who actually underwent IBR from those who did not.

Methods: Several criteria of 248 patients who have undergone mastectomy for ductal carcinoma were analyzed. Factors studied were age, body mass index, diabetes, tobacco use, and weight of the specimen of resection.

Results: The rate of IBR was 43%. An increase in age and weight of the resection specimen, irrespective of the body mass index, was associated with a lower rate of IBR. Thus, an increase of 100 g in the weight of the breast induces a significant reduction of the IBR (33%).

Conclusions: In our series, older patients or patients with larger breasts (irrespective of the body mass index) were less likely to undergo IBR. In order to be in line with the patient's desire, the surgeons of our unit should broaden their indications of IBR. The lack of reconstruction of large breasts should certainly be compensated in part with the recent development of free tissue transfers in our unit.

Level of evidence: 3.

* Corresponding author. Department of Plastic Reconstructive and Aesthetic Surgery, University Central Hospital, 14 Rue Paul Gaffarel, 21000 Dijon, France. Tel.: +33 6 77 04 56 34; fax: +33 3 80 29 35 86.

E-mail address: burnier-pierre@hotmail.fr (P. Burnier).

Introduction

Incidence of ductal carcinoma *in situ* (DCIS) has been considerably increasing in the past 20 years^{1–3} with the widespread adoption of screening mammography.⁴ It represents 20–25% of all patients who were newly diagnosed of breast cancer.⁵

Together with this incidence augmentation and despite the trend to suggest less-aggressive treatment, mastectomy is still required for 40% of the patients, because of diffuse multifocal disease, tumor size, or site.¹

When breast reconstruction (BR) was proposed, 81% of the patients chose immediate breast reconstruction (IBR).⁶ This type of reconstruction is also statistically associated with a better postoperative psychological well-being,⁷ but the rate of BR still remains around 50%.^{8,9} Moreover, only 1–3% of the patients who have undergone mastectomy without IBR decided to undergo a delayed breast reconstruction (DBR).^{9,10} This shows a gap of 30% between patient's wishes and actual BR rate. Due to these facts, the surgeons tended to promote IBR when it is possible and it is also fundamental to identify factors influencing the immediate or delayed character of BR.

Some studies have already suggested different objective criteria, such as increasing age, excessive weight or obesity, diabetes, and tobacco use,^{8,10} but they are still inconsistent with their results.

The aim of this study was to identify characteristics that distinguish patients who actually underwent IBR from those who did not, after mastectomy was conducted for DCIS in our unit.

Methods

Patient population

All patients who underwent mastectomy for pure DCIS, between January 2004 and December 2012, in the oncological surgery unit at the Georges-François Leclerc Cancer Institute, Dijon, France, were included. The patients with microinvasive or invasive carcinoma or other histological type were excluded.

Patients were included in the IBR group if reconstruction occurred during the mastectomy procedure. The no-IBR group contained the patients who had chosen DBR or no BR at all.

Surgical management

After diagnosis of the disease, the decision of whether or not to perform mastectomy was taken by a multidisciplinary team (surgeons, oncologists, radiotherapists, psychologists, and geriatrists). The risks and benefits of only

mastectomy and mastectomy with IBR or DBR were clearly explained to the patients, in accordance with the French National Institute of Cancer – High Authority for Health (INCa–HAS) practice guidelines. Standard written information was provided to the patients, and their consent to the treatment proposed by the team was systematically required.

Uni- or bilateral modified radical mastectomy was used. All patients who underwent mastectomy for DCIS had a sentinel lymph node biopsy (SLNB). The different types of IBR were prosthetic implant, autologous *latissimus dorsi* flap (LDF), LDF associated with prosthetic implant, and transverse *rectus abdominis* myocutaneous (TRAM) flaps.

The follow-up process combined a physical examination with mammography and a bilateral breast echography 6 months after the mastectomy and then each year throughout life.

Data comparison and statistical analysis

The following data characteristics were studied: clinical criteria (age, body mass index (BMI), and menopausal status), comorbidities (tobacco use, i.e., >5 cigarettes per day and diabetes), histopathological criteria (weight of the mastectomy specimen and SLNB status), and the type of BR.

The BMI (kg/m²) determined the following three weight categories:

- Normal, if BMI is ≤ 25 ;
- Overweight, if BMI is between 25 and 30; and
- Obese, if BMI is ≥ 30 .

Variables with normal distribution were expressed with mean and range (min–max). The Student's *t*-test, chi-squared test, or Fischer's exact test were used to compare the different groups. Multivariate analyses of quantitative variables were performed using multiple linear regressions. All analyses were performed using R package with rms libraries (<http://lib.stat.cmu.edu//R/CRANA>), and *p*-value < 0.05 was considered as statistically significant. Significant variables in the univariate analysis (*p* < 0.1) are those tested in multivariate analysis.

This article has been written in accordance with the STROBE guidelines.

Results

In our study, 248 patients underwent mastectomy for DCIS. The IBR and no-IBR groups included 107 (43%) and 141 (57%) patients, respectively. The median follow-up time was 48 months.

Download English Version:

<https://daneshyari.com/en/article/4116973>

Download Persian Version:

<https://daneshyari.com/article/4116973>

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