

Breast Surgery Update #3

08 January 2024



Welcome to the third edition of the Breast Surgery Update. The aim of this publication is to bring together a range of recently-published research and guidance that will help you make evidence based decisions.

Accessing Articles

The following abstracts are taken from a selection of recently published articles.

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Please contact Holly if you would like more information, or further evidence searches: holly.cook3@nhs.net.

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Changes to Nice Guidance

Familial breast cancer: classification, care and managing breast cancer and related risks in people with a family history of breast cancer

Clinical guideline [CG164]

Published: 25 June 2013 Last updated: 14 November 2023

<https://www.nice.org.uk/guidance/cg164>

Suspected cancer: recognition and referral



Early and locally advanced breast cancer: diagnosis and management - further surgery (update)

In development [GID-NG10402]

Expected publication date: 16 January 2024

<https://www.nice.org.uk/guidance/indevelopment/gid-ng10402>

Tumour profiling tests to guide adjuvant chemotherapy decisions in lymph node positive early breast cancer

In development [GID-DG10075]

Expected publication date: 14 February 2024

<https://www.nice.org.uk/guidance/indevelopment/gid-dg10075>

Trastuzumab deruxtecan for treating HER2-low metastatic or unresectable breast cancer after chemotherapy [ID3935]

In development [GID-TA10813]

Expected publication date: 27 March 2024

<https://www.nice.org.uk/guidance/indevelopment/gid-ta10813>

All NICE guidance on Breast Cancer can be found here: <https://www.nice.org.uk/guidance/conditions-and-diseases/cancer/breast-cancer>

A selection of papers from Medline (Oct-Dec 2023) most recent first.

1. 'PartBreCon' study. A UK multicentre retrospective cohort study to assess outcomes following PARTial BREast reCONstruction with chest wall perforator flaps

Item Type: Journal Article

Authors: Agrawal, A.;Romics, L.;Thekkinkattil, D.;Soliman, M.;Kaushik, M.;Barmounakis, P.;Mortimer, C.;Courtney, C. A.;Goyal, A.;Garreffa, E.;Carmichael, A.;Lane, R. A.;Rutherford, C.;Kim, B.;Achuthan, R.;Pitsinis, V.;Goh, S.;Ray, B.;Grover, K.;Vidya, R., et al

Publication Date: 2023

Journal: Breast (Edinburgh, Scotland) 71, pp. 82-88

Abstract: Background: Partial breast reconstruction with a pedicled chest wall perforator flap (CWPF) enables breast conservation in a higher tumour: breast volume ratio scenario. Since there is limited evidence, this retrospective cohort study aimed to ascertain immediate (30-days) and medium-term (follow-up duration) surgical outcomes.; **Methods:** STROBE-compliant protocol ascertained CWPF outcomes between March 2011-March 2021. UK centres known to perform CWPF were invited to participate if they performed at least 10 cases. Data were retrospectively collected, including patient demographics, tumour and treatment characteristics, and surgical and oncological outcomes. Statistical analysis (R™) included multivariable logistic regression and sensitivity analysis.; **Results:** Across 15 centres, 507 patients with median age (54 years, IQR; 48-62), body mass index (25.4 kg/m², IQR; 22.5-29), tumour size (26 mm, IQR; 18-35), and specimen weight (62 g, IQR; 40-92) had following flap types: LiCAP (54.1%, n = 273), MiCAP/AiCAP (19.6%, n = 99), LiCAP + LTAP (19.8%, n = 100) and TDAP (2.2%, n = 11). 30-days complication rates were in 12%: haematoma (4.3%, n = 22), wound infection (4.3%, n = 22), delayed wound healing (2.8%, n = 14) and flap loss (0.6%, n = 3; 1 full) leading to



readmissions (2.6%, n = 13) and re-operations (2.6%, n = 13). Positive margins (n = 88, 17.7%) led to 15.9% (n = 79) re-excisions, including 7.5% (n = 37) at the planned 2nd of 2-stage surgery and 1.8% (n = 9) mastectomy. At median 23 months (IQR; 11-39) follow-up, there were 1.2% (n = 6) symmetrisations; recurrences: local (1%), regional/nodal (0.6%) and distant (3.2%).; **Conclusions:** This large multicentre cohort study demonstrates acceptable complication and margin re-excision rates. CWPf extends the range of breast conservation techniques. Further studies are required for long-term oncological outcomes.; Competing Interests: Declaration of competing interest None of the authors or collaborators declared any conflict of interest related to this project. (Copyright © 2023 The Authors. Published by Elsevier Ltd.. All rights reserved.)

Access or request full text: <https://libkey.io/10.1016/j.breast.2023.07.007>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37544090&custid=ns023446>

2. The International Awareness of Breast Reconstruction

Item Type: Journal Article

Authors: Alsubhi, Fatema S.; Alothman, Mohammed A. and Alhadlaq, Abdulrahman I.

Publication Date: 2023

Journal: Plastic and Reconstructive Surgery. Global Open 11(11), pp. e5417

Abstract: Background: To our knowledge, this is the first and largest study conducted to collect data among surgeons worldwide about breast reconstruction. We have aimed to collect data about breast reconstruction worldwide, the most popular breast reconstruction techniques, and the barriers behind the low rate of breast reconstruction according to surgeons.; **Methodology:** A comparative cross-sectional design was used in this study. A prepared questionnaire, which was developed after reviewing the literature review conducted for this study, was used to collect data. The questionnaire is multiple choice. It was distributed among surgeons online.; **Results:** The study includes 812 participants who live all over the world, representing 79 countries. More than a third of surgeons perform less than 10 breast reconstructions per year (33.38%), and 45.86% of them think that immediate surgery is the most frequent practice. A higher percentage of participants prefer implants over autologous reconstruction as a technique for breast reconstruction (54.9%). Moreover, 39.02% of participants shared that a lack of knowledge about the availability of breast reconstruction was a reason for refusing the surgery.; **Conclusions:** This study demonstrates that the breast reconstruction rate is still low and that most surgeons prefer implants that are performed immediately. The lack of knowledge among patients about the availability of breast reconstruction is the most common reason for refusing reconstruction. Therefore, there is a need to increase patient awareness about the availability of this surgery.; Competing Interests: The authors have no financial interest to declare in relation to the content of this article. Disclosure statements are at the end of this article, following the correspondence information. (Copyright © 2023 The Authors. Published by Wolters Kluwer Health, Inc. on behalf of The American Society of Plastic Surgeons.)

Access or request full text: <https://libkey.io/10.1097/GOX.0000000000005417>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38025611&custid=ns023446>

3. Impact of Radiotherapy Volumes on Late-Term Cosmetic Outcomes and Quality of Life in Patients With Unifocal and Multifocal/Multicentric Breast Cancer After Breast-Conserving Surgery



Item Type: Journal Article

Authors: Altınok, Pelin;Tekçe, Ertuğrul;Kızıltan, Huriye Şenay;Gücin, Zühal and Mayadağlı, Alpaslan

Publication Date: 2023

Journal: European Journal of Breast Health 19(4), pp. 287-296

Abstract: Objective: Breast-conserving surgery (BCS) followed by radiotherapy (RT) is the standard treatment for early-stage breast cancer. The use of an additional RT dose (boost) to the tumour bed improves local control but may worsen quality of life (QOL) and cosmetic results. Multifocal/multicentric tumours (MMTs) pose a challenge as they require larger boost volumes. This study investigated the impact of RT volumes on late-term cosmetic outcomes and QOL in patients with unifocal and MMTs who underwent adjuvant RT after BCS.; **Materials and Methods:** Retrospective data of 367 patients who underwent BCS between 2012 and 2014 were reviewed. A cohort of 121 patients with at least six months of completed RT were prospectively included in the study. Cosmetic results were evaluated using a modified scoring system, and QOL was assessed using The European Cancer Treatment and Organization Committee tools.; **Results:** The results showed that the inclusion of regional lymphatics in the RT treatment field significantly affected QOL, particularly in terms of role functioning and social functioning. Higher boost volume ratios were associated with increased pain-related symptoms. However, the presence of MMTs did not significantly affect cosmetic outcomes compared to unifocal tumours.; **Conclusion:** The size of the boost and inclusion of regional lymphatics in RT significantly impact QOL in patients undergoing BCS. Tumour foci number does not affect cosmetic outcomes. These findings emphasize the need for careful consideration of RT volumes to minimize long-term adverse effects on QOL. Future prospective studies should evaluate early side effects and baseline QOL scores to provide a comprehensive assessment.; **Competing Interests:** Conflict of Interest: No conflict of interest was declared by the authors. (©Copyright 2023 by the the Turkish Federation of Breast Diseases Societies / European Journal of Breast Health published by Galenos Publishing House.)

Access or request full text: <https://libkey.io/10.4274/ejbh.galenos.2023.2023-5-4>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37795008&custid=ns023446>

4. Real-world evidence of neoadjuvant chemotherapy for breast cancer treatment in a Brazilian multicenter cohort: Correlation of pathological complete response with overall survival

Item Type: Journal Article

Authors: Antonini, Marcelo;Mattar, André;Bauk Richter, Fernanda Grace;Pannain, Gabriel Duque;Teixeira, Marina Diógenes;Amorim, Andressa Gonçalves;Ferraro, Odair;Guedes Lopes, Reginaldo Coelho;Gebrim, Luiz Henrique and Real, Juliana Monte

Publication Date: 2023

Journal: Breast (Edinburgh, Scotland) 72, pp. 103577

Abstract: Objectives: We aimed to evaluate the pCR rate in patients receiving NAC for the treatment of breast cancer (BC) in a multicenter cohort in Brazil. Additionally, we aimed to use RWD to assess the impact of pCR on OS and DFS.; **Methods:** This was a retrospective, multicenter cohort study that included female patients over 18 years of age who were diagnosed with nonmetastatic breast cancer and received NAC. OS and DFS at five years were estimated by the Kaplan–Meier method. Additionally, we conducted a multivariate analysis to identify



factors that were significantly associated with pCR and OS.; **Results:** From 2011 to 2020, 1891 patients were included in the study, and 421 (22,3%) achieved pCR (ypT0 ypN0). Considering the presence of residual DCIS, pCR was achieved in 467 patients (23,5%). The pCR rate varied between the subtypes: HER-2+ ($p = 0,016$) and clinical stage IIIA and IIIB ($p < 0,001$). Among HER-2+ patients, those who received trastuzumab had a significantly higher pCR rate than those who did not receive trastuzumab ($p < 0.0001$). Similarly, patients with TNBC who received treatment with platinum-based regimens also showed higher pCR rates ($p < 0.0001$). OS was grouped according to pCR status, and the OS rate was 88,3% in the pCR group and 58.1% in the non-pCR group ($p < 0.0001$). The five-year DFS was 92.2% in the pCR group and 64.3% in the non-pCR group ($p < 0.0001$).; **Conclusion:** The pCR rate and its prognostic value varied across BC subtypes. In our study, pCR could be used as a surrogate of favorable clinical outcome, as it was associated with higher OS and DFS rates.; Competing Interests: Declaration of competing interest None. (Copyright © 2023 The Authors. Published by Elsevier Ltd.. All rights reserved.)

Access or request full text: <https://libkey.io/10.1016/j.breast.2023.103577>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37722319&custid=ns023446>

5. Aesthetic results were more satisfactory after oncoplastic surgery than after total breast reconstruction according to patients and surgeons

Item Type: Journal Article

Authors: Araújo Pereira Lisboa, Fabiana Christina;Paulinelli, Régis Resende;Campos Veras, Lucimara Priscila;Jubé Ribeiro, Luiz Fernando;Pádua Oliveira, Luis Fernando;Sousa Rahal, Rosemar Macedo;Sousa, Aloisio Garcia;Freitas-Júnior, Ruffo and Batista de Sousa, João

Publication Date: 2023

Journal: Breast (Edinburgh, Scotland) 71, pp. 47-53

Abstract: Introduction: Patient satisfaction after breast cancer surgery has an impact on body image, sexual function, self-esteem, and quality of life and may differ from the perception of the attending physician. This study aimed to compare the aesthetic outcomes and satisfaction with conservative oncoplastic surgeries, mastectomies, and total breast reconstruction.; **Methods:** We included 760 women diagnosed with invasive breast carcinoma or phyllodes tumors who returned at least 6 months after surgery or radiotherapy at two public hospitals and a private clinic between 2014 and 2022. Data was collected prospectively from patients and retrospectively from their medical records using a specific form after obtaining their informed consent. Aesthetic outcomes and quality of life were assessed using the BREAST-Q®, Harris Scale, and BCCT.core software. Data were evaluated using the SPSS statistical software. Statistical significance was set at $p < 0.05$. This study was approved by the hospital ethics committees.; **Results:** A total of 405 (53.29%) partial and 355 (46.71%) total reconstructions were included. Patients who underwent partial reconstruction were older and had higher body mass index. Patients who underwent total reconstruction had larger tumors with advanced clinical and pathological stages. Clinical and surgical complications occurred more frequently in the total reconstruction group. A greater number of reparative surgeries and lipofilling procedures were required for total reconstruction. According to the BREAST-Q, the partial reconstruction group showed significantly higher levels of women's satisfaction with their breasts, the surgical outcomes, psychosocial and sexual well-being, provision of information, and the reconstructive surgeon. Only physical well-being was slightly higher in the total reconstruction group. In most cases, the results were rated good or excellent. Physicians considered partial reconstructions to have better results than total reconstructions, although this difference was not perceived by the BCCT.core software.; **Conclusion:** Women who underwent partial breast reconstruction had higher levels of satisfaction in several domains, lower frequency of complications, and required fewer surgeries



to complete their reconstruction than women who underwent total reconstruction. Physicians were also more satisfied with the results of partial reconstructions.; Competing Interests: Declaration of competing interest The authors declare that they have no conflicts of interest. There are no sources of support for the reported work, including grants, equipment and drugs, and no funding was received for this work from any organization. (Copyright © 2023 The Authors. Published by Elsevier Ltd.. All rights reserved.)

Access or request full text: <https://libkey.io/10.1016/j.breast.2023.07.006>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37487426&custid=ns023446>

6. Survey of Surgeon-reported Postoperative Protocols for Deep Inferior Epigastric Perforator Flap in Breast Reconstruction

Item Type: Journal Article

Authors: Araya, Sthefano;Hackley, Madison;Amadio, Grace M.;Deng, Mengying;Moss, Civanni;Reinhardt, Eliann;Walchak, Adam;Tecce, Michael G. and Patel, Sameer A.

Publication Date: 2023

Journal: Plastic and Reconstructive Surgery. Global Open 11(11), pp. e5402

Abstract: Background: The use of deep inferior epigastric perforator (DIEP) flaps is a well-established breast reconstruction technique.; **Methods:** A 29-question survey was e-mailed to 3186 active American Society of Plastic Surgeons members, aiming to describe postoperative monitoring practice patterns among surgeons performing DIEP flaps.; **Results:** From 255 responses (8%), 79% performing DIEP surgery were analyzed. Among them, 34.8% practiced for more than 20 years, 34.3% for 10-20 years, and 30.9% for less than 10 years. Initial 24-hour post-DIEP monitoring: intensive care unit (39%) and floor (36%). Flap monitoring: external Doppler (71%), tissue oximetry (41%), and implantable Doppler (32%). Postoperative analgesia: acetaminophen (74%), non-steroidal anti-inflammatory drugs (69%), neuromodulators (52%), and opioids (4.4%) were administered on a scheduled basis. On postoperative day 1, 61% halt intravenous fluids, 67% allow ambulation, 70% remove Foley catheter, and 71% start diet. Most surgeons discharged patients from the hospital on postoperative day 3+. Regardless of experience, patients were commonly discharged on day 3. Half of the surgeons are in academic/nonacademic settings and discharge on/after day 3.; **Conclusions:** This study reveals significant heterogeneity among the practice patterns of DIEP surgeons. In light of these findings, it is recommended that a task force be convened to establish standardized monitoring protocols for DIEP flaps. Such protocols have the potential to reduce both the length of hospital stays and overall care costs all while ensuring optimal pain management and vigilant flap monitoring.; Competing Interests: The authors have no financial interest to declare in relation to the content of this article. This study was funded by NIH/NCI grant P30CA006927 (Fox Chase Cancer Center Support Grant). A Smiles Factory grant funded the survey deployment. (Copyright © 2023 The Authors. Published by Wolters Kluwer Health, Inc. on behalf of The American Society of Plastic Surgeons.)

Access or request full text: <https://libkey.io/10.1097/GOX.0000000000005402>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38025610&custid=ns023446>

7. Oncoplastic surgery for breast cancer: Global perspectives and trends

Item Type: Journal Article



Authors: Armstrong, Kate and Maxwell, Jessica

Publication Date: 2023

Journal: Journal of Surgical Oncology 128(6), pp. 967-971

Abstract: Oncoplastic surgery (OPS) is a form of breast conservation that combines definitive oncologic resection with optimal aesthetic outcomes. Various definitions exist, with most focusing on volume displacement techniques to close the lumpectomy defect and redistribute the remaining breast volume over the preserved breast. Although its oncologic safety has been well demonstrated, uptake into practice varies globally. This article details the definition, safety, training opportunities, and practice patterns of OPS on a global scale. (© 2023 Wiley Periodicals LLC.)

Access or request full text: <https://libkey.io/10.1002/jso.27408>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37818917&custid=ns023446>

8. Fascio-adipose Intramammary Fold Flap for Full Expander Coverage in Breast Reconstruction

Item Type: Journal Article

Authors: Baccarani, Alessio;Marra, Caterina;De Maria, Federico;Blessent, Claudio Gio Francesco and De Santis, Giorgio

Publication Date: 2023

Journal: Plastic and Reconstructive Surgery.Global Open 11(11), pp. e5365

Abstract: Competing Interests: All the authors have no financial interest to declare in relation to the content of this article.

Access or request full text: <https://libkey.io/10.1097/GOX.0000000000005365>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37928636&custid=ns023446>

9. A comparison of presentations and outcomes of salvage versus non-salvage abdominal free flap breast reconstructions-Results of a 15-year tertiary referral centre review

Item Type: Journal Article

Authors: Bojanic, Christine;Di Pace, Bruno;Ghorra, Dina T.;Fopp, Laura J.;Rabey, Nicholas G. and Malata, Charles M.

Publication Date: 2023

Journal: PloS One 18(11), pp. e0288364

Abstract: Introduction: Salvage breast reconstruction with autologous tissue is becoming more prevalent due



to a resurgence in implant-based procedures. The latter has caused a commensurate rise in failed or treatment-resistant prosthetic cases requiring conversion to free tissue transfers. Salvage reconstruction is often considered more challenging, owing to patient presentation, prior treatments and intraoperative difficulties. The aim of the study was to test this hypothesis by comparing outcomes of salvage versus non-salvage autologous microsurgical breast reconstructions in a retrospective matched cohort study.; **Methods:** The demographics, risk factors, operative details and outcomes of patients who underwent free flap salvage of implant-based reconstructions by a single operator (2005-2019) were retrospectively evaluated. For each salvage reconstruction, the consecutive non-salvage abdominal free flap reconstruction was selected for comparison. The clinical outcomes including intraoperative blood loss, operative time, flap survival and complication rates were compared.; **Results:** Of 442 microsurgical patients, 35 (8.0%) had salvage reconstruction comprising 41 flap transfers (29 unilateral, 6 bilateral) and 42 flaps (28 unilateral, 7 bilateral) in nonsalvage reconstruction. Deep inferior epigastric perforator (DIEP) flaps comprised the commonest autologous tissue used in both groups at 74% and 71% respectively. Most patients (83%) underwent salvage reconstruction for severe capsular contractures. There was a significant difference in radiation exposure between groups (salvage reconstruction 89%, non-salvage reconstruction 26%; p0.05).; **Conclusion:** This 15-year study shows that despite salvage autologous free flap breast reconstruction requiring longer operation times, its intra and postoperative outcomes are generally comparable to non-salvage cases. Therefore, salvage breast reconstruction with free flaps provides a reliable option for failed or suboptimal implant-based reconstructions.; **Competing Interests:** The authors have declared that no competing interests exist. (Copyright: © 2023 Bojanic et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.)

Access or request full text: <https://libkey.io/10.1371/journal.pone.0288364>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37910518&custid=ns023446>

10. What's new in surgical oncology breast

Item Type: Journal Article

Authors: Brabender, Danielle E.;Klimberg, V. S. and Sener, Stephen F.

Publication Date: 2023

Journal: Journal of Surgical Oncology

Abstract: It is on the backdrop of advances in tumor biology and systemic therapy for breast cancer, that progress in locoregional treatment has focused on management of the breast for invasive cancer, imaging for staging and therapeutic decision-making, and de-escalation in the management of the axilla. (© 2023 The Authors. Journal of Surgical Oncology published by Wiley Periodicals LLC.)

Access or request full text: <https://libkey.io/10.1002/jso.27528>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37994521&custid=ns023446>

11. Inframammary versus Periareolar Incision: A Comparison of Early Complications in Nipple-sparing Mastectomy

Item Type: Journal Article



Authors: Cavalcante, Francisco P.;Lima, Ticiane O.;Alcantara, Ryane;Cardoso, Amanda;Ulisses, Flora;Novita, Guilherme;Zerwes, Felipe and Millen, Eduardo

Publication Date: 2023

Journal: Plastic and Reconstructive Surgery.Global Open 11(11), pp. e5367

Abstract: Background: Nipple-sparing mastectomy (NSM), either used therapeutically or prophylactically, may yield more complications than conventional mastectomy. The incision may affect aesthetic outcome and complication rates, with periareolar incisions being associated with nipple-areolar complex (NAC) necrosis.; **Methods:** Early complications were compared between NSM performed in 2015-2022 using inframammary fold (IMF) or periareolar incisions.; **Results:** Overall, 180 procedures in 152 patients (bilateral NSM = 28) were included (IMF = 104; periareolar = 76). Mean age (47 versus 43.9 years; $P < 0.038$), mastectomy weight (312.7 versus 246.8 grams; $P < 0.001$), implant volume (447.5 versus 409.0 mL; $P = 0.002$), and use of tissue expanders (68.4% versus 50.0%; $P = 0.013$) were all greater with periareolar incisions. Prepectoral reconstruction was more common with IMF (18.3% versus 3.9%; $P = 0.004$). Forty-three complications (23.9%) were recorded (periareolar $n = 27$, 35%; IMF $n = 16$, 15.3%; $P = 0.0002$). NAC necrosis accounted for 17 complications (22.4%) in the periareolar group versus nine (8.5%) in the IMF group ($P = 0.002$). Necrosis was predominantly moderate ($n = 6$, 8.3% versus $n = 1$, 1.0%, respectively) ($P = 0.014$). Unadjusted odds ratios (OR) for complications 3.05; 95% confidence interval (CI): 1.27-7.26] and necrosis (3.04; 95% CI: 1.27-7.27) were higher in the periareolar group. In the multivariate analysis, necrosis was associated with periareolar incisions adjusted odds ratio (aOR): 2.92; 95% CI: 1.14-7.44]. Prepectoral reconstruction was associated with IMF incisions (aOR: 25.51; 95% CI: 3.53-184.23; $P = 0.001$) and with body mass index of more than 25-30 (aOR: 37.09; 95% CI: 5.95-231.10; $P < 0.001$). Therapeutic mastectomies (aOR: 68.56; 95% CI: 2.50-188.36; $P = 0.012$) and tissue expanders (aOR: 18.36; 95% CI: 1.89-178.44; $P = 0.026$) were associated with seromas.; **Conclusions:** Both incisions are viable options; however, the risk of NAC necrosis increased with the periareolar approach. Further research is required.; **Competing Interests:** The authors have no financial interests to declare in relation to the content of this article. (Copyright © 2023 The Authors. Published by Wolters Kluwer Health, Inc. on behalf of The American Society of Plastic Surgeons.)

Access or request full text: <https://libkey.io/10.1097/GOX.0000000000005367>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37928633&custid=ns023446>

12. Comparative effectiveness of nipple-sparing mastectomy and breast-conserving surgery on long-term prognosis in breast cancer

Item Type: Journal Article

Authors: Chen, Qitong;Qu, Limeng;He, Yeqing;Deng, Yueqiong;Zhou, Qin and Yi, Wenjun

Publication Date: 2023

Journal: Frontiers in Endocrinology 14, pp. 1222651

Abstract: Background: The frequency of nipple-sparing mastectomy (NSM) surgery is presently increasing. Nonetheless, there is a paucity of long-term prognosis data on NSM. This study compared the long-standing prognosis of NSM in relation to breast-conserving surgery (BCS).; **Methods:** Population-level data for 438,588 female breast cancer patients treated with NSM or BCS and postoperative radiation from 2000 to 2018 were identified in the Surveillance, Epidemiology, and End Results (SEER) database; 321 patients from the Second



Xiangya Hospital of Central South University were also included. Propensity score matching (PSM) was performed to reduce the influence of selection bias and confounding variables to make valid comparisons. The Kaplan-Meier analysis, log-rank test, and Cox regression were applied to analyze the data.; **Results:** There were no significant differences in long-term survival rates between patients who underwent NSM and those who underwent BCS+radiotherapy (BCS+RT), as indicated by the lack of significant differences in overall survival (OS) ($p = 0.566$) and breast cancer-specific survival (BCSS) ($p = 0.431$). Cox regression indicated that NSM and BCS+RT had comparable prognostic values ($p = 0.286$) after adjusting for other clinicopathological characteristics. For OS and BCSS, subgroup analysis showed that the majority of patients achieved an analogous prognosis whether they underwent NSM or BCS. The groups had comparable recurrence-free survival (RFS), with no significant difference found ($p = 0.873$).; **Conclusions:** This study offers valuable insights into the long-term safety and comparative effectiveness of NSM and BCS in the treatment of breast cancer. These findings can assist clinicians in making informed decisions on a case-by-case basis.; **Competing Interests:** The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest. (Copyright © 2023 Chen, Qu, He, Deng, Zhou and Yi.)

Access or request full text: <https://libkey.io/10.3389/fendo.2023.1222651>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38053723&custid=ns023446>

13. Neoadjuvant chemotherapy impact on outcomes in immediate breast reconstruction with latissimus dorsi flap and silicone implant

Item Type: Journal Article

Authors: D'Alessandro, Gabriel Salum; Munhoz, Alexandre Mendonça; Takeuchi, Fabiana Midori; Povedano, Alejandro and Góes, João, Carlos Sampaio

Publication Date: 2023

Journal: Journal of Surgical Oncology

Abstract: Background and Objectives: Neoadjuvant chemotherapy (NCH) has demonstrated efficacy in downsizing tumors and facilitating less extensive surgery. However, immediate breast reconstruction (IBR) after NCH has raised concerns regarding higher complication rates. This study evaluates the impact of NCH on outcomes following IBR with a latissimus dorsi flap and implant (LDI) after mastectomy.; **Methods:** Cases from a prospective maintained database were reviewed, and patients classified according to whether or not they received NCH. Risk factors and major and minor complications in both groups were then analyzed.; **Results:** Among the 196 patients who underwent 198 IBR procedures, 38.4% received NCH and 66.1% did not. The overall complication rate was 46.7% in the non-NCH group and 53.3% in the NCH group ($p = 0.650$). The presence of comorbidities increased the likelihood of any complication (odds ratio OR]: 3.46; 95% confidence interval CI]: 1.38-8.66; $p = 0.008$) as well as major complications (OR: 3.35; 95% CI: 1.03-10.95; $p = 0.045$). Although patients in the NCH group experienced more major complications (10.5% vs. 4.9%; $p = 0.134$) and early loss of breast reconstruction (3.9% vs. 0.8%; $p = 0.128$), these findings were not statistically significant.; **Conclusion:** This study found no statistically significant association between NCH and higher risk of complications or loss of IBR with LDI after mastectomy. (© 2023 Wiley Periodicals LLC.)

Access or request full text: <https://libkey.io/10.1002/jso.27479>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37792635&custid=ns023446>



14. Patient-reported health-related quality of life outcomes following mastectomy for breast cancer, with immediate, delayed or no breast reconstruction: Four-year follow-up from a prospective cohort study

Item Type: Journal Article

Authors: Dempsey, Kathy;Mathieu, Erin;Brennan, Meagan;Snook, Kylie;Hoffman, Julia;Campbell, Ian;Scarlet, Jenni;Flay, Heather;Wong, April;Boyle, Frances;King, Madeleine and Spillane, Andrew

Publication Date: 2023

Journal: Breast (Edinburgh, Scotland) 71, pp. 122-131

Abstract: Background: Breast reconstruction (BR) improves women's health-related quality of life (HRQOL) following mastectomy for breast cancer, yet factors contributing to improved HRQOL remain unclear. This study aimed to explore the overall impact of mastectomy with or without BR on participants' perceptions of HRQOL over time in a cohort of women with high-risk breast cancer; to examine differences in mean HRQOL scores between immediate BR, delayed BR and no BR groups; to assess the influence of patient characteristics potentially associated with HRQOL scores; and to determine the feasibility of long-term collection of patient-reported outcome measures in clinical settings.; **Methods:** A prospective, longitudinal study of 100 women with high-risk breast cancer who underwent mastectomy with or without breast reconstruction and were likely to require post-mastectomy radiotherapy. Four validated patient-reported questionnaires, comprising 21 outcome measures relating to HRQOL, administered at baseline and up to 4 years post-mastectomy. Demographic, clinical and surgical data extracted from patient medical records.; **Results:** Consistently significant declines in perceptions of future health and arm symptoms, consistently significant improvements in treatment side effects, breast symptoms and fatigue, as well as significant improvements, compared to baseline, in social functioning and financial difficulties at 48 months. No significant differences in mean HRQOL scores between women given a choice of reconstructive options.; **Conclusion:** Similar trajectories of HRQOL scores were found in women with high-risk breast cancer who were offered a choice of BR. Informed choice may be an independent contributing factor in long-term maintenance of most HRQOL indicators at their pre-mastectomy levels.; **Competing Interests:** Declaration of competing interest The authors have no relevant financial or non-financial interests to disclose. (Copyright © 2023 The Authors. Published by Elsevier Ltd.. All rights reserved.)

Access or request full text: <https://libkey.io/10.1016/j.breast.2023.08.001>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37573653&custid=ns023446>

15. Predictors of nodal metastases in early stage HER2+ breast cancer: Deciding on treatment approach with neoadjuvant chemotherapy vs. upfront surgery

Item Type: Journal Article

Authors: Faleh, Sohayb;Prakash, Ipshita;Eisenberg, Elisheva;Basik, Mark;Boileau, Jean Francois;Tejera, David;Panet, Francois;Buhlaiga, Najwa;Meterissian, Sarkis and Wong, Stephanie M.

Publication Date: 2023

Journal: European Journal of Surgical Oncology : The Journal of the European Society of Surgical Oncology and the British Association of Surgical Oncology 49(8), pp. 1411-1416



Abstract: Background: The purpose of this study is to evaluate preoperative predictors of nodal metastases in patients with early-stage, HER2-positive (HER2+) breast cancer.; **Methods:** The SEER Database was queried to identify women with a first diagnosis of stage I-II (T1-T2) HER2-positive breast cancer treated with upfront surgery in 2018. Multivariable logistic regression was used to identify clinical characteristics independently associated with nodal involvement.; **Results:** Overall, 3333 women with stage I-II HER2+ breast cancer met inclusion criteria and were included in the study. The median age at diagnosis was 59 years (IQR, 51-69 years). Most patients underwent breast-conserving surgery (60.9%), with a median of 3 (IQR 2-4) axillary lymph nodes removed. On final pathology, 762 (22.9%) of T1-T2 HER2+ patients were node positive; 2.7% pN0i+, 3.7% pN1mi, 15.1% pN1, and 1.4% pN2. Women less than 40 years and those between 40 and 49 years showed the highest proportion of axillary lymph node metastasis, in 33.7% and 30.7% respectively, and declining with age ($p < 0.001$). Patients with triple-positive breast cancer had the highest rates of nodal involvement (24.8%), compared to 20.7% ER+/PR-/HER2+ and 19.6% of HER2-enriched patients ($p = 0.006$). On adjusted analysis, age, biologic subtype, tumour size, and type of surgery remained independent predictors of nodal involvement. On subgroup analysis, women under age 50 with T1c HER2-enriched or triple-positive breast cancer had a 33% and 35% incidence of nodal involvement, which declined with age.; **Conclusions:** The likelihood of pathologic nodal involvement in early-stage HER2+ breast cancer is contingent on age, ER/PR status, and tumour size.; **Competing Interests:** Declaration of competing interest Jean-Francois Boileau reports honoraria from Roche, Novartis, Genomic Health, Pfizer, Allergan, and Merck; personal fees from Roche, Genomic Health, NanoString Technologies, Pfizer, Eli Lilly, Novartis, and Merck; and travel support from Roche, GlaxoSmithKline, Novartis, Pfizer, and Lifecell outside the submitted work. The remaining authors have no conflicts of interest to disclose. (Copyright © 2023. Published by Elsevier Ltd.)

Access or request full text: <https://libkey.io/10.1016/j.ejso.2023.03.226>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37031045&custid=ns023446>

16. Recommendations for an Effective and Safe Extreme Oncoplastic Breast Surgery Combining Multiple Techniques

Item Type: Journal Article

Authors: Franceschini, Gianluca

Publication Date: 2023

Journal: Plastic and Reconstructive Surgery.Global Open 11(10), pp. e5325

Abstract: Competing Interests: The author has no financial interest to declare in relation to the content of this article.

Access or request full text: <https://libkey.io/10.1097/GOX.0000000000005325>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37900985&custid=ns023446>

17. The impact of body mass index on oncoplastic breast surgery: A multicenter analysis

Item Type: Journal Article

Authors: Gabriel, De La Cruz Ku;Camarlinghi, Madison;Mallouh, Michael P.;Torres-Roman, J.;Linshaw,



Publication Date: 2023

Journal: Journal of Surgical Oncology 128(7), pp. 1052-1063

Abstract: Background: Obesity has nearly tripled in the last 50 years. During the last decades, oncoplastic breast surgery has become an important choice in the surgical treatment of breast cancer. An association exists between higher body mass index (BMI) and wound complications for major operations, but there is scarce literature on oncoplastic surgery. Hence, our aim was to compare the complication rates among patients who underwent oncoplastic surgery, stratified by BMI.; **Methods:** Patient data were analyzed from the National Surgical Quality Improvement Program database (NSQIP) for oncoplastic breast procedures (2005-2020). Patients were stratified according to World Health Organization obesity classifications. Multivariate logistic regression was performed to assess risk factors for complications (overall, operative, and wound-related).; **Results:** From a total of 6887 patients who underwent oncoplastic surgery, 4229 patients were nonobese, 1380 had Class 1 obesity (BMI: 30 to <35 kg/m²), 737 Class 2 obesity (BMI: 35 to <40 kg/m²), and 541 Class 3 obesity (BMI: ≥ 40 kg/m²). Greater operative time was found according to higher BMI ($p < 0.001$). Multivariate analysis adjusted for baseline characteristics showed that patients with obesity Class 2 (odds ratio OR = 1.51, 95% confidence interval CI: 1.03-2.23, $p = 0.037$) and 3 (OR = 1.87, 95% CI 1.24-2.83, $p = 0.003$) had increased risk of overall and wound complications compared with Nonobese patients. Comparing obese with nonobese patients, there were no differences in rates of deep SSI, organ/space SSI, pneumonia, reintubation, pulmonary embolism, deep vein thrombosis, urinary tract infection, stroke, bleeding, postoperative sepsis, length of stay, and readmission.; **Conclusions:** Oncoplastic surgery is a safe procedure for most patients. However, caution should be exercised when performing oncoplastic surgery for patients with Class 2 or 3 obesity (BMI ≥ 35 kg/m²), given there was a higher rate of overall and wound-specific complications, compared with patients who were not obese or had Class 1 obesity. (© 2023 Wiley Periodicals LLC.)

Access or request full text: <https://libkey.io/10.1002/jso.27397>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37448232&custid=ns023446>

18. Oncoplastic and reconstructive surgery in SENONETWORK Italian breast centers: lights and shadows

Item Type: Journal Article

Authors: Ghilli, Matteo;Lisa, Andrea Vittorio Emanuele;Salgarello, Marzia;Papa, Giovanni;Rietjens, Mario;Folli, Secondo;Curcio, Annalisa;Ferrari, Guglielmo;Caruso, Francesco;Altomare, Vittorio;Friedman, Daniele;De Santis, Maria Carmen;De Rose, Fiorenza;Meduri, Bruno;De Felice, Francesca;Marino, Lorenza;Cucciarelli, Francesca;Montemezzi, Stefania;Panizza, Pietro;Belli, Paolo, et al

Publication Date: 2023

Journal: Breast (Edinburgh, Scotland) 73, pp. 103601

Abstract: Competing Interests: Declaration of competing interest The authors have no conflict of interest to declare. During the preparation of this work the authors didn't use generative AI and AI-assisted technologies.

Access or request full text: <https://libkey.io/10.1016/j.breast.2023.103601>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38043223&custid=ns>



19. A systematic review of the scientific evidence of venous supercharging in autologous breast reconstruction with abdominally based flaps

Item Type: Journal Article

Authors: Hansson, Emma;Ramakrishnan, Venkat and Morgan, Mary

Publication Date: 2023

Journal: World Journal of Surgical Oncology 21(1), pp. 379

Abstract: Background: Abdominally based free flaps are commonly used in breast reconstruction. A frequent complication is venous congestion, which might contribute to around 40% of flap failures. One way to deal with it is venous supercharging. The primary aim of this study was to investigate the scientific evidence for the effects of venous supercharging.; **Methods:** A systematic literature search was conducted in PubMed, CINAHL, Embase, and Cochrane library. The included articles were critically appraised, and certainty of evidence was assessed using the Grading of Recommendations, Assessment, Development and Evaluations (GRADE) approach.; **Results:** Thirty-six studies were included. Most studies had serious study limitations and problems with directness. Three studies report 'routine' use of venous supercharging and performed it prophylactically in patients who did not have clinical signs of venous congestion. Seventeen studies report on flap complications, of which one is a randomised controlled trial demonstrating statistically significant lower complication rates in the intervention group. The overall certainty of evidence for the effect of a venous supercharging on flap complications, length of hospital stay and operative time, in patients without clinical signs of venous congestion, is very low (GRADE $\oplus \oplus \ominus \ominus$), and low on and surgical takebacks (GRADE $\oplus \oplus \ominus \ominus$). Twenty-one studies presented data on strategies and overall certainty of evidence for using radiological findings, preoperative measurements, and clinical risk factors to make decisions on venous supercharging is very low (GRADE $\oplus \ominus \ominus \ominus$).; **Conclusion:** There is little scientific evidence for how to predict in which cases, without clinical signs of venous congestion, venous supercharging should be performed. The complication rate might be lower in patients in which a prophylactic venous anastomosis has been performed.; Trial Registration: PROSPERO (CRD42022353591). (© 2023. The Author(s).)

Access or request full text: <https://libkey.io/10.1186/s12957-023-03254-9>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38044454&custid=ns023446>

20. Computational mechanobiology model evaluating healing of postoperative cavities following breast-conserving surgery

Item Type: Journal Article

Authors: Harbin, Zachary;Sohutskay, David;Vanderlaan, Emma;Fontaine, Muira;Mendenhall, Carly;Fisher, Carla;Voytik-Harbin, Sherry and Tepole, Adrian Buganza

Publication Date: 2023

Journal: Computers in Biology and Medicine 165, pp. 107342

Abstract: Breast cancer is the most commonly diagnosed cancer type worldwide. Given high survivorship,



increased focus has been placed on long-term treatment outcomes and patient quality of life. While breast-conserving surgery (BCS) is the preferred treatment strategy for early-stage breast cancer, anticipated healing and breast deformation (cosmetic) outcomes weigh heavily on surgeon and patient selection between BCS and more aggressive mastectomy procedures. Unfortunately, surgical outcomes following BCS are difficult to predict, owing to the complexity of the tissue repair process and significant patient-to-patient variability. To overcome this challenge, we developed a predictive computational mechanobiological model that simulates breast healing and deformation following BCS. The coupled biochemical-biomechanical model incorporates multi-scale cell and tissue mechanics, including collagen deposition and remodeling, collagen-dependent cell migration and contractility, and tissue plastic deformation. Available human clinical data evaluating cavity contraction and histopathological data from an experimental porcine lumpectomy study were used for model calibration. The computational model was successfully fit to data by optimizing biochemical and mechanobiological parameters through Gaussian process surrogates. The calibrated model was then applied to define key mechanobiological parameters and relationships influencing healing and breast deformation outcomes. Variability in patient characteristics including cavity-to-breast volume percentage and breast composition were further evaluated to determine effects on cavity contraction and breast cosmetic outcomes, with simulation outcomes aligning well with previously reported human studies. The proposed model has the potential to assist surgeons and their patients in developing and discussing individualized treatment plans that lead to more satisfying post-surgical outcomes and improved quality of life.; Competing Interests: Declaration of competing interest The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper. (Copyright © 2023 Elsevier Ltd. All rights reserved.)

Access or request full text: <https://libkey.io/10.1016/j.compbiomed.2023.107342>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37647782&custid=ns023446>

21. Effect of radiation therapy during surgery on postoperative wound complications after breast reconstruction in patients with breast cancer: A meta-analysis

Item Type: Journal Article

Authors: Huang, Na;Liu, Lihao;Qin, Yuan and Xie, Yao

Publication Date: 2023

Journal: International Wound Journal

Abstract: Breast remodelling is a major therapeutic choice in radical mastectomy. Breast reconstruction is regarded as a promising option for the treatment of breast cancer. The purpose of this meta-analysis was to investigate the effect of Post mastectomy radiotherapy (PMRT) on postoperative wound complications in breast carcinoma. A comprehensive review of documents was conducted between the date of establishment and the 28th of August 2023. In all of the trials, patients were treated with breast cancer. The researchers chose 11 publications out of 8068 related studies. Two researchers examined these publications to satisfy the inclusion criteria. Among the 516 patients who had received radiation therapy in the course of the operation, 1772 had not received radiation therapy. The impact of radiation therapy and non-radiation therapy in breast cancer patients after breast reconstruction was reported in 8 studies, and the incidence of postoperative wound infection in non-radiation group was significantly lower (OR, 1.95; 95% CI, 1.26-3.02 p = 0.003). In nine studies, There is not considered to have achieved statistical significance between radiation therapy and non-radiation treatment for post-operation wound dehiscence in breast cancer patients who had received chemotherapy (OR, 1.61; 95% CI, 0.70-3.72 p = 0.27). The results of six trials demonstrated that radiation therapy and non-radiation therapy had no statistical significance on post-operation haemorrhage in breast cancer patients (OR, 1.02; 95% CI, 0.42-2.47 p = 0.96). The results of 7 trials demonstrated that radiation



therapy and non-radiation therapy had no significant impact on the post-operation of skin necrosis (OR, 1.22; 95% CI, 0.66-2.28 p = 0.53). Two trials demonstrated that those without radiation therapy were less likely than those who received radiation therapy in skin contracture in patients (OR, 7.24; 95% CI, 1.80-29.10 p = 0.005). Regarding the incidence of wound infection and cutaneous contraction was higher in the radiation group. (© 2023 The Authors. International Wound Journal published by Medicalhelplines.com Inc and John Wiley & Sons Ltd.)

Access or request full text: <https://libkey.io/10.1111/iwj.14473>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37905575&custid=ns023446>

22. Patient-Reported Outcomes of Omission of Breast Surgery Following Neoadjuvant Systemic Therapy: A Nonrandomized Clinical Trial

Item Type: Journal Article

Authors: Johnson, Helen M.;Lin, Heather;Shen, Yu;Diego, Emilia J.;Krishnamurthy, Savitri;Yang, Wei T.;Smith, Benjamin D.;Valero, Vicente;Lucci, Anthony;Sun, Susie X.;Shaitelman, Simona F.;Mitchell, Melissa P.;Boughey, Judy C.;White, Richard L.;Rauch, Gaiane M. and Kuerer, Henry M.

Publication Date: 2023

Journal: JAMA Network Open 6(9), pp. e2333933

Abstract: Importance: Patients should have an active role in decisions about pursuing or forgoing specific therapies in treatment de-escalation trials.; **Objective:** To evaluate longitudinal patient-reported outcomes (PROs) encompassing decisional comfort and health-related quality of life (HRQOL) among patients who elected to enroll in a clinical trial evaluating radiotherapy alone, without breast surgery, for invasive breast cancers with exceptional response to neoadjuvant systemic therapy (NST).; **Design, Setting, and Participants:** Prospective, single-group, phase 2 clinical trial at 7 US medical centers. Women aged 40 years or older with invasive cT1-2 N0-1 M0 triple-negative or human epidermal growth factor receptor 2 (ERBB2)-positive breast cancer with no pathologic evidence of residual disease following standard NST enrolled from March 6, 2017, to November 9, 2021. Validated PRO measures were administered at baseline and 6, 12, and 36 months post-radiotherapy. Data were analyzed from January to February 2023.; **Interventions:** PRO measures included the Decision Regret Scale (DRS), Functional Assessment of Cancer Therapy-Lymphedema (FACT-B+4), and Breast Cancer Treatment Outcomes Scale (BCTOS).; **Main Outcomes and Measures:** Changes in PRO measure scores and subscores over time.; **Results:** Among 31 patients, the median (IQR) age was 61 (56-66) years, 26 (84%) were White, and 26 (84%) were non-Hispanic. A total of 15 (48%) had triple-negative disease and 16 (52%) had ERBB2-positive disease. Decisional comfort was high at baseline (median IQR] DRS score 10 0-25] on a 0-100 scale, with higher scores indicating higher decisional regret) and significantly increased over time (median IQR] DRS score at 36 months, 0 0-20]; P < .001). HRQOL was relatively high at baseline (median IQR] FACT-B composite score 121 111-134] on a 0-148 scale, with higher scores indicating higher HRQOL) and significantly increased over time (median IQR] FACT-B score at 36 months, 128 116-137]; P = .04). Perceived differences between the affected breast and contralateral breast were minimal at baseline (median IQR] BCTOS score 1.05 1.00-1.23] on a 1-4 scale, with higher scores indicating greater differences) and increased significantly over time (median IQR] BCTOS score at 36 months, 1.36 1.18-1.64]; P < .001). At 36 months postradiotherapy, the cosmetic subscore was 0.45 points higher than baseline (95% CI, 0.16-0.74; P = .001), whereas function, pain, and edema subscores were not significantly different than baseline.; **Conclusions and Relevance:** In this nonrandomized phase 2 clinical trial, analysis of PROs demonstrated an overall positive experience for trial participants, with longitudinal improvements in decisional comfort and overall HRQOL over time and minimal lasting adverse effects of therapy.; **Trial Registration:** ClinicalTrials.gov Identifier: NCT02945579.



Access or request full text: <https://libkey.io/10.1001/jamanetworkopen.2023.33933>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37707811&custid=ns023446>

23. Survival outcomes seen with neoadjuvant chemotherapy in the management of locally advanced inflammatory breast cancer (IBC) versus matched controls

Item Type: Journal Article

Authors: Johnson, Kai Cc;Grimm, Michael;Sukumar, Jasmine;Schnell, Patrick M.;Park, Ko Un;Stover, Daniel G.;Jhawar, Sachin R.;Gatti-Mays, Margaret;Wesolowski, Robert;Williams, Nicole;Sardesai, Sagar;Pariser, Ashley;Sudheendra, Preeti;Tozbikian, Gary;Ramaswamy, Bhuvaneswari;Doto, Dureti and Cherian, Mathew A.

Publication Date: 2023

Journal: Breast (Edinburgh, Scotland) 72, pp. 103591

Abstract: Inflammatory breast cancer (IBC) poses an ongoing challenge as rates of disease recurrence and mortality remain high compared to stage-matched controls. However, frontline therapy has evolved through the years, including the widespread use of neoadjuvant chemotherapy (NAC) given the prognostic importance of pathologic complete response (pCR). Due to these sweeping changes, we need new data to assess current recurrence and survival outcomes for locally advanced IBC in the context of matched non-inflammatory controls. We conducted a retrospective analysis of institutional IBC data from 2010 to 2016 with the primary objective of comparing overall survival (OS), relapse-free survival (RFS), and distant relapse-free survival (DRFS). We matched IBC patients to non-inflammatory controls based on age, receptor status, tumor grade, clinical stage, and receipt of prior NAC. Secondary objectives included assessing pCR rates and identifying prognostic factors. Among NAC recipients, we observed similar pCR rates (47.6 % vs. 49.4 %, $p = 0.88$) between IBC ($n = 84$) and matched non-IBC ($n = 81$) cohorts. However, we noted a significant worsening of OS ($p = 0.0001$), RFS ($p = 0.0001$), and DRFS ($p = 0.001$) in the IBC group. Specifically, 5-year OS in the IBC cohort was 58.9 % vs. 86.7 % for matched controls ($p = 0.0003$). Older age was a weak negative predictor for OS (HR 1.03, $p = 0.001$) and RFS (HR 1.02, $p = 0.01$). For DRFS, older age was also a weak negative predictor (HR 1.02, $p = 0.02$), whereas the use of NAC was a positive predictor (HR 0.47, $p = 0.02$). Despite no clear difference in pCR, survival outcomes remain poor for IBC compared to matched non-inflammatory controls.; Competing Interests: Declaration of competing interest Dr. Ko Un Park is a consultant with Bayer LLC. All remaining authors have no financial or non-financial relationships or activities to declare in relation to this article. (Copyright © 2023. Published by Elsevier Ltd.)

Access or request full text: <https://libkey.io/10.1016/j.breast.2023.103591>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37871527&custid=ns023446>

24. The King is in the altogether: Radiation therapy after oncoplastic breast surgery

Item Type: Journal Article

Authors: Kaidar-Person, Orit;Offersen, Birgitte Vrou;Tramm, Trine;Christiansen, Peer;Damsgaard, Tine Engberg;Kothari, Ashutosh and Poortmans, Philip



Publication Date: 2023

Journal: Breast (Edinburgh, Scotland) 72, pp. 103584

Abstract: Breast cancer is the most common malignancy, and the majority of the patients are diagnosed at an early disease stage. Breast conservation is the preferred locoregional approach, and oncoplastic breast conservation surgery is becoming more popular. This narrative review aims to discuss the challenges and uncertainties in target volume definition for postoperative radiation after these procedures, to improve radiation therapy decisions and encourage multidisciplinary. (Copyright © 2023. Published by Elsevier Ltd.)

Access or request full text: <https://libkey.io/10.1016/j.breast.2023.103584>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37783134&custid=ns023446>

25. Oncologic outcome of breast reconstruction after mastectomy in breast cancer: a systematic review and meta-analysis

Item Type: Journal Article

Authors: Kang, Seok Kyung;Kim, Dong Il;Lee, Seungju;Jung, Youn Joo;Seo, Jung Yeol;Nam, Su Bong;Pak, Kyoungjune;Lee, Seokwon and Kim, Hyun Yul

Publication Date: 2023

Journal: Translational Cancer Research 12(10), pp. 2717-2725

Abstract: Background: We conducted a comprehensive systematic review of the literature and meta-analysis of the oncologic outcomes of breast reconstruction (BR) after mastectomy and mastectomy only. This study aimed to analyze the impact of BR on the prognosis of patients with breast cancer.; **Methods:** A systematic search of MEDLINE and EMBASE databases was performed using the following keywords: breast cancer, mastectomy, and BR. Inclusion criteria were studies reporting the survival data of patients after mastectomy only and mastectomy with BR. Event-free survival (EFS), breast cancer-specific survival (BCSS), and overall survival (OS) were considered the indicators of oncological outcomes. As all the included studies were non-randomized trials, we used the Newcastle-Ottawa Scale (NOS) for risk of bias assessment. The effect of BR on survival was measured using the effect size of the hazard ratio (HR). Data from each study were analyzed using the Review Manager.; **Results:** Fifteen studies with 20,948 cases of BR and 63,358 cases of mastectomy were included. The pooled HRs for EFS and BCSS were 1.07 95% confidence interval (CI): 0.78-1.47, P=0.65] and 0.84 (95% CI: 0.64-1.11, P=0.22), respectively. The patients who underwent BR after mastectomy had similar EFS and BCSS scores. Furthermore, patients who received BR had better OS (HR =0.73; 95% CI: 0.61-0.88, P=0.001) than those who underwent mastectomy only.; **Conclusions:** The data showed that BR after mastectomy had similar EFS and BCSS and better OS than mastectomy alone. Our meta-analysis suggests that BR is a practicable and safe treatment option for patients with breast cancer.; **Competing Interests:** Conflicts of Interest: All authors have completed the ICMJE uniform disclosure form (available at <https://tcr.amegroups.com/article/view/10.21037/tcr-23-706/coif>). The authors have no conflicts of interest to declare. (2023 Translational Cancer Research. All rights reserved.)

Access or request full text: <https://libkey.io/10.21037/tcr-23-706>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37969403&custid=ns023446>



26. Effect of high-dose radiation therapy on positive margins after breast-conserving surgery for invasive breast cancer

Item Type: Journal Article

Authors: Kim, Hyunjung;Kim, Tae Gyu;Park, Byungdo;Kim, Jeong Ho;Jun, Si-Youl;Lee, Jun Ho;Choi, Hee Jun;Jung, Chang Shin;Bang, Yoon Ju;Lee, Hyoun Wook;Lee, Jae Seok;Nam, Hyun Yeol;Shin, Seunghyeon;Kim, Sung Min and Kim, Haeyoung

Publication Date: 2023

Journal: Breast (Edinburgh, Scotland) 71, pp. 106-112

Abstract: Purpose: Positive margins after breast-conserving surgery are associated with poor oncological outcomes and warrant additional surgery. This study aimed to evaluate the effectiveness of high-dose radiation therapy for positive margins by comparing local recurrence between patients with positive and negative margins.; **Methods:** We retrospectively evaluated 550 patients treated with adjuvant radiation therapy after breast-conserving surgery for invasive breast cancer between 2013 and 2019. The total equivalent dose in 2 Gy fractions (EQD2) to the tumor bed ranged from 65.81 to 66.25 Gy for positive margins and 59.31-61.81 Gy for negative margins. The differences in local recurrence between the positive and negative margin groups were analyzed.; **Results:** After a median follow-up of 58 months, the crude local recurrence rate was 7.3% in the positive margin group (n = 55) and 2.4% in the negative margin group (n = 495). Positive margins were associated with higher local recurrence without statistical significance in the entire cohort (p = 0.062). Among patients aged <60 years, those with positive margins had a significantly lower 5-year local recurrence-free survival rate than those with negative margins (89.16% vs. 97.57%, respectively; p = 0.005). In contrast, there was no significant difference in the 5-year local recurrence-free survival rate between patients with positive and negative margins among those aged ≥60 years (100.00% vs. 94.38%, respectively; p = 0.426).; **Conclusion:** In this study, positive margins were not associated with poor local control in older patients after a high-dose boosts. Further prospective studies are needed to verify our findings.; **Competing Interests:** Declaration of competing interest none. (Copyright © 2023 The Authors. Published by Elsevier Ltd.. All rights reserved.)

Access or request full text: <https://libkey.io/10.1016/j.breast.2023.08.003>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37572626&custid=ns023446>

27. A Novel Framework for Optimizing Efficiency and Education in Microsurgical Breast Reconstruction

Item Type: Journal Article

Authors: Lester, Mary E.;Berns, Jessica;Dawson, Steven;Newsom, Keeley;Hartman, Brett and Hassanein, Aladdin H.

Publication Date: 2023

Journal: Plastic and Reconstructive Surgery.Global Open 11(11), pp. e5445

Abstract: Deep inferior epigastric perforator (DIEP) flaps are becoming the most frequent choice for autologous breast reconstruction. There are many benefits to DIEP flaps, but the procedures can be lengthy and have a steep learning curve. The balance of efficiency and education can be difficult to achieve. A framework was



implemented to focus on both efficiency and education at each stage of the DIEP flap procedure. The author's methods to improve efficiency include a two-team approach with assigned roles for faculty and residents. The roles are consistent across the institution. Methods to enhance education include practice in a laboratory-based microsurgical training course and assigning goals for the rotation. Trainees include independent and integrated plastic surgery residents without microsurgical fellows. Bilateral DIEPs are performed with two attendings, and unilateral DIEPs, with one attending. A retrospective review identified patients undergoing DIEP flap reconstruction from 2017 to 2020. Outcome measures include operative time and complications, which are comparable to previously published data. Focusing on education allows residents to learn each stage of the case. The authors present a framework for training residents in DIEP flap reconstruction to optimize efficiency and education.; Competing Interests: The authors have no financial interest to declare in relation to the content of this article. The Indiana University Department of Surgery was awarded an educational grant for our microsurgery skills laboratory from Zimmer-Biomet on December 13, 2019, for \$3114.00. The Indiana University Department of Surgery was awarded an educational grant for our microsurgery skills laboratory from Zimmer-Biomet on July 5, 2023, for \$34,600.00. Disclosure statements are at the end of this article, following the correspondence information. (Copyright © 2023 The Authors. Published by Wolters Kluwer Health, Inc. on behalf of The American Society of Plastic Surgeons.)

Access or request full text: <https://libkey.io/10.1097/GOX.00000000000005445>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38025630&custid=ns023446>

28. Inpatient versus Outpatient Immediate Alloplastic Breast Reconstruction: Recent Trends, Outcomes, and Safety

Item Type: Journal Article

Authors: Little, Andrea K.;Patmon, Darin L.;Sandhu, Harminder;Armstrong, Shannon;Anderson, Daniella and Sommers, Megan

Publication Date: 2023

Journal: Plastic and Reconstructive Surgery.Global Open 11(9), pp. e5135

Abstract: Background: Immediate alloplastic breast reconstruction was traditionally performed as an inpatient procedure. Despite several reports in the literature demonstrating comparable safety outcomes, there remains hesitancy to accept breast reconstruction performed as an outpatient procedure.; **Methods:** A retrospective review of National Surgical Quality Improvement Program data from 2014 to 2018 was utilized to evaluate recent trends and 30-day postoperative complication rates for inpatient versus outpatient immediate prosthetic-based breast reconstruction. Propensity score matching was used to obtain comparable groups.; **Results:** During the study period, 33,587 patients underwent immediate alloplastic breast reconstruction. Of those, 67.5% of patients were discharged within 24 hours, and 32.4% of patients had a hospital stay of more than 24 hours. Immediate alloplastic reconstruction had an overall growth rate of 16.9% from 2014 to 2018. After propensity score matching, intraoperative variables that correlated with significantly increased inpatient status included increased work relative value units (16.3 ± 2.3 versus 16.2 ± 2.6 ; $P < 0.001$), longer operative times (228 ± 86 versus 206 ± 77 ; $P < 0.001$), and bilateral procedure (44.0% versus 43.5%; $P < 0.001$). There were higher rates of pulmonary embolism, wound dehiscence, urinary tract infection, transfusions, sepsis, readmissions, and reoperations in the group with the longer hospital stay.; **Conclusion:** Based on increased complication rates and costs in the inpatient setting, we propose outpatient reconstructive surgery as a safe and cost-effective alternative for immediate alloplastic breast reconstruction.; Competing Interests: The authors have no financial interest to declare in relation to the content of this article. (Copyright © 2023 The Authors. Published by Wolters Kluwer Health, Inc. on behalf of The American Society of Plastic Surgeons.)



Access or request full text: <https://libkey.io/10.1097/GOX.00000000000005135>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37744774&custid=ns023446>

29. The Ergonomic FALD Flap for One-stage Total Breast Reconstruction

Item Type: Journal Article

Authors: Longo, Benedetto;D'Orsi, Gennaro;Giacalone, Martina;Pistoia, Angelica;Vanni, Gianluca;Buonomo, Claudio Oreste;Farcomeni, Alessio and Cervelli, Valerio

Publication Date: 2023

Journal: Plastic and Reconstructive Surgery.Global Open 11(9), pp. e5262

Abstract: Background: The fat-augmented latissimus dorsi (FALD) flap combines this pedicled flap with immediate intraoperative fat transfer. Very little is described concerning its inset at the mammary site. Our efforts have concentrated on seeking the best flap orientation and skin-adipose paddle shaping, to improve the aesthetic outcome and to obtain a complete breast reconstruction (BR) in one stage.; **Methods:** A prospective clinical study was performed in patients who underwent BR with FALD flaps, between December 2020 and March 2022. Patients were randomly enrolled into two groups: ergonomic inset of the FALD flap with vertical orientation of the skin-adipose paddle (group A) and FALD flap with traditional horizontal paddle orientation (group B). The study's endpoints were the evaluation of the aesthetic outcomes (from patients' and surgeon's perspectives) and complications.; **Results:** Thirty-two FALD flaps (23 patients) were performed for group A, and 31 FALD flaps (25 patients) for group B. The two groups were homogeneous in terms of demographic and surgical data ($P > 0.05$). The overall complication rate was homogeneous among the groups, without statistically significant differences ($P = 1.00$). The surgeon's assessments showed a statistically significant superior aesthetic outcome in group A regarding volume, symmetry, and shape ($P < 0.05$). Higher satisfaction was observed in group A patients, in terms of breast size ($P < 0.00001$), shape ($P = 0.0049$), and overall satisfaction ($P = 0.00061$).; **Conclusions:** The ergonomic vertical FALD flap technique enables surgeons to perform one-stage total BR, with excellent breast projection and upper pole fullness. These refinements in flap shaping and molding reduced the need for further autologous fat transfer, obtaining a brilliant totally autologous BR without the need for microsurgical experience.; **Competing Interests:** The authors have no financial interest to declare in relation to the content of this article. (Copyright © 2023 The Authors. Published by Wolters Kluwer Health, Inc. on behalf of The American Society of Plastic Surgeons.)

Access or request full text: <https://libkey.io/10.1097/GOX.00000000000005262>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37731730&custid=ns023446>

30. Rash and Poor Wound Healing After Mastectomy

Item Type: Journal Article

Authors: Miller, Austinn C.;Ratushny, Vladimir and Cognetta,Armand B.,Jr

Publication Date: 2023



Journal: Jama 330(11), pp. 1092-1093

Access or request full text: <https://libkey.io/10.1001/jama.2023.16367>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37642971&custid=ns023446>

31. Coping in Post-Mastectomy Breast Cancer Survivors and Need for Intervention: Systematic Review

Item Type: Journal Article

Authors: Mishra, Anju;Nair, Jayajith and Sharan, Anjali Midha

Publication Date: 2023

Journal: Breast Cancer : Basic and Clinical Research 17, pp. 11782234231209126

Abstract: Background: Breast cancer is the most prominent cancer type to affect women. Surgical treatment of invasive breast cancers involves mastectomy. Due to mastectomy, women are subjected to social, emotional, and cultural problems which need to be addressed.; **Objective:** The objective of the study is to understand how women cope with body image-related issues, trauma, anxiety, and depression post-mastectomy.; **Design:** A systematic literature review was conducted for understanding the coping in post-mastectomy patients. The methods for identifying the studies were based on Preferred Reporting Items for Systematic reviews and Meta-analysis (PRISMA) guidelines.; **Databases:** Medline/PubMed, PsycInfo, and Cochrane databases were used for searching relevant articles. A final of 19 studies were analyzed for the work.; **Methods:** Search strings such as "coping strategies and post mastectomy," "body image coping and post mastectomy" and "anxiety coping and post mastectomy" were used for identification of references from databases. Eligibility criteria were used for finalizing the references.; **Results:** Analysis of the 19 studies has clearly shown that women who undergo mastectomy suffer from anxiety, stress, and trauma. This study has observed that women have problems with their body image post-mastectomy along with bouts of depression. Self-coping has been observed in relatively few studies. Psychological interventions before surgery have been observed to be a better coping strategy. In most of the studies, women opted for breast reconstruction to overcome the trauma associated with mastectomy.; **Conclusion:** Mastectomy has a severe impact on women's appearance and psychology. Breast reconstruction and acceptance have played an important role in coping among these women. However, breast reconstruction is not accepted by many women due to a multitude of factors. Thus, it is essential to have proper intervention programs in place to ensure women can cope with this situation and can lead healthy lives.; **Registration:** Systematic literature review (SLR) is submitted to PROSPERO. The application confirmation number is 449135.Registration awaited from the database.; **Competing Interests:** The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. (© The Author(s) 2023.)

Access or request full text: <https://libkey.io/10.1177/11782234231209126>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37954028&custid=ns023446>

32. Plastic surgery market share of breast reconstructive procedures: An analysis of two nationwide databases

Item Type: Journal Article



Authors: Rochlin, Danielle H.;Matros, Evan;Shamsunder, Meghana G.;Rubenstein, Robyn;Nelson, Jonas A. and Sheckter, Clifford C.

Publication Date: 2023

Journal: Journal of Surgical Oncology 128(7), pp. 1064-1071

Abstract: Background and Objectives: Given advances that streamline breast reconstruction (e.g., prepectoral placement, acellular dermal matrix ADM], oncoplastic surgery), there is concern that nonplastic surgeons are performing a growing proportion of breast reconstructive procedures. The purpose of this study was to evaluate US trends in the market share of breast reconstruction performed by plastic compared to general surgeons.; **Methods:** IBM® MarketScan® Commercial Claims 2006-2017 and NSQIP 2005-2020 were queried to identify women who underwent mastectomy with alloplastic (tissue expander or implant-based) or free flap reconstruction, or lumpectomy with oncoplastic reconstruction (breast reduction, mastopexy, or local/regional flap). MarketScan included immediate and delayed reconstructions, while all NSQIP reconstructions were immediate. Poisson regression with incident rate ratios (IRRs) modeled trends in surgeon type over time.; **Results:** The cohort included 65 168 encounters from MarketScan and 73 351 from NSQIP. Plastic surgeons performed 95.8% of free flap, 93.8% of alloplastic, and 64.9% of oncoplastic reconstructions. Plastic surgeons performed an increasing proportion of immediate oncoplastic reduction and mastopexy (MarketScan IRR: 1.077, 95% confidence interval CI]: 1.060-1.094, $p < 0.001$; NSQIP IRR: 1.041, 95% CI: 1.030-1.052, $p < 0.001$). There were no clinically significant trends for delayed oncoplastic, alloplastic, or free flap reconstructions. Plastic surgeons were more likely to use ADM compared to general surgeons in NSQIP ($p < 0.001$).; **Conclusions:** Plastic surgeons gained market share in immediate oncoplastic breast reduction and mastopexy over the past two decades without any loss in alloplastic or free flap breast reconstruction. Plastic surgeons should continue collaboration with breast surgical oncologists to reinforce the shared surgeon model for management of breast cancer. (© 2023 Wiley Periodicals LLC.)

Access or request full text: <https://libkey.io/10.1002/jso.27398>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37439094&custid=ns023446>

33. Decreasing length of stay in breast reconstruction patients: A national analysis of 2019-2020

Item Type: Journal Article

Authors: Rubenstein, Robyn N.;Stern, Carrie S.;Graziano, Francis D.;Plotsker, Ethan L.;Haglich, Kathryn;Tadros, Audree B.;Allen, Robert J.;Mehra, Babak J.;Matros, Evan and Nelson, Jonas A.

Publication Date: 2023

Journal: Journal of Surgical Oncology 128(5), pp. 726-742

Abstract: Background: The effects of COVID-19 on breast reconstruction included shifts toward alloplastic reconstruction methods to preserve hospital resources and minimize COVID exposures. We examined the effects of COVID-19 on breast reconstruction hospital length of stay (LOS) and subsequent early postoperative complication rates.; **Methods:** Using the National Surgical Quality Improvement Program, we examined female patients who underwent mastectomy with immediate breast reconstruction from 2019 to 2020. We compared postoperative complications across 2019-2020 for alloplastic and autologous reconstruction patients. We further performed subanalysis of 2020 patients based on LOS.; **Results:** Both alloplastic and autologous reconstruction patients had shorter inpatient stays. Regarding the alloplastic 2019 versus 2020 cohorts,



complication rates did not differ ($p > 0.05$ in all cases). Alloplastic patients in 2020 with longer LOS had more unplanned reoperations ($p < 0.001$). Regarding autologous patients in 2019 versus 2020, the only complication increasing from 2019 to 2020 was deep surgical site infection (SSI) (2.0% vs. 3.6%, $p = 0.024$). Autologous patients in 2020 with longer LOS had more unplanned reoperations ($p = 0.007$).; **Conclusions:** In 2020, hospital LOS decreased for all breast reconstruction patients with no complication differences in alloplastic patients and a slight increase in SSIs in autologous patients. Shorter LOS may lead to improved satisfaction and lower healthcare costs with low complication risk, and future research should examine the potential relationship between LOS and these outcomes. (© 2023 Wiley Periodicals LLC.)

Access or request full text: <https://libkey.io/10.1002/jso.27378>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37403585&custid=ns023446>

34. Autologous Fat Grafting for Post-mastectomy Pain Syndrome: A Systematic Review and Meta-Analysis

Item Type: Journal Article

Authors: Samuels, Sabrina;Adeboye, Teniola;Zafar, Abdal Qadir;Katsura, Chie;Izard, Charlie;Shahrokhi, Nazanin and Rahman, Shafiq

Publication Date: 2023

Journal: Cureus 15(11), pp. e49017

Abstract: Fat grafting has been described as a potential treatment for post-mastectomy pain syndrome (PMPS) following oncological breast surgery. The study's aim was to compare and contrast the current literature using a systematic review and meta-analysis to quantify the evidence. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were used. Databases, including MEDLINE, Google Scholar, Cumulative Index to Nursing and Allied Health Literature (CINAHL), and the Cochrane Central Register of Controlled Trials (CENTRAL), were searched. Data synthesis was conducted using Review Manager 5.4 (Cochrane Collaboration, London, UK), with 95% confidence intervals. All randomised controlled trials (RCT) and observational studies comparing lipofilling for PMPS were included. A total of six studies met the inclusion criteria with five articles being used in data analysis for the mean percentage reduction in visual analogue scale (VAS) score. The primary outcome measure was the mean percentage reduction in the VAS pain score. Secondary outcomes included the Neuropathic Pain Symptom Inventory (NPSI) and the quality of life assessments post treatment. Overall, a total of 266 patients received fat transfer for PMPS, and 164 were in the control group. The mean percentage reduction in VAS score was 19.8 (10.82, 28.82; $p < 0.0001$). Secondary outcomes, including health-related quality of life, showed good outcomes post fat transfer. This involved breast softness, cosmesis, and psychosocial well-being. The results from this meta-analysis suggest that autologous fat grafting is an efficacious treatment for reducing pain caused by PMPS. The authors suggest more high-quality trials are needed to enhance the current evidence base.; **Competing Interests:** The authors have declared that no competing interests exist. (Copyright © 2023, Samuels et al.)

Access or request full text: <https://libkey.io/10.7759/cureus.49017>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38024082&custid=ns023446>



35. Repeat sentinel lymph node surgery for locally recurrent breast cancer after prior mastectomy

Item Type: Journal Article

Authors: Schulze, Amy K.;Hoskin, Tanya L.;Mrdutt, Mary M.;Mutter, Robert W. and Hieken, Tina J.

Publication Date: 2023

Journal: Journal of Surgical Oncology

Abstract: Background and Objectives: Current NCCN guidelines discourage repeat sentinel lymph node (SLN) surgery in patients with local recurrence (LR) of breast cancer following prior mastectomy. This study addresses the feasibility and therapeutic impact of this approach.; **Methods:** We identified 73 patients managed with repeat SLN surgery for post-mastectomy isolated LR. Lymphatic mapping was performed using radioisotope with or without lymphoscintigraphy and/or blue dye. Successful SLN surgery was defined as retrieval of ≥ 1 SLN.; **Results:** SLN surgery was successful in 65/73 (89%), identifying a median of 2 (range 1-4) SLNs, with 10/65 (15%) SLN-positive. Among these, 5/10 (50%) proceeded to ALND. In unsuccessful cases, 1/8 (13%) proceeded to ALND. Seven of 10 SLN-positive patients and 50/55 SLN-negative patients received adjuvant radiotherapy. Chemotherapy was administered in 31 (42%) and endocrine therapy in 50 of 57 HR+ patients (88%). After 28 months median follow-up, eight patients relapsed with the first site local in two, distant in five, and synchronous local/distant in one. No nodal recurrences were observed.; **Conclusions:** SLN surgery for patients with LR post-mastectomy is feasible and informative. This approach appears oncologically sound, decreases axillary dissection rates and may be used to tailor adjuvant radiation target volumes and systemic therapies. (© 2023 Wiley Periodicals LLC.)

Access or request full text: <https://libkey.io/10.1002/jso.27496>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37929785&custid=ns023446>

36. Wise-pattern Split-reduction Incision to Facilitate Mastectomy and Direct-to-Implant Reconstruction for Superficial Breast Cancers

Item Type: Journal Article

Authors: Schwartz, Jean-Claude D.

Publication Date: 2023

Journal: Plastic and Reconstructive Surgery.Global Open 11(10), pp. e5324

Abstract: The split reduction allows for oncoplastic breast conserving surgery using a modified Wise-pattern closure in ptotic patients with cancers in close proximity to a skin margin. Although cancers involving skin within the Wise pattern are conveniently resected during closure, cancers in close proximity to skin outside the Wise pattern require a modified closure. This modified Wise-pattern closure preserves skin near the inferior pole of the breast which is normally resected and shifts this resection superiorly over the cancer. This also shifts the final medial or lateral inframammary scar onto the visible breast mound. Although this split-reduction Wise pattern has been well described for resecting advanced cancers in patients who undergo oncoplastic breast conserving surgery, this approach has not been described in patients who require mastectomy. Here, we report on 10 consecutive patients with ptosis and advanced breast cancers that require skin resection outside the standard Wise pattern, where we used the split-reduction incision to facilitate mastectomy and direct-to-implant reconstruction.; **Competing Interests:** The author has no financial interest to declare in relation to the content of this article. Disclosure statements are at the end of this article, following the correspondence



Access or request full text: <https://libkey.io/10.1097/GOX.00000000000005324>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37817927&custid=ns023446>

37. Patterns of completion axillary dissection for patients with cT1-2N0 breast cancer undergoing total mastectomy with positive sentinel lymph nodes

Item Type: Journal Article

Authors: Schwieger, Lara;Postlewait, Lauren M.;Subhedar, Preeti D.;Geng, Feifei;Liu, Yuan;Gillespie, Theresa and Arciero, Cletus A.

Publication Date: 2023

Journal: Journal of Surgical Oncology

Abstract: Background and Objectives: The ACOSOGZ0011 trial found that overall survival (OS) for patients with 1-2 positive nodes undergoing sentinel lymph node biopsy-alone (SLNB) was noninferior to completion axillary lymph node dissection (ALND), but excluded patients undergoing mastectomy. Our study examined patterns of ALND and its relationship with OS for SLNB-positive patients undergoing mastectomy.; **Methods:** The National Cancer Database was queried (2010-2017) for patients with cT1-2N0 breast cancer undergoing mastectomy with positive sentinel lymph nodes. Clinical data were compared.; **Results:** Of 20 001 patients, 11 574 (57.9%) underwent SLNB + ALND, and 8427 (42.1%) had SLNB-alone. The SLNB + ALND group had more positive nodes (mean 2.6 vs. 1.3, $p < 0.001$) and more frequently received nodal radiation (33.4% vs. 28.9%, $p < 0.001$). Patients diagnosed in later years were less likely to undergo ALND (2010: reference; 2017: odds ratio: 0.29, 95% confidence interval CI]: 0.25-0.33, $p < 0.001$). ALND (hazard ratio HR]: 0.97, 95% CI: 0.89-1.06, $p = 0.49$) and nodal radiation (HR: 0.92, 95% CI: 0.83-1.02, $p = 1.06$) were not independently associated with OS. Propensity-score matched 5-year OS was similar (SLNB + ALND: 90.9% vs. SLNB-alone: 90.3%, $p = 0.65$).; **Conclusion:** For patients undergoing mastectomy for cT1-2N0 breast cancer with positive SLNB, SLNB-alone was common and increased over time. Axillary radiation was not routinely delivered in the SLNB-alone group. Completion ALND and nodal radiation were not associated with improved survival. (© 2023 Wiley Periodicals LLC.)

Access or request full text: <https://libkey.io/10.1002/jso.27503>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37955191&custid=ns023446>

38. Improving Visualization of Intramuscular Perforator Course: Augmented Reality Headsets for DIEP Flap Breast Reconstruction

Item Type: Journal Article

Authors: Seth, Ishith;Lindhardt, Joakim;Jakobsen, Anders;Bo Thomsen, Jørn;Kiil, Birgitte Jul;Rozen, Warren Matthew and Kenney, Peter Sinkjaer

Publication Date: 2023

Journal: Plastic and Reconstructive Surgery.Global Open 11(9), pp. e5282



Abstract: Background: Augmented reality (AR) technology, exemplified by devices such as the Microsoft HoloLens 2, has gained interest for its potential applications in preoperative guidance. This study explores the use of AR technology for perforator identification during deep inferior epigastric artery perforator (DIEP) flap breast reconstruction.; **Methods:** A case series of five patients where an AR device was used to identify perforators during DIEP flap breast reconstruction is presented. The device was utilized to recognize preoperative perforators and map their extra- and intramuscular routes. Sound and/or color Doppler confirmation was used to verify the findings.; **Results:** In all five cases, the AR device successfully identified preoperative perforators and delineated their extra- and intramuscular routes. AR technology in perioperative visualization of vasculature offers the potential to enhance surgical precision and reduce operative times. By providing an augmented three-dimensional overlay of patients' vascular structures, AR can facilitate a more comprehensive understanding of individual anatomy, ultimately improving surgical outcomes.; **Conclusions:** AR technology shows promise in enhancing perforator identification efficiency and deepening understanding of perforator trajectories during preoperative planning. Nonetheless, additional research is needed to establish whether the advantages of AR technology warrant its widespread adoption for perforator identification.; **Competing Interests:** The authors have no financial interest to declare in relation to the content of this article. (Copyright © 2023 The Authors. Published by Wolters Kluwer Health, Inc. on behalf of The American Society of Plastic Surgeons.)

Access or request full text: <https://libkey.io/10.1097/GOX.00000000000005282>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37744778&custid=ns023446>

39. Breast-conserving surgery is an appropriate procedure for centrally located breast cancer: a population-based retrospective cohort study

Item Type: Journal Article

Authors: Yuan, Ye-Wei;Liu, Peng-Cheng;Li, Fang-Fang;Yang, Ya-Han;Yang, Wei;Fan, Li;Mou, De-Wu;Yang, Hong-Wei and Chen, Mao-Shan

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Journal: BMC Surgery 23(1), pp. 298

Abstract: Background: The evidence of breast-conserving therapy (BCT) applied in centrally located breast cancer (CLBC) is absent. This study aims to investigate the long-term survival of breast-conserving therapy (BCT) in centrally located breast cancer (CLBC) compared with mastectomy in CLBC and BCT in non-CLBC.; **Methods:** Two hundred ten thousand four hundred nine women with unilateral T1-2 breast cancer undergoing BCT or mastectomy were identified from the Surveillance, Epidemiology, and End Results database. Kaplan-Meier survival curves were assessed via log-rank test. Propensity score matching (PSM) was used to balance baseline features, and the multivariable Cox model was used to estimate the adjusted hazard ratio [HR] and its 95% confidence interval [CI] for breast cancer-specific survival (BCSS) and overall survival (OS).; **Results:** With a median follow-up of 91 months, the BCSS and OS rates in patients who received BCT were greater than those patients treated with mastectomy in the entire CLBC set. Multivariable Cox analyses showed that CLBC patients who received BCT had better BCSS (HR = 0.67, 95%CI: 0.55-0.80, $p < 0.001$) and OS (HR = 0.78, 95%CI: 0.68-0.90, $p = 0.001$) than patients who received a mastectomy, but there were no significant differences of BCSS (HR = 0.65, 95%CI: 0.47-0.90, $p = 0.009$) and OS (HR = 0.82, 95%CI: 0.65-1.04, $p = 0.110$) after PSM. In patients treated with BCT, CLBC patients had a similar BCSS (HR = 0.99, 95%CI: 0.87-1.12, $p = 0.850$) but a worse OS (HR = 1.09, 95%CI: 1.01-1.18, $p = 0.040$) compared to that of the non-CLBC patient, but there was no significant difference both BCSS (HR = 1.05, 95%CI: 0.88-1.24, $p = 0.614$) and OS (HR = 1.08, 95%CI: 0.97-1.20, $p = 0.168$)



after PSM.; **Conclusion:** Our findings revealed that BCT should be an acceptable and preferable alternative to mastectomy for well-selected patients with CLBC. (© 2023. BioMed Central Ltd., part of Springer Nature.)

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40. Neoadjuvant Chemotherapy and Neoadjuvant Chemotherapy with Immunotherapy Result in Different Tumor Shrinkage Patterns in Triple-negative Breast Cancer

Item Type: Journal Article

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Abstract: Introduction: This study aims to explore whether neoadjuvant chemotherapy with immunotherapy (NACI) leads to different tumor shrinkage patterns, based on magnetic resonance imaging (MRI), compared to neoadjuvant chemotherapy (NAC) alone in patients with triple-negative breast cancer (TNBC). Additionally, the study investigates the relationship between tumor shrinkage patterns and treatment efficacy was investigated.; **Methods:** This retrospective study included patients with TNBC patients receiving NAC or NACI from January 2019 until July 2021 at our center. Pre- and post-treatment MRI results were obtained for each patient, and tumor shrinkage patterns were classified into three categories as follows: 1) concentric shrinkage (CS); 2) diffuse decrease; and 3) no change. Tumor shrinkage patterns were compared between the NAC and NACI groups, and the relevance of the patterns to treatment efficacy was assessed.; **Results:** Of the 99 patients, 65 received NAC and 34 received NACI. The CS pattern was observed in 53% and 20% of patients in the NAC and NACI groups, respectively. Diffuse decrease pattern was observed in 36% and 68% of patients in the NAC and NACI groups. The association between the treatment regimens (NAC and NACI) and tumor shrinkage patterns was statistically significant ($p = 0.004$). The postoperative pathological complete response (pCR) rate was 45% and 82% in the NAC and NACI groups ($p < 0.001$), respectively. In the NACI group, 17% of patients with the CS pattern and 56% of those with the diffuse decrease pattern achieved pCR ($p = 0.903$). All tumor shrinkage patterns were associated with achieved a high pCR rate in the NACI group.; **Conclusion:** Our study demonstrates that the diffuse decrease pattern of tumor shrinkage is more common following NACI than that following NAC. Furthermore, our findings suggest that all tumor shrinkage patterns are associated with a high pCR rate in patients with TNBC treated with NACI. (© 2023 Korean Breast Cancer Society.)

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