Original Article

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A Picture of Breast Reconstruction in a Public Oncology Hospital in Latin America: A Ten-Year Experience

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ABSTRACT

Objective: Breast cancer is the most frequent malignant tumor among women worldwide, with the sole exception of non-melanoma skin cancer. Currently, one of the most common treatments in Brazil is modified radical mastectomy, which, although effective, leads to both physical and psychological complications. In this context, breast reconstruction seeks to restore the functional and psychosocial health of women. This study aims to investigate the characteristics of breast reconstructions after mastectomy by comparing immediate and delayed reconstructions.

Materials and Methods: This is a retrospective observational study, which was performed by analyzing the electronic medical records of the Erasto Gaertner Hospital in Curitiba, Brazil, from between January 2007 and December 2017.

Results: After applying exclusion criteria, we analyzed a total of 268 medical records from January 2010 to December 2017. The most frequent histological type was invasive ductal carcinoma. Patients treated after 2014 had a higher number of immediate reconstructions, and the most commonly used method was alloplastic reconstruction using expanders (66.5%). There was no significant difference in the frequency of immediate or late complications between patients who opted for immediate or delayed reconstructions. The most common immediate complication was surgical wound dehiscence, and the use of neoadjuvant chemotherapy was not associated with a higher rate of complications in immediate reconstructions.

Conclusion: The current preference is for immediate reconstructions with breast tissue expanders in combination with chemotherapy, which follows a trend in Brazil and worldwide that has been identified in the literature. Finally, the growth in immediate reconstructions with no associated increase in complications demonstrates the effectiveness of this practice.

Keywords: Breast cancer, mastectomy, reconstruction

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Introduction

Breast cancer is the most frequent type of malignant tumor among women worldwide, with the sole exception of non-melanoma skin cancer. The Brazilian Cancer Institute estimated that a total of 59,700 women would be affected by the disease during the years of 2018 and 2019 (1). The most common type of surgery for breast cancer in Brazil is conservative treatment, followed by modified radical mastectomy, with stable trends between 2008 and 2014 (2). Radical mastectomy and adjuvant therapies lead to major physical and psychological changes. In several cases, women's self-perception of their bodies is altered following mastectomy, with a sensation of mutilation and a loss of femininity and sensuality (3, 4).

Aiming to reduce the stigma caused by the disease and its treatment, breast reconstruction seeks to restore women's functional and psychosocial health. Aesthetic results can be optimized with the proper choice of reconstructive method, which include silicone breast implants and pedicled or microsurgical myocutaneous flaps (5).

The choice of the type of reconstruction is a complex decision that must be made on an individual-to-individual basis. It depends on several factors, such as the presence of comorbidities (6) as well as the size and configuration of the contralateral breast, previous surgical or non-surgical procedures, skin quality of the chest wall, and the preferences of the patient.

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A body of literature (7-9) has compared the responses of patients regarding the restoration of their body image, sexuality, and psychosocial outcomes for the different methods and timing of reconstruction (immediate versus delayed). However, it can be challenging to assess the psychosocial impact of different surgical procedures, since some candidates for conservative breast surgery choose mastectomy, and some candidates for reconstruction do not wish to do undergo the procedure. Other patients are not candidates for breast preservation or immediate reconstruction due to the advanced stage of the disease or the presence of comorbidities.

Given these considerations and the large number of reconstructions performed in the Erasto Gaertner Hospital (Curitiba, Paraná, Brazil) in recent years, we investigated the characteristics of patients undergoing breast reconstruction after mastectomy. We collected information on the epidemiology, type of tumor, and surgical procedures performed with the objective of comparing immediate and delayed reconstructions. We also analyzed changes in the profile of reconstructions conducted at the hospital over the last ten years.

Materials and Methods

This is a retrospective observational study that was performed through the analysis of electronic medical records of patients undergoing post-mastectomy breast reconstruction surgery at the Erasto Gaertner Hospital, located in Curitiba, Paraná, Brazil.

Our sample was comprised of female patients aged 18 or above who underwent surgery in the institution between January 2007 and December 2017, and whose medical records were at least 75% complete. Patients who did not meet the inclusion criteria were excluded.

We collected data on age, date of diagnosis and surgery, tumor type (general classification and subclassification), clinical and anatomopathological stage, hormone profiling (progesterone receptor, estrogen, HER-2, and KI-67), personal history (smoking, genetic syndromes, family history, fertility status, number of children), genetic background (Li-Fraumeni syndrome), treatment performed for the tumor (surgical, radiotherapy, chemotherapy; adjuvant, neoadjuvant), immediate or delayed reconstruction, contralateral breast symmetrisation, use of surgical drain, and presence of immediate and/or late complications after the reconstruction procedure.

The data were exclusively collected from electronic records, and investigators did not have contact with the patients studied at any time. There was therefore no need for a free, prior and informed consent protocol. The study was approved by the Hospital Research Ethics Committee under the Brazilian Certificate of Presentation for Ethical Evaluation (CAAE) no. 96006918.2.0000.0098, report No. 2,917,871, on September 26, 2018.

Patients were divided into two major analysis groups based on the date of reconstruction surgery: group 1 (2010–2013) and group 2 (2014–2017). This division was due to the 2013 passing of Law 12,802/2013 (10), which guarantees immediate reconstruction as an option to patients (when such a process is technically feasible and indicated). This law may change the sample since it facilitates a patient's decision to pursue immediate reconstruction. Due to the small number of electronic records of patients who underwent reconstruction between 2007 and 2009 (only four patients, with much missing information), these were excluded from the analysis.

Key Points

- The current tendency in Brazil is to perform immediate alloplastic reconstruction using expanders.
- No significant difference was found in the frequency of immediate or late complications between patients receiving immediate and delayed reconstructions.
- The use of neoadjuvant chemotherapy was not associated with a higher complication rate in immediate reconstructions.

Statistical analysis

The information obtained was tabulated in spreadsheets using Excel for MacOS® 2016, and analyzed using *GraphPad Prism*®, with inferences calculated through the chi-square test. Any p-values lower than 0.05 were considered statistically significant.

Results

A total of 308 records of reconstruction surgeries were available for the initial period of January 2007 and December 2017. After applying the exclusion criteria, the sample was comprised of 268 patients, which were divided into two groups according to the date of reconstruction surgery: group 1 (2010–2013), and group 2 (2014–2017). The characteristics of the patients are summarized in Table 1. Of particular note is that six patients in the study had Li-Fraumeni syndrome.

Invasive ductal carcinoma, or invasive breast cancer of no special type (NST), was the most frequent histological type of tumor in this study (Figure 1). Most patients were in stage II (A or B) (Figure 2) according to the seventh edition of the TNM Classification, which was the reference until 2017, the last year analyzed in this study.

Most patients had tumors with positive expression of estrogen (65.71%) and progesterone (59.77%) receptors. HER-2 was positive in 27.32% of patients. As expected, the proportion of immediate reconstructions higher in group 2, with 170 patients (71%), than in group 1, in which 14 patients (48%) underwent the immediate procedure (p=0.013). Figure 3 shows the percentage of growth in the number of immediate reconstructions over five years (2013-2017).

Alloplastic reconstruction with expanders was the most common method (66.5%) among patients who underwent immediate reconstruction (Figure 4). Meanwhile, autologous reconstruction methods were most prevalent among patients who received delayed reconstruction (Figure 5). Contralateral breast symmetry was performed in 71.73% and areola reconstruction in 41.56% of the patients. Surgical drain was used in 98.6% of patients, with an average use of 10 days.

There was no statistically significant difference between immediate and delayed reconstructions with respect to the occurrence of immediate complications. Among patients who underwent immediate reconstructions, 10.19% experienced complications in the first few days after the procedure and 8.9% experienced complications later on, while these figures are 14.06% and 9.37%, respectively, for delayed reconstructions. The most frequent complication among patients who underwent immediate reconstructions was suture dehiscence in the operative wound. Capsular contracture of patients with breast prothesis was the most frequent late complication in this group. Among those who underwent delayed reconstructions, the most common immediate complication was surgical site infec-

Table 1. Characteristics of the patient sample

Variable	Groups		
	Group 1 (2010–2013)	Group 2 (2014–2017)	Total (2010–2017)
Number (n)	29	239	268
Mean age, in years, at diagnosis	43.17 (31–59)*	47.12 (18–86)*	46.65 (18–86)*
Smoking	7.14%	27.84%	24.73%
Positive family history of breast cancer	55.5%	45.95%	48.75%
Fertility status – fertile age	73.3%	51.16%	53.47%

*values in brackets represent the minimum and maximum ages, respectively.

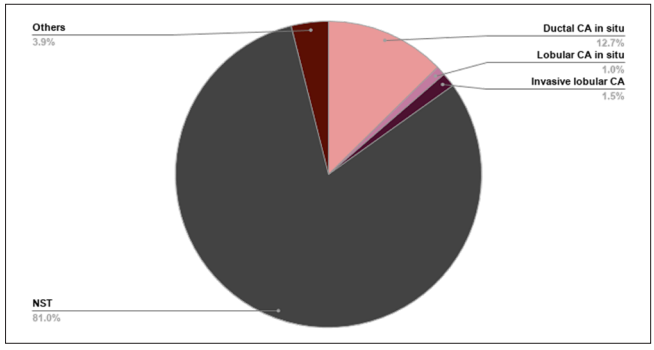

Figure 1. Histological type of tumor in patients in the complete sample (2010–2017)

CA: carcinoma; NST: no special type, or non-specified invasive cancer

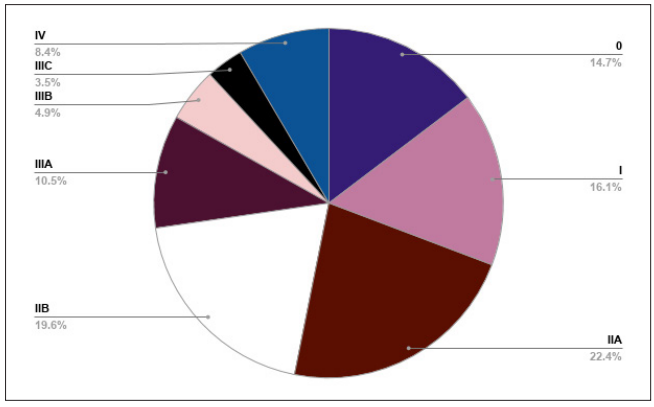

Figure 2. Clinical stage of patients in the complete sample (2010–2017), according to the seventh edition of the TNM Classification

tion, while capsular contracture remained the most frequent complaint. Finally, smokers had significantly more late complications than non-smokers (31.8% versus 0.7%, respectively; p=0.00438).

In the early reconstruction group, the failure rate of alloplastic reconstruction was 16.3% and 8.7% in autologous reconstruction. Meanwhile, alloplastic reconstruction had a failure rate of 25.6% in the late reconstruction group, while the autologous reconstruction failure rate was 14.7%. We were not able to make an inference regarding differences between the groups because of the low total number of autologous reconstructions.

Radiotherapy was more frequently performed on patients of the group who received a delayed reconstruction than those who underwent immediate reconstruction (58.18% and 28.4%, respectively; p=0.00016). The complication rate (including immediate and late complications) was 29.16% in the radiotherapy group and 20.35% among those who did not receive radiotherapy (p= 0.28). Among those who did receive radiotherapy, those who had an immediate reconstruction had a complication rate of 27.02%, while those who underwent a delayed reconstruction had a 31.4% complication rate, though the difference was not significant (p=0.76). Finally, the complication rate of alloplastic reconstruction among

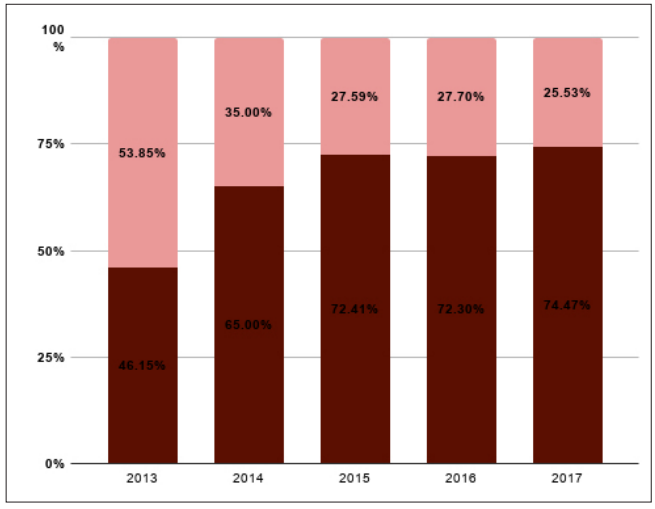

Figure 3. Percentage of immediate (dark red) and delayed (light red) reconstructions over five years (2013–2017)

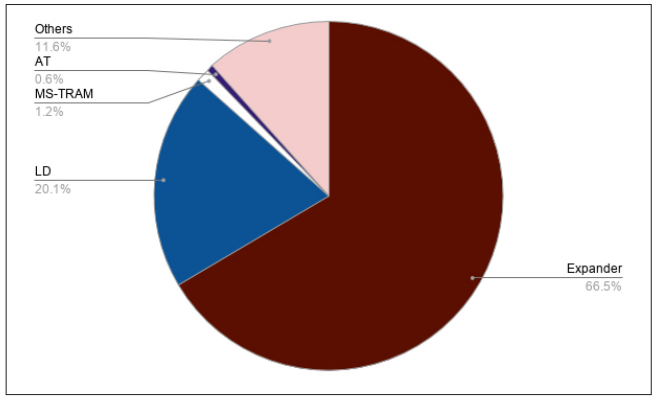

Figure 4. Types of reconstruction performed in patients submitted to immediate reconstruction

AT: anterolateral thigh; LD: latissimus dorsi; MS-TRAM: free muscle-sparing transverse rectus abdominis myocutaneous; others

those who underwent radiotherapy was 32.65% and 21.7% among patients who received autologous reconstruction and radiotherapy (p=0.47).

Table 2 shows that 70.3% of the patients underwent chemotherapy, and a higher percentage of those who received delayed reconstruction receiving neoadjuvant chemotherapy. Among patients who received neoadjuvant chemotherapy and immediate reconstruction (n=44), 25% had immediate or late complications. In comparison, the complication rate was 18.11% in patients who underwent immediate reconstruction and did not receive neoadjuvant chemotherapy (n=127). This difference, however, was not statistically significant (p=0.3811). Figures 6a-c illustrate a case conducted in the studied hospital.

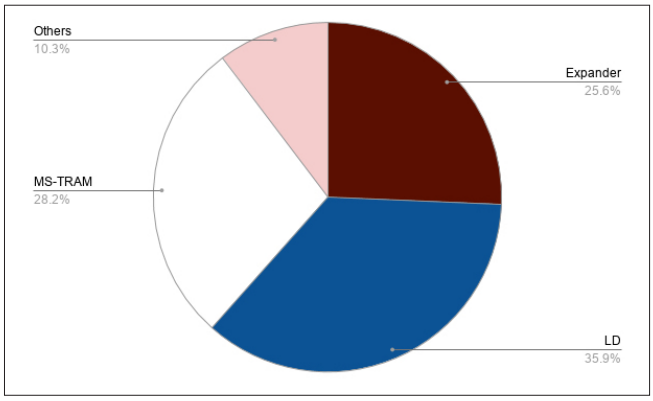

Figure 5. Types of reconstruction performed in patients submitted to delayed reconstruction

LD: latissimus dorsi; MS-TRAM: free muscle-sparing transverse rectus abdominis myocutaneous; others

The frequency of patients positive for luminal A did not differ between patients who underwent immediate and delayed reconstructions (50.6% versus 35.3%, respectively; p=0.136), nor did these two groups differ in the frequency of luminal B (33.3% versus 29.4%; p=0.6818), or HER2 (25.7% versus 28.2%; p= 0.74).

Discussion and Conclusion

After non-melanoma skin cancer, breast cancer is the most prevalent type of cancer among women in Brazil and worldwide, accounting for 29.5% of new cancer cases when non-melanoma skin neoplasms are excluded (1). As one of the main treatments recommended for the disease, the number of mastectomies performed is also, quite large.

Breast reconstruction seeks to restore woman's functional and psychosocial health, though the type of reconstruction chosen depends on several factors. It is thus alarming that only 20% of mastectomy patients underwent breast reconstruction procedures in Brazil between 2008 and 2015, according to the Department of Informatics of the Brazilian Unified Health System (DATASUS), analyzed by the Brazilian Society of Mastology (SBM) (11). In this sense, the Brazilian Law no. 12,802/2013 represented an advance, as it states that immediate reconstruction should be performed at the same surgical time as the mastectomy (immediate reconstruction) as long as the proper technical conditions are met.

In this study, we observed an increase in the proportion of immediate reconstructions in the period of 2014–2017, directly

Table 2. Information on chemotherapy performed in patients undergoing immediate and delayed breast reconstruction

	Groups		
Chemotherapy	**Immediate reconstruction**	**Late reconstruction**	**Total**
Patients had undergone chemotherapy	111 (70.25%)	55 (70.5%)	166 (70.3%)
Neoadjuvant	45 (28.48%)	29 (37.18%)	74 (31.35%)
Adjuvant	66 (41.77%)	26 (33.32%)	92 (38.65%)
Patients had not undergone chemotherapy	47 (29.75%)	23 (29.5%)	70 (29.7%)

Figure 6. a-c. Pre- and post-operative images of an immediate breast reconstruction. Legend: Patient submitted to neoadjuvant chemotherapy, followed by modified radical mastectomy and immediate reconstruction with breast tissue expander. The left image (Figure 6a) shows the pre-operative status and the right image (Figure 6b) shows the patient after six months with the breast tissue expander inflated (420 mL). Figure 6c illustrates six months after the replacement the expander with a permanent implant (275 cc). Skin envelope fat grafting was also performed. The patient has undergone contralateral symmetrization by a T-inverted mastopexy with thoracic flap and muscle loop

following the passage of Law no. 12,802/2013. While 48% of reconstructions were immediate in group 1 (2010–2013), 71% were in group 2 (2014–2017) (p=0.013). Therefore, the practices of Erasto Gaertner Hospital became more in line with the will of the patients, as women tend to prefer a single surgical intervention (12). Interestingly, the proportion of immediate reconstructions in group 2 (71%) mirrors the results of another study of 127 patients in Brazil, which found that 73% opted for immediate reconstructions after the law came into force (12).

We also found that there was a predominance of the use of expanders (alloplastic reconstruction) in immediate reconstructions. Our result is in line with the global literature, including studies from the United States, where implants surpassed autologous reconstructions in 2002 (13).

The mean age of breast cancer patients who underwent reconstruction was 46.65 years. This result is similar to a previous study conducted in Brazil, in which the average age of patients was 48.75 years (14).

The most common histological type of tumor found in the present study was the invasive ductal carcinoma, which is in line with trends in Brazil (15), where the most common invasive histological type is the unspecified infiltrating ductal carcinoma. The latter pathology represents 70% to 80% of all breast tumors, followed by the infiltrating lobular carcinoma (about 5% to 15%), and other histological types (15). We found that the most common stage was stage II (A and B), corresponding to 42% of patients. This result is corroborated by data from Brazil's Cancer Institute (INCA), where stage II also had the highest proportion of patients in 2015 (1). It is important to note that the cases in our study were classified using the seventh edition of the TNM Classification, since patients were diagnosed and submitted to surgical treatment between 2007 and 2017, prior to the publication of the eighth edition. In the eighth edition of the TNM Classification of Malignant Tumors, lobular carcinoma in situ is no longer considered a breast malignancy, but rather a benign entity that confers a higher risk of future breast cancer (16).

We did not find a significant difference in the frequency with which patients who were positive for luminal A, luminal B, or HER2 underwent immediate or delayed reconstruction. In contrast, other studies have reported patients with Luminal-A type cancers as being more likely to undergo immediate reconstruction (17). In contrast, patients with HER-2 cancer tended to opt for delayed reconstruction (17).

Immediate and delayed reconstructions were not found to differ in terms of their likelihood to result in immediate or late complications. The most common immediate complication was surgical wound dehiscence, which is consistent with a previous Brazilian study with 66 patients (14). We also observed that smokers had significantly more late complications than non-smokers. Smoking, as well as obesity and alcohol consumption, has been described as a factor associated with complications in breast reconstruction (18). In part due to the relatively small number of cases our study was not able to show a significant difference in the rate of complications among patients undergoing radiotherapy, who have been described as more prone to complications in the literature (19). However, the complication rate among the radiotherapy group was higher, particularly among patients who received alloplastic reconstruction. One disadvantage of implant-based breast reconstruction is the possibility of long-term complications, including rupture and capsular contracture (19).

The level of complications among patients receiving neoadjuvant chemotherapy and immediate reconstruction have been a subject of debate (20). In this study, we did not observe any significant between immediate reconstruction patients who had undergone neoadjuvant chemotherapy and those who had not. This result is similar to another study with 54 patients in Brazil, where no statistically significant difference was found (21).

Due to the lack of information on the histological type and clinical staging in many medical records, we were unable to form robust correlations between histological types and reconstruction methods. Since our study is retrospective, our information was not sufficient to present and discuss cosmetic outcomes for patients. Conversely, using the rich patient records allowed us to study a comparatively large number of patients and compare results before and after the passage of Law no. 12,802/2013.

This analysis shows that the current preference is for immediate reconstructions with breast tissue expanders in combination with chemotherapy, which follows trends in the wider literature from Brazil and elsewhere.

The growth of immediate reconstructions was not associated with an increase in complications, demonstrating the effectiveness of this practice. It is also consistent with Law no. 12,802/2013, Brazilian legislation that provides the option of immediate reconstruction whenever technically appropriate.

Ethics Committee Approval: Ethics committee approval was received for this study from the ethics committee of Erasto Gaertner Hospital, under the Brazilian Certificate of Presentation for Ethical Evaluation (CAAE) no. 96006918.2.0000.0098, report No. 2,917,871, on September 26, 2018.

Informed Consent: Due to the retrospective design of the study, informed consent was not taken.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept – A.K.G., M.C.C.O.; Design – A.K.G., M.C.C.O.; Supervision – A.K.G., M.C.C.O.; Resources – A.K.G., M.C.C.O.; Materials – A.K.G., M.C.C.O., V.W..; Data Collection and/or Processing – V.W., L.Z.B.B., T.M.S.R., D.B.D.Z., C.I.B.; Analysis and/or Interpretation – V.W.; Literature Search - V.W., L.Z.B.B., T.M.S.R., D.B.D.Z., C.I.B.; Writing Manuscript – V.W., L.Z.B.B., T.M.S.R., D.B.D.Z., C.I.B.; Critical Review – A.K.G., M.C.C.O.

Conflict of Interest: The authors have no conflicts of interest to declare.

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References

1. Instituto Nacional de Câncer José Alencar Gomes da Silva. A situação do câncer de mama no Brasil: síntese de dados dos sistemas de informação. Rio de Janeiro: INCA, 2019.
2. Freitas-Júnior R, Gagliato DM, Moura Filho JW, Gouveia PA, Rahal RM, Paulinelli RR, Oliveira LF, Freitas PF, Martins E, Urban C, Lucena CÊ. Trends in breast cancer surgery at Brazil's public health system. J Surg Oncol 2017; 115: 544-549. (PMID: 28168857) [Crossref]
3. Kim JY, Colwell AS, Disa JJ. Introduction to "advances in breast reconstruction". Plast Reconstr Surg 2017; 140: 4S-5S. (PMID: 29064916) [Crossref]
4. Zhong T, Hu J, Bagher S, Vo A, O'Neill AC, Butler K, Novak CB, Hofer SO, Metcalfe KA. A comparison of psychological response, body image,

sexuality, and quality of life between immediate and delayed autologous tissue breast reconstruction: a prospective long-term outcome study. Plast Reconstr Surg 2016; 138: 772-780. (PMID: 27673514) [Crossref]
5. Cosac OM, Camara Filho JP, Barros APGSH BM, Esteves BP, Curado DM. Reconstruções mamárias: estudo retrospectivo de 10 anos. Rev Bras Cir Plást 2013; 28: 59-64. [Crossref]
6. Coon D, Tuffaha S, Christensen J, Bonawitz SC. Plastic surgery and smoking: a prospective analysis of incidence, compliance, and complications. Plast Reconstr Surg 2013; 131: 385-391. (PMID: 23358000) [Crossref]
7. Almeida TR, Guerra MR, Filgueiras MS. Repercussões do câncer de mama na imagem corporal da mulher: uma revisão sistemática. Physis: Revista de Saude Coletiva 2012; 22: 1003-1029. [Crossref]
8. Santos DB, Vieira EM. Imagem corporal de mulheres com câncer de mama: uma revisão sistemática da literatura. Cien S aude Colet 2011; 16: 2511-2522. (PMID: 21655725) [Crossref]
9. Guedes TS, de Oliveira NP, Holanda AM, Reis MA, da Silva CP, e Silva BL, de Camargo Cancela M, de Souza DL. Body image of women submitted to breast cancer treatment. Asian Pac J Cancer Prev 2018; 19: 1487-1493. (PMID: 29936719)
10. Brasil. Lei no. 12802, de 24 de abril de 2013. Diário Oficial da União 25 abr 2013; seção 1, página 2.
11. Sociedade Brasileira de Mastologia. Apenas 20% das mulheres tiveram suas mamas reconstruídas no Brasil entre 2008 e 2015: Rio de Janeiro [Internet]. Curitiba; 2020 [citado 2020 jan 03]. Available from: https://www.sbmastologia.com.br/releases/apenas-20-das-mulheres-tiveram-suas-mamas-reconstruidas-no-brasil-entre-2008-e-2015/
12. Saliba GA, Carvalho EE, Silva Filho AF, Alves JC, Tavares MV, Costa SM, Coelho CM. Reconstrução mamária: análise de novas tendências e suas complicações maiores. Rev Bras Cir Plást. 2013:618-25.
13. Albornoz CR, Bach PB, Mehrara BJ, Disa JJ, Pusic AL, McCarthy CM, Cordeiro PG, Matros E. A paradigm shift in US breast reconstruction: increasing implant rates. Plast Reconstr Surg 2013; 131: 15-23. (PMID: 23271515) [Crossref]
14. Junior FC, Mélega JM, Pinheiro AS, Pereira RF. Reconstrução mamária total: técnicas e complicações. Rev Bras Cir Plást 2010; 25(Supll 1): 62.
15. Lakhani SR, editor. WHO Classification of Tumours of the Breast. International Agency for Research on Cancer; 2012.
16. Kalli S, Semine A, Cohen S, Naber SP, Makim SS, Bahl M. American joint committee on cancer's staging system for breast cancer: what the radiologist needs to know. Radiographics 2018; 38: 1921-1933. (PMID: 30265613) [Crossref]
17. Sandberg LJ, Clemens MW, Symmans WF, Valero V, Caudle AS, Smith B, Kuerer HM, Hsu L, Kronowitz SJ. Molecular Profiling Using Breast Cancer Subtype to Plan for Breast Reconstruction. Plast Reconstr Surg 2017; 139: 586e-596e. (PMID: 28234813) [Crossref]
18. Paredes CG, Pessoa SG, Amorim DN, Peixoto DT, Araújo JS. Complicações em reconstrução de mama com retalho pediculado do músculo reto abdominal transverso. Revista Brasileira de Cirurgia Plástica 2012; 27: 552-555. [Crossref]
19. Ho AY, Hu ZI, Mehrara BJ, Wilkins EG. Radiotherapy in the setting of breast reconstruction: types, techniques, and timing. Lancet Oncol 2017; 18: e742-753. [Crossref]
20. Song J, Zhang X, Liu Q, Peng J, Liang X, Shen Y, Liu H, Li H. Impact of neoadjuvant chemotherapy on immediate breast reconstruction: a meta-analysis. PLoS One 2014; 9: e98225. (PMID: 24878776) [Crossref]
21. Cammarota MC, Esteves BP, Daher JC, Di Lamartine J, Curado DM, Benedik A. Quimioterapia neoadjuvante e reconstrução mamária imediata: uma boa opção? Rev Bras Cir Plást 2013; 28: 611-617.