Immediate breast reconstruction after mastectomy at Örebro University Hospital

Version 2

Author: Linnea Larsson, MB
School of Medical Sciences
Örebro University
Örebro
Sweden

Supervisor: Maria Wedin, MD
Department of Surgery
Örebro University Hospital
Örebro
Sweden

Word count
Abstract: 250
Manuscript: 3500
Abstract

Introduction
Immediate breast reconstruction (IBR) can be offered to breast cancer patients after mastectomy. A satisfactory breast symmetry has positive effects on psychosocial morbidity, quality of life and body image. The frequency of IBR were in 2017 in Region Örebro County 4%, lower than the national target on 20%.

Aim
The aim is to provide an overview of the work with IBR at Örebro University Hospital in 2016, regarding frequency of IBR, work with IBR at multidisciplinary team conferences, documentation of the patient’s opinion about IBR, delayed reconstructions, patient characteristics and presence of contraindications.

Material and methods
This was a retrospective study of all women who underwent mastectomy at Örebro University Hospital in 2016.

Results
Five of the 103 women got IBR with expander implants in connection to mastectomy, additionally 28 had no contraindications for IBR. Five of the women have discussed about IBR at multidisciplinary team conferences and seven had notes about their attitude to IBR. Ten women underwent delayed reconstruction during the follow-up, additional seven patients were waiting for surgery. There were no significant differences in patient characteristics between the groups “mastectomy and IBR” and “mastectomy only”.

Conclusions
The low frequencies of performed IBR, discussions at multidisciplinary team conferences and documentation of the patient’s opinion about IBR indicate that there is space for a more active work about IBR. Besides the women who got IBR, there were additionally 28 women without any contraindications for IBR, indicating that there is a considerable group that can become candidates for IBR.

Keywords
Breast cancer, Immediate breast reconstruction, Mastectomy, Contraindications, Radiotherapy
Introduction

Every year almost 9500 Swedish women are affected by breast cancer[1]. Surgery is the main treatment together with radiotherapy (RT) and systemic oncological treatments. The two surgical possibilities are mastectomy or breast-conserving surgery. Breast-conserving surgery followed by RT is a safe treatment and can be used for women with unifocal smaller tumors, but also the size of the breast matters. Mastectomy can be used in cases with multifocal tumors, a disadvantaging between size of tumor and breast, relapse after breast-conserving surgery, in inflammatory tumor or other T4-tumor after neoadjuvant treatment, in preventive surgery and in accordance with the patient’s desire[1]. In case of mastectomy, an immediate breast reconstruction (IBR) and delayed reconstruction may be offered, both leading to satisfactory breast symmetry with positive effects on psychosocial morbidity, quality of life and body image[1–3]. IBR does not lead to an increased risk of local relapse compared with only mastectomy[4]. Postoperative RT against breast and lymph nodes lower the risk of relapse and mortality of invasive breast tumors and ductal cancer in situ and lymph node metastasis, respectively. If the tumor’s size exceeds 50 mm or if the tumor is not removed radically, the national practice guideline recommends RT after mastectomy [1].

IBR can be done with three different techniques, fixed-volume permanent implants, permanent or temporary tissue expanders and autologous reconstruction. The temporary ones need to be replaced by permanent implants in another procedure[5]. The most used in Örebro are temporary tissue expanders. The effects of RT on IBR have generated significant discussion. Several studies have demonstrated that RT is a risk factor of complications after implant based IBR, including capsular contracture, poor cosmetic outcome, tissue ulceration and reconstruction failure, resulting in higher rates of revisional surgery[3,5–7]. Predictors of reconstruction failure are smoking, T3 or T4 tumors and axillary lymph node invasion[8]. RT prior the mastectomy compared when RT is given postoperatively is a greater risk factor for complications after IBR. When RT is given prior to the mastectomy autologous techniques are recommended[5,9]. The need of reoperation is high even among IBR-patients without postoperative RT, indicating a general problem with all implant-breast reconstructions [5]. Studies about the effect of RT on the outcome after implant-based IBR are confounded by small patient groups, cross-sectional designs, varying surgical techniques, diverging conclusions and no randomized trials [5,6,10,11]. A Cochrane review from 2011 of all literature comparing immediate with delayed breast reconstruction found only one randomized, controlled trial[12].
Other studies have demonstrated no significant differences in the overall rate of minor or major complications after RT in implant IBR[13], between permanent breast implant and temporary tissue expander[14], and that delayed reconstruction is associated with increased postoperative medical and surgical complications compared IBR, probably related a higher comorbidity [15]. Zhong et al shows in a multivariable regression analysis that immediate reconstruction was not associated with increased postoperative complications, after adjusting for laterality, BMI, smoking, previous breast irradiation, and sentinel lymph node dissection [16].

Contraindications for reconstruction are locally advanced disease, mental instability or inability to understand the meaning of the surgery. According to the guidelines, among patients with previously RT or planned postoperative RT, IBR should with implants be performed with caution, and the patient must be informed about the risks of complications. Overweight and smoking are relative contraindications for all reconstruction surgery[1]. Thus even when RT is planned postoperatively is implant reconstruction an acceptable surgical option[17].

Data from the National Quality Registry for Breast Cancer shows that the presence of IBR varies a lot between different regions in Sweden. In 2017 were 26% of the mastectomies in Stockholm County Council combined with IBR, compared with 4% in Region Örebro County. The target is that at least 20% of the mastectomies will be combined with IBR[18].

Aim

The aim is to provide an overview of the work with IBR at Örebro University Hospital in 2016, regarding frequency of IBR this year, work with IBR at multidisciplinary team conferences, documentation of the patient’s opinion about IBR, frequency of delayed reconstructions, patient characteristics and presence of contraindications for IBR.

Material and methods

This was a retrospective study of all women who underwent mastectomy in 2016 at Örebro University Hospital. Included women had undergone mastectomy or modified radical mastectomy, which is mastectomy with axillary clearance at the same time, from 1 January to 31 December, 2016. Totally 105 women underwent mastectomy during this period. Two patients were excluded from the study because one sought asylum and the other was a prophylactic mastectomy, generating a study population of 103 patients.
The casebooks were examined, in the electronic system for casebooks “Klinisk portal”, from, whether IBR or not, discussion and documentation at multidisciplinary team conferences, documentation of the patient’s own opinion of IBR and how many who instead underwent delayed reconstruction. The casebooks were also examined for patient characteristics including smoking, body mass index (BMI), prior or planned RT, age, number of drugs and distance from home to Örebro University Hospital. The presence of contraindications was compared between women who underwent mastectomy only and those who underwent mastectomy and IBR. Some of the factors in patient characteristics were used to examine presence of contraindications. No contraindications for IBR were defined as no smoking, no prior or postoperative RT, BMI <30 kg/m² and <5 regularly used drugs. The facts above were acquired from notes in the casebooks in connection to the mastectomy. If many values of weight and length (BMI) were available, those closest in time were used. Age was defined in completed years on the day of the mastectomy. Number of drugs was defined as the number of regularly used drugs at the time of hospitalization within weeks before surgery. The distance from home to hospital specified in kilometers. No patient data regarding patient characteristics were missing. The facts were summarized anonymized.

Patient characteristics were summarized and compared between the groups mastectomy only and mastectomy and IBR by Fisher’s exact test for categorical variables and Mann-Whitney U test for continuous variables. Statistical significance was set at P<0,05. IBM SPSS Statistics 23 was used for the statistical analysis.

The study was approved by the regional ethical review board in Uppsala (No 2018/362). From an ethical aspect, the examine of casebooks was done afterwards and no one was asked about participation. However, it is important with follow-up of medical care, to control compliance to guidelines, to investigate causes to deviations and possibilities to counteract against them. It is also important to have the ability to offer IBR to more women, to avoid psychosocial distress as much as possible. Further, this study does not involve any further treatment for the women and they are not vulnerable to any additional risks.

Results
Five of the 103 women got IBR in connection with mastectomy. In five cases they had a discussion about IBR, and the possibilities for this surgery to the individual woman, at multidisciplinary team conferences, based on notes in the casebooks. But in two cases the IBR and notes at multidisciplinary team conferences did not belong to the same patients. There
were notes about the attitudes of the women to IBR in seven cases, and three of them refused the offer about IBR or were cases where IBR was not possible. Four women underwent delayed reconstruction within 8-12 months after the mastectomy. Expander implants were used in all these early cases and none had got prior or postoperative RT. No one underwent delayed reconstruction within 13-17 months. Within 18-21 months, seven women got delayed reconstruction and six have had RT against the current breast prior or after the mastectomy. The techniques used in these late cases were Latissimus dorsi (LD) flap and Deep inferior epigastric perforator (DIEP) flap. Additional seven patients were waiting for reconstructive surgery at the time for collection of data (table 1). Follow-up was 20 to 31 months.

Table 1: The frequency of IBR, discussion about IBR at multidisciplinary team conferences, notes about the women own opinion about IBR and numbers of delayed reconstruction among all mastectomies in 2016.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>103</td>
<td>100 %</td>
</tr>
<tr>
<td>IBR</td>
<td>5</td>
<td>5 %</td>
</tr>
<tr>
<td>Discussion at multidisciplinary team conferences</td>
<td>5</td>
<td>5 %</td>
</tr>
<tr>
<td>Patients own opinion</td>
<td>7</td>
<td>7 %</td>
</tr>
<tr>
<td>Delayed reconstruction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- After 8-12 months</td>
<td>4</td>
<td>4 %</td>
</tr>
<tr>
<td>- After 13-17 months</td>
<td>0</td>
<td>0 %</td>
</tr>
<tr>
<td>- After 18-21 months</td>
<td>6</td>
<td>6 %</td>
</tr>
<tr>
<td>- Reconstruction planned</td>
<td>7</td>
<td>7 %</td>
</tr>
</tbody>
</table>

As shown in table 2 and 3, there were no significant differences in patient characteristics between the women who underwent mastectomy and IBR and those who underwent mastectomy only. The factors that were examined were presence of smoking, RT, BMI, age, number of drugs and distance from the patient’s home to hospital. Excluding the five women who got IBR, there were 28 women without any contraindications for IBR (no RT, no smoking, BMI <30 kg/m², <5 drugs).
Table 2: Comparison of presence of smoking and RT between the groups mastectomy and IBR and mastectomy only.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total</th>
<th>Mastectomy and IBR</th>
<th>Mastectomy only</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of participants</td>
<td>103</td>
<td>5</td>
<td>98</td>
<td>1.0</td>
</tr>
<tr>
<td>Smoking</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- No smoking</td>
<td>90</td>
<td>5</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>- Smoking</td>
<td>13</td>
<td>0</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Radiotherapy</td>
<td></td>
<td></td>
<td></td>
<td>0.573</td>
</tr>
<tr>
<td>- No RT</td>
<td>55</td>
<td>4</td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>- Postoperative RT</td>
<td>41</td>
<td>1</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>- Prior RT</td>
<td>7</td>
<td>0</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Comparison of BMI, age, number of drugs and distance to hospital between the groups mastectomy and IBR (n=5) and mastectomy only (n=98).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Min-Max</th>
<th>Mean rank</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI (kg/m²)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.615</td>
</tr>
<tr>
<td>- Total</td>
<td>26.3</td>
<td>25.6</td>
<td>17.8-42.0</td>
<td>58.8</td>
<td></td>
</tr>
<tr>
<td>- Mastectomy and IBR</td>
<td>26.7</td>
<td>26.3</td>
<td>22.0-30.7</td>
<td>51.7</td>
<td></td>
</tr>
<tr>
<td>- Mastectomy only</td>
<td>26.3</td>
<td>25.5</td>
<td>17.8-42.0</td>
<td>51.7</td>
<td></td>
</tr>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.615</td>
</tr>
<tr>
<td>- Total</td>
<td>63.4</td>
<td>64.0</td>
<td>27-95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Mastectomy and IBR</td>
<td>60.4</td>
<td>63.0</td>
<td>49-71</td>
<td>45.2</td>
<td></td>
</tr>
<tr>
<td>- Mastectomy only</td>
<td>63.5</td>
<td>64.0</td>
<td>27-95</td>
<td>52.4</td>
<td></td>
</tr>
<tr>
<td>Drugs (numbers)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.483</td>
</tr>
<tr>
<td>- Total</td>
<td>2.57</td>
<td>1.0</td>
<td>0-13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Mastectomy and IBR</td>
<td>1.0</td>
<td>1.0</td>
<td>0-2</td>
<td>42.8</td>
<td></td>
</tr>
<tr>
<td>- Mastectomy only</td>
<td>2.65</td>
<td>1.5</td>
<td>0-13</td>
<td>53.5</td>
<td></td>
</tr>
<tr>
<td>Distance (km)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.568</td>
</tr>
<tr>
<td>- Total</td>
<td>25.4</td>
<td>21.0</td>
<td>0.5-82.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Mastectomy and IBR</td>
<td>29.3</td>
<td>41.0</td>
<td>1.6-53.0</td>
<td>59.7</td>
<td></td>
</tr>
<tr>
<td>- Mastectomy only</td>
<td>25.1</td>
<td>17.5</td>
<td>0.5-82.0</td>
<td>51.6</td>
<td></td>
</tr>
</tbody>
</table>

Discussion and conclusion

Our study shows that the frequency of IBR in Region Örebro County in 2016 was 5 %, lower than the target in the national guidelines of 20 %[18]. This year was the national median frequency 12 %, when 357 of 2915 mastectomies in Sweden were in combination with IBR [18]. IBR was also discussed at multidisciplinary team conferences in a low extent, 5 %. Even the patient’s own opinion about IBR was noted in just a few cases. Together this indicates that there is space for progress of a more active work about IBR with discussion at multidisciplinary team conferences and responsiveness to the patient’s own opinion.
Furthermore, there were 28 women without any contraindications for IBR (no RT, no smoking, BMI <30 kg/m², <5 drugs), excluding the five women who got IBR. This is indicating that there is a considerable group of women in Region Örebro County who can become candidates for IBR.

During the examination of the casebooks we also noticed, beside the facts presented in results, interesting findings about women's opinions about mastectomy in wider terms. Several women wished mastectomy ahead of breast-conserving surgery and later also underwent mastectomy. There were also women who expressed their wish about breast-conserving surgery or IBR. Thus, both opinions occur among women with breast tumors. We also found two women who after the mastectomy underwent breast reduction surgery on the contralateral side because they experienced that side heavier according to the larger size of breast. In other words, a mastectomy can have varying meaning to different women. Some women can offer psychological benefits of reconstructive surgery, others get improved psychological functioning without the surgical procedure[19]. It has been shown that IBR-patients have a greater disturbance in mental health, more severe impairment in emotional wellbeing to their cancer diagnosis and higher levels of anxiety. They have also greater disturbance in work and daily activities, related to the cancer diagnosis[20]. Women in a broad age range are affected by breast tumors and one can contemplate about the importance of age in the question about mastectomy and reconstruction. Younger women are a patient group who suffer most from their psychosocial well-being, where the diagnosis has a different impact in this phase of life and they have a different attitude toward their own femininity [5]. Another reflection is how does a wait for reconstruction influence the patient and her quality of life. To wait for a delayed reconstruction implies impaired body image, sexuality and health-related quality of life, but this improves and after reconstruction any differences to IBR can not be found [2]. In a wider dimension, patients who undergo breast conserving surgery report better body image than the mastectomy-patients, especially during the first years[21]. Considering that, it is important as far as possible to counteract psychosocial suffer after mastectomy, and IBR has great benefits and possibilities to that, specially when breast conserving surgery is not possible. The doctor needs to be attentive to the patients signals about their body image and importance of the breast to the individual woman.

Totally ten women underwent delayed reconstruction during follow-up and additionally seven were waiting for surgery. In several cases it is written that the wait for plastic surgery is long. The settings for that can be in the organization of the medical service and its shape varies
between different hospitals and regions. At Örebro University Hospital, the breast surgeons do the mastectomies while the plastic surgeons follow up and finish with the IBR. The plastic surgeons also do the cases with delayed reconstruction. In this hospital the breast surgeons and plastic surgeons belong to two different clinics. However, in Stockholm County Council a surgeon with competence in both fields can perform both the mastectomy and IBR[5]. But in other hospitals in Sweden where they perform mastectomies, they have no competence in plastic surgery at all. Of course, in these places the possibilities for IBR are limited. The Örebro University Hospital has good conditions for IBR regarding the access to plastic surgery. According to the national guidelines, reconstructive surgery should be done by a breast center with a great experience and wide competence of reconstructive surgery. IBR with implants can be done by breast surgeons with competence in reconstruction or plastic surgeons, unlike IBR with own tissue which need a plastic surgeon[1]. Maybe, IBR should become more accessible to the patients if the breast surgeons also performed the IBR. The breast surgeons meet the patients the first times at the breast reception and if they have a wider knowledge about IBR it could be easier to introduce reconstruction to the patient and feel in if they are interested in IBR or not. When every breast surgeon qualified in the UK got the ability to perform IBR with implants and LD flap, the rates of IBR rose[22]. To get this competence a large volume of patients is needed and takes time of practice to the individual surgeon[1,23,24]. Alternatively, the plastic surgeon can be involved in the multidisciplinary team and participate at multidisciplinary team conferences, thereby raise reconstruction surgery to a more central part of the oncologic care[25]. However, collaboration between plastic and breast surgeons is necessary[25]. Every year are approximately 250 women operated with either mastectomy or breast-conserving surgery at Örebro University Hospital[18]. Supplementary training for breast surgeons in IBR may lead to a relative shortage of available breast surgeons for the large group of breast cancer patients, even if IBR-patients would receive benefits from a long-term view. The overall cost is reduced when IBR is compared to delayed reconstruction, and it can be an argument for supplementary training for surgeons in both breast and plastic surgeons that also involve costs [10,26].

It is interesting that there are such large differences in occurrence of IBR between the different regions in Sweden. A wonder is if there are any differences in characteristics between the mastectomy patients in Örebro and in Stockholm where the frequency of IBR is higher. Erikson et al presented in their study about risk factors for complications after IBR also characteristics for the patients. Their mean age was about 50 years compared with 63 in
this study. Also BMI was lower among their patients, about 24 kg/m² and here 26 [5]. Of
course, is it important to take into consideration that they only had IBR-patients in their study
and we have all mastectomy-patients, generating two slightly different patient groups. In
future studies it should be interesting to compare the patient’s characteristics between two
regions to investigate if it can be a cause for the differences in IBR-frequency.

When the patient has got IBR with expander implant it is first unfilled. After that, the patient
comes for the next appointment to nurse and surgeon shortly after surgery. Later the next
appointments are every 7th to 14th day for filling up the expander, little by little. When the
expander is filled to the correct amount, one awaits additional two to four months before
exchange to a permanent implant, because the breast will stretch and adapt[27]. This implies
many visits to the hospital for the patients, and the distance to the hospital and the time for
trip can be essential. Unfortunately, the comparison of distance to hospital between the groups
mastectomy and IBR and mastectomy only was insignificant. However, Region Örebro
County is a geographically relatively small region and the distance should maybe not matter.
To the women who desire IBR, the distance to the hospital and the numbers of next
appointments are perhaps not determining.

With consideration to the discussion about whether RT is leading to increased numbers and
severity of complications, Riboffo et al showed that the plastic surgery community usually
highlights the complications caused by RT. At the same time were other specialists did not
report more favorable results, the opinion of breast surgeons is somewhere in the middle. The
differences in reported complications between plastic surgeons and other specialists can be
explained with the greater attention to the aesthetic details, such as capsular contractures [7].
But RT is only one of several relative and absolute contraindications. Cowen et al proposed
that an algorithm should be used when deciding IBR or not, regarding for example smoking,
tumorstage and axillary lymph node invasion. This model should help the surgeon and patient
to predict the probabilities of complications with implant-based IBR[8]. But it is not sure
whether the patient should have RT or not until the microscopic examine of the whole tumor
and axillary lymph node are done and this occur after the mastectomy[1]. In other words, the
staging of the tumor comes after the mastectomy and an eventually IBR, and to decide about
IBR, without being sure about eventual risk factors, is difficult to both the doctors and the
patient.

At Örebro University Hospital, the plastic surgeons for traditional reason almost without
exception refuse IBR when RT is planned. This is in line with the studies which show a
higher rate of complications according to RT after the mastectomy and IBR [3,5–7]. But there are also other studies which do not show this correlation between RT and complications[13,14]. If it becomes possible to offer IBR to breast cancer patients even when RT is planned, more than the 28 women can be candidates for this surgery. The result should give positive effects on psychosocial morbidity, quality of life and body image to more breast cancer patients[1–3].

Limitations in this study are, above all, the small number of patients, especially among those who underwent IBR. This limited the possibilities to examine if there were any significant differences in patient characteristics between women with and without IBR. Another limitation is that this study just considers the patient’s opinion about IBR and not mastectomy in wider terms. It could be valuable to examine the opinions among the women about reconstruction in broader terms, including for example if they prefer mastectomy, do not want any reconstruction or wishes about breast-conserving surgery. To get further possibilities to develop the IBR-care in Örebro, it should be valuable with a comparison to another region with higher frequency of IBR, for example Stockholm. Things that should be interesting to examine are patient characteristics, techniques of reconstruction, frequency and types of complications, surgeon’s competence including specialities and the type of discussion about IBR among colleagues and between doctor/nurse and patient. It should also be interesting with a new research like this in some years to make it possible to evaluate development in the work of IBR at Örebro University Hospital over time.

Another study that should bring important information would be a qualitative research about women thoughts about reconstruction, body image and psychosocial well-being at different moments, for example at the time of diagnosis, before and after mastectomy, after immediate or delayed reconstruction and follow-up after some years. Methods that can be used in a qualitative research are interviews, both in groups and individual, and observations, for example from diaries. Another possible method are questionnaires with open questions or standardized, validated questionnaires for measure quality of life, for example SF-36, BREAST-Q, EORTC QLQ-BR45 specified in breast cancer and EORTC QLQ-BRECON23 specified in breast reconstruction[2,28,29]. This information should be useful to investigate if women receive benefits of IBR and, by extension, might help the doctors to identify women who receive the most benefits of IBR. Another interesting research can be a quality observation study regarding possible differences between breast surgeons, plastic surgeons and oncologists in manner when they talk to breast cancer patients about reconstruction.
In summary, of totally 103 women who underwent mastectomy at Örebro University Hospital during 2016 five also underwent IBR. This is lower than the target from the national guidelines on 20%. The low frequencies of discussions about IBR at multidisciplinary team conferences and documentation of the patient’s opinion about IBR indicate that there is space for a more active work about IBR. The opinions about mastectomy and breast reconstruction differ among women, and mastectomy can be a desire to some, but can be repulsive to others. Satisfactory breast symmetry has positive effects on psychosocial morbidity, quality of life and body image. Therefore, it is important to develop the work with IBR to get the possibilities to offer IBR to women who has a wish for it. This study showed no significant differences in patient characteristics between the groups mastectomy and IBR and mastectomy only. There were ten women who underwent delayed reconstruction during the follow-up and seven women were waiting for surgery, indicating that the wait for delayed reconstruction is long. But there were, beside the five women who got IBR, additionally 28 women without any contraindications for IBR. This indicates that there is a considerable group of women in Region Örebro County that can become candidates for IBR in the future.
References


18. NKBC [Internet]. Nationellt Kvalitetsregister För Bröstcancer [citerad 2018 sep 4];Available from: http://statistik.incanet.se/brostcancer/


27. Bröstrekonstruktion med expanderprotes [Internet]. [citerad 2018 okt 1];Available from: https://www.regionorebrolan.se/sv/uso/Patientinformation/Kliniker-och-enheter/Plastikkirurgiska_kliniken1/Patientinformation/Brostrekonstruktion-med-expanderprotes/


Cover letter

Dear Editor,

I am pleased to submit an original research article entitled “Immediate breast reconstruction after mastectomy at Örebro University Hospital” for consideration for publication in British journal of surgery. In this manuscript, we show that the frequency of IBR at Örebro University Hospital is much lower than the national guidelines, that the wait for delayed reconstruction is long and that there is a large group of women without any contraindications for IBR who can became candidates for IBR. We also show that there were notes in the casebooks about the women’s opinion about reconstruction in just a few cases.

We believe that this manuscript is appropriate for publication by British journal of surgery because it illustrates an essential part of the care of patients with breast cancer. IBR is important for their psychosocial well-being. To develop this care is current to many hospitals and our findings can be an asset for them. The frequency of delayed reconstructions in Sweden is not registered but our data gave an indication for the frequency in other regions in Sweden. A mapping of women’s own opinion about mastectomy and reconstruction is an essential part for future studies about immediate and delayed breast reconstruction.

This work is our own original work, has not been published and is not under consideration for publication elsewhere. We hope that you will considerer publishing our manuscript in your journal.

Sincerely,

Linnea Larsson, MB
School of Medical Sciences
Örebro University
Örebro
Sweden
Populärvetenskaplig sammanfattning

**Fler kvinnor med bröstcancer skulle kunna erhållas direktrekonstruktion**


I den här studien har man utifrån journalanteckningar gjort en kartläggning av alla som genomgick en operation där hela bröstet opererades bort vid Universitetssjukhuset Örebro under år 2016. Man kollade på hur många direktrekonstruktioner som gjordes, hur aktivt man hade direktrekonstruktion med som en möjlighet, hur många som fick en rekonstruktion vid senare tillfälle och hur många som hade andra faktorer som gjorde att direktrekonstruktion inte var möjlig. Exempel på sådana faktorer är rökning, övervikt och strålbehandling mot bröstet. Resultat var att 5 av de totalt 103 patienterna genomgick en direktrekonstruktion, 10 hade genomgått rekonstruktion vid senare tillfälle och 7 väntade hösten 2018 på operation. Det var 28 kvinnor som inte genomgick någon direktrekonstruktion, men som inte heller hade några faktorer som begränsade möjligheterna till en sådan operation. Det visar på att det i Region Örebro Län finns en betydande grupp kvinnor som skulle ha möjlighet att genomgå direktrekonstruktion och ha nytta av en sådan operation, om det själva skulle vara intresserade av det.
Etiskt övervägande

Vård av svårt cancersjuka patienter väcker många frågor och funderingar över vad som är rätt och fel. Det mest ideala för att kartlägga riskfaktorer för komplikationer vid direktrekonstruktion är randomiserade studier. Studiedeltagarna ska då informeras och lämna godkännande för deltagande, men i vilken omfattning tar personen i fråga ett välgrundat beslut i en sådan situation? Att ha fått ett cancerbesked i nära anslutning till att man tar ett sådant beslut kan man tänka ha påverkan. Men att patientens beslut om studiemedverkan kan ha påverkats är ändå inte skäl att studiedeltagande inte ska vara frivilligt.

En annan typ av studier är kvalitetssäkringar av en kliniks egna arbete. De görs ofta i efterhand och utan att deltagarna tillfrågas, vilket är känsligt. Det är ändå viktigt att alla fall kommer med, för att möjliggöra att fånga de punkter där förbättringsarbete behövs. Den här typen av studier publiceras inte och sammanställda data sprids inte, vilket kan vara fördelaktigt för den enskilda individen.