

BÖLÜM 3

ONKOPLASTİK MEME KORUYUCU CERRAHİ

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GİRİŞ

Günümüzde memeler sadece süt yapan, süt veren, bebeği emziren ve besleyen organ olmaların ötesinde tanımlanmaktadır. Memeler kadınları tanımlayan ve tamamlayan organlar olarak bilinmektedir. Aynı zamanda kadın estetiğinin önemli bir bileşenidir. Bu estetik organlar yaşam boyunca değişmekte ve önemli sağlık sorunlarına neden olmaktadır. Yapılan çalışmalarda genel cerrahi polikliniklerine en sık başvuran hastalık grubunun meme hastalıkları olduğu bildirilmiştir (1). Kanser hastaları son on yıllarda artış eğilimindedir. Meme kanseri hemen hemen tamamı (%99) kadınlarda orta çıkan yaygın bir kanser türü olarak bilinmektedir. Kadın kadınlardaki kanserin yaklaşık olarak %30'nu oluşturmaktadır ve kadınlarda kanserden ölümlerin ise %14.5'dir (2). Meme kanserinin tedavisi modern yaklaşımla günümüzde multidisipliner yapıda tedavi edilmektedir. Bu tedavi yaklaşımında hala en etkili tedavi yöntemi olarak cerrahi tedaviler yerini korumaktadır. Günlük pratiğimizde kür sağlamak için meme kanserinin cerrahi tedavisi yapılmayan hemen hemen hiç hasta yoktur. Meme kanseri için yapılan cerrahi yaklaşımlar yüzyıl içinde önemli oranda değişmiştir. Meme kanserinin cerrahi tedavisi olarak Halsted 190'lü yıllarda radikal mastektomi ilk kez tanımlanmıştır. Modifiye radikal mastektomi (MRM) 1950'li yıllarda popüler olmuştur. Kanser için memenin korunduğu sadece kanserin alındığı meme koruyucu cerrahiler (MKC) tanımlanmıştır. Bu teknikte memeye radyoterapi (RT) yapılmaktadır. Cerrahi tedavide 20 yıllık uzun dönem izlem sonuçlarına göre MKC+ RT ve

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için uzun vadeli izlem (onkolojik, estetik ve hasta memnuniyet verileri) verileri beklenmektedir.

KAYNAKLAR

1. Emiroğlu M, Inal A, Sert I, İlhan E, Peker K, Gülçelik MA, Güngör H, Salimoğlu S, Can D, Ellidokuz H, Aydın C. How do surgeons approach breast cancer surgery in Turkey? A national survey. *Breast Cancer*. 2013 Oct 13; [Epub ahead of print] [PubMed] [Google Scholar]
2. Estimates of worldwide burden of cancer in 2008: GLOBOCAN 2008. Ferlay J, Shin HR, Bray F, Forman D, Mathers C, Parkin DM *Int J Cancer*. 2010 Dec 15; 127(12):2893-917.
3. Veronesi U, Banfi A, Salvadori B, Luini A, Saccozzi R, Zucali R, Marubini E, Del Vecchio M, Boracchi P, Marchini S, et al. Breast conservation is the treatment of choice in small breast cancer: long-term results of a randomized trial. *Eur J Cancer*. 1990;26:668-670. <http://dx.doi.org/10.1016/0277-5379%2890%2990113-8>. [PubMed] [Google Scholar].
4. Emiroğlu M, Sert I, Inal A. The role of oncoplastic breast surgery in breast cancer treatment. *J Breast Health*. 2015;11:1-9. [PMC free article] [PubMed] [Google Scholar]
5. Gulcelik MA, Dogan L, Camlibel M, Karaman N, Kuru B, Alagol H. et al. Early complications of a reduction mammoplasty technique in the treatment of macromastia with or without breast cancer. *Clin Breast Cancer* 2011;11:395-399. [PubMed] [Google Scholar]
6. Miller KD, Nogueira L, Mariotto AB, et al. Cancer treatment and survivorship statistics, 2019. *CA Cancer J Clin*. 2019;69:363-385.
7. Al-Ghazal L, Fallowfield RW, Blamey R. Comparison of psychological aspects and patient satisfaction following breast conserving surgery, simple mastectomy and breast reconstruction. *Eur J Cancer*. 2000;36:1938-43. [PubMed] [Google Scholar]
8. Emiroglu M, Karaali C, Oztop MB, and Gulluoglu BM. National Consensus on Oncoplastic Breast Conserving Surgery in Turkey: Position Paper for the Standardization of Surgical Practice *Turk J Surg*. 2020 Sep; 36(3): 271-277. Published online 2020 Sep 28. doi: 10.47717/turkjsurg.2020.4639
9. Weber WP, Soysal SD, Fulco I, et al. Standardization of oncoplastic breast conserving surgery. *Eur J Surg Oncol*. 2017;43:1236-1243. [PubMed] [Google Scholar]
10. Chatterjee A, Gass J, Patel K, et al. Consensus Definition and Classification System in Oncoplastic Surgery developed by the American Association of Breast Surgeons. *Ann Surg Oncol* 2019; 26:3436-44. 10.1245/s10434-019-07345-4 [PubMed] [CrossRef] [Google Scholar]
11. Clough KB, Cuminet J, Fitoussi A, et al. Cosmetic sequelae after conservative treatment for breast cancer: classification and results of surgical correction. *Ann Plast Surg* 1998;41:471-81. 10.1097/00000637-199811000-00004 [PubMed] [CrossRef] [Google Scholar]
12. Munhoz AM, Montag E, Gemperli R. Current aspects of therapeutic reduction mammoplasty for immediate early breast cancer management: An update *World J Clin Oncol*. 2014 Feb 10; 5(1): 1-18. Published online 2014 Feb 10. doi: 10.5306/wjco.v5.i1.1
13. Clough KB, Nos C, Fitoussi A, et al. Partial reconstruction after conservative treatment for breast cancer: classification of sequelae and treatment options. *Ann Chir Plast Esthet* 2008;53:88-101. 10.1016/j.anplas.2008.01.001 [PubMed] [CrossRef] [Google Scholar]
14. Emiroglu M, Salimoğlu S, Karaali C, Sert I, Gungor O, Sert F. et al. Oncoplastic reduction mammoplasty for breast cancer in women with macromastia: oncological long-term outcomes. *Asian J Surg* 2017;40:41-47. [PubMed] [Google Scholar]
15. Losken A, Dugal CS, Styblo TM, et al. A meta-analysis comparing breast conservation therapy alone to the oncoplastic technique. *Ann Plast Surg* 2014;72:145-9. 10.1097/SAP.0b013e3182605598 [PubMed] [CrossRef] [Google Scholar]
16. De La Cruz L, Blankenship SA, Chatterjee A, et al. Outcomes After Oncoplastic Breast-Conserving Surgery in Breast Cancer Patients: A Systematic Literature Review. *Ann Surg Oncol* 2016;23:3247-58. 10.1245/s10434-016-5313-1 [PubMed] [CrossRef] [Google Scholar]

17. Munhoz AM, Montag E, Arruda E, et al. Assessment of immediate conservative breast surgery reconstruction: a classification system of defects revisited and an algorithm for selecting the appropriate technique. *Plast Reconstr Surg* 2008;121:716-27 [PubMed] [Google Scholar]
18. Kronowitz SJ, Feledy JA, Hunt KK, et al. Determining the optimal approach to breast reconstruction after partial mastectomy. *Plast Reconstr Surg* 2006;117:1-11 [PubMed] [Google Scholar]
19. Slavin SA, Halperin T. Reconstruction of the breast conservation deformity. *Semin Plast Surg* 2004;18:89-96 [PMC free article] [PubMed] [Google Scholar]
20. Clough KB, Thomas SS, Fitoussi AD, et al. Reconstruction after conservative treatment for breast cancer: cosmetic sequelae classification revisited. *Plast Reconstr Surg* 2004;114:1743-53 [PubMed] [Google Scholar]
21. Munhoz AM, Aldrighi CM, Ferreira MC. Paradigms in oncoplastic breast surgery: a careful assessment of the oncological need and aesthetic objective. *Breast J* 2007;13:326-7 [PubMed] [Google Scholar]
22. Hamdi M, Wolfli J, Van Landuyt K. Partial mastectomy reconstruction. *Clin Plast Surg* 2007;34:51-62 [PubMed] [Google Scholar]
23. Audretsch WP, Rezai M, Kolotas C, et al. Tumor-specific immediate reconstruction in breast cancer patients. *Persp Plast Surg* 1998;11:71-100 [Google Scholar]
24. Clough KB, Kaufman GJ, Nos C, et al. Improving breast cancer surgery: a classification and quadrant per quadrant atlas for oncoplastic surgery. *Ann Surg Oncol* 2010;17:1375-91. 10.1245/s10434-009-0792-y [PubMed] [CrossRef] [Google Scholar]
25. Munhoz AM, Montag E, Arruda EG, et al. Superior-medial dermoglandular pedicle reduction mammoplasty for immediate conservative breast surgery reconstruction. *Ann Plast Surg* 2006;57:502-8 [PubMed] [Google Scholar]
26. Spear SL, Pelletiere CV, Wolfe AJ, et al. Experience with reduction mammoplasty combined with breast conservation therapy in breast cancer. *Plast Reconstr Surg* 2003;111:1102-9 [PubMed] [Google Scholar]
27. Kayar R, Çobanoğlu M, Güngör O, Çatal H, Emiroğlu M. The value of breast reduction operations in breast conservation surgery; Late results of 116 patients with breast cancer. *J Breast Health*. 2006;2:15-22. [Google Scholar]
28. Tan MP, Sitoh NY, Sim AS. Breast conservation treatment for multifocal and multicentric breast cancers in women with small-volume breast tissue. *ANZ J Surg* 2017;87:E5-E10. 10.1111/ans.12942 [PubMed] [CrossRef] [Google Scholar]
29. Noguchi M, Yokoi-Noguchi M, Ohno Y, et al. Oncoplastic breast conserving surgery: Volume replacement vs. volume displacement. *Eur J Surg Oncol* 2016;42:926-34. 10.1016/j.ejso.2016.02.248 [PubMed] [CrossRef] [Google Scholar]
30. Patel K, Bloom J, Nardello S, et al. An Oncoplastic Surgery Primer: Common Indications, Techniques, and Complications in Level 1 and 2 Volume Displacement Oncoplastic Surgery. *Ann Surg Oncol* 2019;26:3063-70. 10.1245/s10434-019-07592-5 [PubMed] [CrossRef] [Google Scholar]
31. Dogan L, Gulcelik MA, Karaman N, Camlibel M, Serdar GK, Ozaslan C. Intraglandular flap technique for tumors located in the upper outer quadrant of the breast. *Clin Breast Cancer*. 2012;12:194-198. <http://dx.doi.org/10.1016/j.clbc.2012.03.010>. [PubMed] [Google Scholar]
32. Yang JD, Kim MC, Lee JW, et al. Usefulness of Oncoplastic Volume Replacement Techniques after Breast Conserving Surgery in Small to Moderate-sized Breasts. *Arch Plast Surg* 2012;39:489-96. 10.5999/aps.2012.39.5.489 [PMC free article] [PubMed] [CrossRef] [Google Scholar]
33. Lee JW, Kim MC, Park HY, et al. Oncoplastic volume replacement techniques according to the excised volume and tumor location in small- to moderate-sized breasts. *Gland Surg* 2014;3:14-21. [PMC free article] [PubMed] [Google Scholar]
34. Emiroğlu M, Inal A, Sert I, İlhan E, Peker K, Gülçelik MA, Güngör H, Salimoğlu S, Can D, Ellidokuz H, Aydın C. The Approach of General Surgeons to Oncoplastic and Reconstructive

Breast Surgery in Turkey: A Survey of Practice Patterns. *Balkan Medical Journal*, 31(4), 307-312., Doi: 10.5152/balkanmedj. 2014.13230, (Kontrol No: 2584227)

35. Khayat E, Brackstone M, Maxwell J, et al. Training Canadian surgeons in oncoplastic breast surgery: Where do we stand? *Can J Surg*. 2017;60:369–71. [PMC free article] [PubMed] [Google Scholar]
36. Emiroğlu M, KuruB, Gülçelik MA, Atahan MK, Sezer AY, Karaali C, ark'nın. The Main Topics at the Oncoplastic Breast Surgery Course and Expert Panel. *J Breast Health*. 2017;1;13(1):46-49.
37. Kaufman CS. Increasing role of oncoplastic surgery for breast cancer. *Curr Oncol Rep*. 2019;21:111. [PMC free article] [PubMed] [Google Scholar]
38. Clough KB, Ihrai T, Oden S, et al. Oncoplastic surgery for breast cancer based on tumour location and a quadrant-per-quadrant atlas. *Br J Surg*. 2012;99:1389–1395. [PubMed] [Google Scholar]
39. Berrino P, Campora E, Santi P. Postquadrantectomy breast deformities; classification and techniques of surgical correction. *Plast Reconstr Surg* 1987;79:567-72 [PubMed] [Google Scholar]
40. Chatterjee A, Gass J, Patel K, et al. A Consensus Definition and Classification System of Oncoplastic Surgery Developed by the American Society of Breast Surgeons. *Ann Surg Oncol* 2019;26:3436-44. 10.1245/s10434-019-07345-4 [PubMed] [CrossRef] [Google Scholar]
41. Rietjens M, Urban CA, Rey PC, et al. Long-term oncological results of breast conservative treatment with oncoplastic surgery. *Breast* 2007;16:387-95 [PubMed] [Google Scholar]
42. Fitzal F, Mittlboeck M, Trischler H. Breast-conserving therapy for centrally located breast cancer. *Ann Surg* 2008;247:470-6 [PubMed] [Google Scholar]
43. Arnaout A, Ross D, Khayat E, et al. Position statement on defining and standardizing an oncoplastic approach to breast-conserving surgery in Canada. *Curr Oncol*. 2019;26:e405–e409. [PMC free article] [PubMed] [Google Scholar]
44. Yang JD, Lee JW, Cho YK, et al. Surgical techniques for personalized oncoplastic surgery in breast cancer patients with small- to moderate-sized breasts (part 2): volume replacement. *J Breast Cancer* 2012;15:7-14. 10.4048/jbc.2012.15.1.7 [PMC free article] [PubMed] [CrossRef] [Google Scholar]
45. Rainsbury RM. Breast-sparing reconstruction with latissimus dorsi miniflaps. *Eur J Surg Oncol* 2002;28:891-5. 10.1053/ejso.2002.1350 [PubMed] [CrossRef] [Google Scholar]
46. Audretsch W, Rezaei M, Kolotas C. Tumor-specific immediate reconstruction in breast cancer patients. *Perspec Plast Surg*. 1998;11:71–79. [Google Scholar]
47. Crown A, Laskin R, Rocha FG, et al. Extreme oncoplasty: Expanding indications for breast conservation. *Am J Surg* 2019;217:851-6. 10.1016/j.amjsurg.2019.01.004 [PubMed] [CrossRef] [Google Scholar]
48. Refaat M, Abouelnagah G, Awad AT, et al. Modified round block technique for peripherally located early cancer breast, a technique that fits for all quadrants. *Breast J* 2020;26:414-9. 10.1111/tbj.13485 [PubMed] [CrossRef] [Google Scholar]
49. Losken A, Pinell-White X, Hart AM, et al. The oncoplastic reduction approach to breast conservation therapy: benefits for margin control. *Aesthet Surg J* 2014;34:1185-91. 10.1177/1090820X14545618 [PubMed] [CrossRef] [Google Scholar]
50. Clough KB, Gouveia PF, Benyahi D, et al. Positive Margins After Oncoplastic Surgery for Breast Cancer. *Ann Surg Oncol* 2015;22:4247-53. 10.1245/s10434-015-4514-3 [PubMed] [CrossRef] [Google Scholar]
51. Ho W, Stallard S, Doughty J, et al. Oncological Outcomes and Complications After Volume Replacement Oncoplastic Breast Conservations-The Glasgow Experience. *Breast Cancer (Auckl)* 2016;10:223-8. 10.4137/BCBCR.S41017 [PMC free article] [PubMed] [CrossRef] [Google Scholar]
52. Tan MP, Sitoh NY, Sim AS. Breast conservation treatment for multifocal and multicentric breast cancers in women with small-volume breast tissue. *ANZ J Surg* 2017;87:E5-E10. 10.1111/ans.12942 [PubMed] [CrossRef] [Google Scholar]

53. Schaverien MV, Raine C, Majdak-Paredes E, Dixon JM. Therapeutic mammoplasty--extending indications and achieving low incomplete excision rates. *Eur J Surg Oncol.* 2013;39:329–333. <http://dx.doi.org/10.1016/j.ejso.2013.01.006>. [PubMed] [Google Scholar]
54. Kapadia SM, Reitz A, Hart A, et al. Time to Radiation After Oncoplastic Reduction. *Ann Plast Surg* 2019;82:15-8. 10.1097/SAP.0000000000001598 [PubMed] [CrossRef] [Google Scholar]
55. Piper M, Peled AW, Sbitany H, et al. Comparison of Mammographic Findings Following Oncoplastic Mammoplasty and Lumpectomy Without Reconstruction. *Ann Surg Oncol* 2016;23:65-71. 10.1245/s10434-015-4611-3 [PubMed] [CrossRef] [Google Scholar]
56. De La Cruz L, Blankenship SA, Chatterjee A, et al. Outcomes After Oncoplastic Breast-Conserving Surgery in Breast Cancer Patients: A Systematic Literature Review. *Ann Surg Oncol* 2016;23:3247-58. 10.1245/s10434-016-5313-1 [PubMed] [CrossRef] [Google Scholar]
57. Gulcelik MA, Dogan L, Yuksel M, Camlibel M, Ozaslan C, Reis E. Comparison of outcomes of standard and oncoplastic breast-conserving surgery. *J Breast Cancer.* 2013;16:193–197. <http://dx.doi.org/10.4048/jbc.2013.16.2.193>. [PMC free article] [PubMed] [Google Scholar]
58. Khan J, Barrett S, Forte C, et al. Oncoplastic breast conservation does not lead to a delay in the commencement of adjuvant chemotherapy in breast cancer patients. *Eur J Surg Oncol* 2013;39:887-91. 10.1016/j.ejso.2013.05.005 [PubMed] [CrossRef] [Google Scholar]
59. Carter SA, Lyons GR, Kuerer HM, et al. Operative and Oncologic Outcomes in 9861 Patients with Operable Breast Cancer: Single-Institution Analysis of Breast Conservation with Oncoplastic Reconstruction. *Ann Surg Oncol* 2016;23:3190-8. 10.1245/s10434-016-5407-9 [PubMed] [CrossRef] [Google Scholar]
60. Kosasih S, Tayeh S, Mokbel K, et al. Is oncoplastic breast conserving surgery oncologically safe? A meta-analysis of 18,103 patients. *Am J Surg* 2020;220:385-392. 10.1016/j.amjsurg.2019.12.019 [PubMed] [CrossRef] [Google Scholar]
61. De Lorenzi F, Hubner G, Rotmensz N, et al. Oncological results of oncoplastic breast-conserving surgery: Long term follow-up of a large series at a single institution: A matched-cohort analysis. *Eur J Surg Oncol* 2016;42:71-7. 10.1016/j.ejso.2015.08.160 [PubMed] [CrossRef] [Google Scholar]
62. Carter SA, Lyons GR, Kuerer HM, et al. Operative and Oncologic Outcomes in 9861 Patients with Operable Breast Cancer: Single-Institution Analysis of Breast Conservation with Oncoplastic Reconstruction. *Ann Surg Oncol* 2016;23:3190-8. 10.1245/s10434-016-5407-9 [PubMed] [CrossRef] [Google Scholar]
63. Dolan R, Patel M, Weiler-Mithoff E, et al. Imaging Results Following Oncoplastic and Standard Breast Conserving Surgery. *Breast Care (Basel)* 2015;10:325-9. 10.1159/000437105 [PMC free article] [PubMed] [CrossRef] [Google Scholar]
64. Mansell J, Weiler-Mithoff E, Stallard S, et al. Oncoplastic breast conservation surgery is oncologically safe when compared to wide local excision and mastectomy. *Breast* 2017;32:179-85. 10.1016/j.breast.2017.02.006 [PubMed] [CrossRef] [Google Scholar]
65. Rainsbury RM. Surgery insight: Oncoplastic breast-conserving reconstruction--indications, benefits, choices and outcomes. *Nat Clin Pract Oncol.* 2007;4:657–664. <http://dx.doi.org/10.1038/nponc0957>. [PubMed] [Google Scholar]
66. Cardoso MJ, Cardoso JS, Vrieling C, Macmillan D, Rainsbury D, Heil J, Hau E, Keshtgar M. Recommendations for the aesthetic evaluation of breast cancer conservative treatment. *Breast Cancer Res Treat.* 2012;135:629–637. <http://dx.doi.org/10.1007/s10549-012-1978-8>. [PubMed] [Google Scholar]
67. Tenofsky PL, Dowell P, Topalovski T, Helmer SD. Surgical, oncologic, and cosmetic differences between oncoplastic and nononcoplastic breast conserving surgery in breast cancer patients. *Am J Surg.* 2014;207:398–402. <http://dx.doi.org/10.1016/j.amjsurg.2013.09.017>. [PubMed] [Google Scholar]
68. Cardoso MJ, Cardoso JS, Vrieling C, Macmillan D, Rainsbury D, Heil J, Hau E, Keshtgar M. Recommendations for the aesthetic evaluation of breast cancer conservative treatment. *Breast*

Cancer Res Treat. 2012;135:629–637. <http://dx.doi.org/10.1007/s10549-012-1978-8>. [PubMed] [Google Scholar]

69. Haloua M.H., Krekel N.M.A., Jacobs G.J.A., Zonderhuis B., Bouman M.-B., Buncamper M.E., Niessen F.B., Winters H.A.H., Terwee C., Meijer S., van den Tol M.P. Cosmetic outcome assessment following breast-conserving therapy: a comparison between bcct.core software and panel evaluation. *International journal of breast cancer*. 2014;2014 716860–716860. [PMC free article] [PubMed] [Google Scholar] doi: 10.1016/j.breast.2018.06.008. [PubMed] [CrossRef] [Google Scholar]
70. Cardoso M.J., Vrieling C., Cardoso J.S., Oliveira H.P., Williams N.R., Dixon J.M., the PICTURE Project Clinical Trial Team, & the PICTURE Project Delphi Panel The value of 3d images in aesthetic evaluation of breast cancer conservative treatment. results from a prospective multi-centric clinical trial. *Breast*. 2018;41:19–24
71. Cohen WA, Mundy LR, Ballard TN, et al. The BREAST-Q in surgical research: a review of the literature 2009–2015. *J Plast Reconstr Aesthet Surg*. 2016;69:149–162. [PMC free article] [PubMed] [Google Scholar]
72. Kelemen P, Pukancsik D, Újhelyi M, et al. Comparison of clinicopathologic, cosmetic and quality of life outcomes in 700 oncoplastic and conventional breast-conserving surgery cases: A single-centre retrospective study. *Eur J Surg Oncol* 2019;45:118-24. 10.1016/j.ejso.2018.09.006 [PubMed] [CrossRef] [Google Scholar]
73. Rose M, Svensson H, Handler J, et al. Patient-reported outcome after oncoplastic breast surgery compared with conventional breast-conserving surgery in breast cancer. *Breast Cancer Res Treat* 2020;180:247-56. 10.1007/s10549-020-05544-2 [PMC free article] [PubMed] [CrossRef] [Google Scholar]