



Bölüm

21

ENDOSKOPİ YARDIMLI ONKOPLASTİK MEME CERRAHİSİ

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GİRİŞ

Tarihsel olarak, modifiye radikal mastektomi, ameliyat edilebilir meme kanserini tedavi etmek için tercih edilen yöntemdi¹. Bununla birlikte, son birkaç on yılda cerrahi tekniklerde bir dizi ilerleme kaydedilmiştir ve şimdi meme koruyucu cerrahi (MKC), özellikle erken evre hastalığı olan kadınlarda meme kanseri tedavisi olarak giderek daha fazla kullanılmaktadır^{2,3}. Sentinel lenf nodu biyopsisi (SLNB) artık çoğu hastada uygulanmakta ve böylece klinik nod negatif hastalarda aksiller lenf nodu diseksiyonu (ALND) ihtiyacını ortadan kaldırılabilmektedir⁴. Meme cerrahisi alanındaki bir diğer önemli gelişme, hacim kaydırıcı veya hacim replase edici teknikleri kullanılarak geniş tümör eksizyonunu hemen kısmi meme rekonstrüksiyonu ile birleştiren bir meme koruyucu teknik olan onkoplastik meme cerrahisinin (OMC) geliştirilmesi olmuştur^{5,6}. Bununla birlikte, özellikle büyük tümörleri veya çok merkezli lezyonları olan kadınlar olmak üzere bazı hastalarda mastektomi hala endikedir⁷. Neyse ki, bu alandaki son gelişmeler artık hemen meme rekonstrüksiyonu (IBR) ile meme başı koruyucu mastektominin (NSM) yapılmasına izin vermekte^{8,9}, ve bu durum geleneksel mastektomiden çok daha iyi kozmetik sonuç ve yaşam kalitesi sağlamaktadır¹⁰.

Endoskopik (veya laparoskopik) cerrahi, göze çarpmayan bölgelere gizlenmiş küçük yaralardan yapıldığı için kozmetik sonucu optimize eden bir teknik

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KAYNAKLAR

1. Patey DH, Dyson WH. The prognosis of carcinoma of the breast in relation to the type of operation performed. *Br J Cancer*. 1948;2(1):7-13. doi:10.1038/bjc.1948.2
2. Veronesi U, Cascinelli N, Mariani L, et al. Twenty-year follow-up of a randomized study comparing breast-conserving surgery with radical mastectomy for early breast cancer. *N Engl J Med*. 2002;347(16):1227-1232. doi:10.1056/NEJMoa020989
3. Fisher B, Anderson S, Bryant J, et al. Twenty-year follow-up of a randomized trial comparing total mastectomy, lumpectomy, and lumpectomy plus irradiation for the treatment of invasive breast cancer. *N Engl J Med*. 2002;347(16):1233-1241. doi:10.1056/NEJMoa022152
4. Giuliano AE, McCall L, Beitsch P, et al. Locoregional recurrence after sentinel lymph node dissection with or without axillary dissection in patients with sentinel lymph node metastases: the American College of Surgeons Oncology Group Z0011 randomized trial. *Ann Surg*. 2010;252(3):426-432; discussion 432-433. doi:10.1097/SLA.0b013e3181f08f32
5. Anderson BO, Masetti R, Silverstein MJ. Oncoplastic approaches to partial mastectomy: an overview of volume-displacement techniques. *Lancet Oncol*. 2005;6(3):145-157. doi:10.1016/S1470-2045(05)01765-1
6. Holmes DR, Schooler W, Smith R. Oncoplastic approaches to breast conservation. *Int J Breast Cancer*. 2011;2011:303879. doi:10.4061/2011/303879
7. Newman LA, Kuerer HM, Hunt KK, et al. Presentation, treatment, and outcome of local recurrence after skin-sparing mastectomy and immediate breast reconstruction. *Ann Surg Oncol*. 1998;5(7):620-626. doi:10.1007/BF02303832
8. Petit JY, Veronesi U, Luini A, et al. When mastectomy becomes inevitable: the nipple-sparing approach. *Breast*. 2005;14(6):527-531. doi:10.1016/j.breast.2005.08.028
9. Petit JY, Veronesi U, Orecchia R, et al. Nipple-sparing mastectomy in association with intraoperative radiotherapy (ELIOT): A new type of mastectomy for breast cancer treatment. *Breast Cancer Res Treat*. 2006;96(1):47-51. doi:10.1007/s10549-005-9033-7
10. Zurrida S, Bassi F, Arnone P, et al. The Changing Face of Mastectomy (from Mutilation to Aid to Breast Reconstruction). *Int J Surg Oncol*. 2011;2011:980158. doi:10.1155/2011/980158
11. Carbonell AM. Minimally invasive gastric surgery. *Surg Clin North Am*. 2011;91(5):1089-1103. doi:10.1016/j.suc.2011.06.006
12. Lai H-W, Tseng S-H, Lee Y-T, et al. Impact of AITS laparoscopic training center on surgeons' preference for appendectomy. *Surg Endosc*. 2010;24(9):2210-2215. doi:10.1007/s00464-010-0930-4
13. Kerbl DC, McDougall EM, Clayman RV, Mucksavage P. A history and evolution of laparoscopic nephrectomy: perspectives from the past and future directions in the surgical management of renal tumors. *J Urol*. 2011;185(3):1150-1154. doi:10.1016/j.juro.2010.10.040
14. Luketich JD, Pennathur A, Awais O, et al. Outcomes after minimally invasive esophagectomy: review of over 1000 patients. *Ann Surg*. 2012;256(1):95-103. doi:10.1097/SLA.0b013e3182590603
15. Friedlander LD, Sundin J, Bakshandeh N. Endoscopy mastectomy and breast reconstruction: endoscopic breast surgery. *Aesthetic Plast Surg*. 1995;19(1):27-29. doi:10.1007/BF00209307
16. Eaves FF, Bostwick J, Nahai F, Murray DR, Styblo TM, Carlson GW. Endoscopic techniques in aesthetic breast surgery. Augmentation, mastectomy, biopsy, capsulotomy, capsulorrhaphy, reduction, mastopexy, and reconstructive techniques. *Clin Plast Surg*. 1995;22(4):683-695.
17. Momeni A, Padron NT, Bannasch H, Borges J, Björn Stark G. Endoscopic transaxillary subpectoral augmentation mammoplasty: a safe and predictable procedure. *J Plast Reconstr Aesthet Surg*. 2006;59(10):1076-1081. doi:10.1016/j.bjps.2006.01.031
18. Osanai T, Nihei Z, Ichikawa W, Sugihara K. Endoscopic resection of benign breast tumors: retromammary space approach. *Surg Laparosc Endosc Percutan Tech*. 2002;12(2):100-103. doi:10.1097/00129689-200204000-00005

19. Liu H, Huang C-K, Yu P-C, et al. Retromammary approach for endoscopic resection of benign breast lesions. *World J Surg.* 2009;33(12):2572-2578. doi:10.1007/s00268-009-0225-x
20. Sakamoto N, Fukuma E, Higa K, et al. Early results of an endoscopic nipple-sparing mastectomy for breast cancer. *Ann Surg Oncol.* 2009;16(12):3406-3413. doi:10.1245/s10434-009-0661-8
21. Nakajima H, Fujiwara I, Mizuta N, Sakaguchi K, Hachimine Y. Video-assisted skin-sparing breast-conserving surgery for breast cancer and immediate reconstruction with autologous tissue. *Ann Surg.* 2009;249(1):91-96. doi:10.1097/SLA.0b013e31818e3fa6
22. Yamashita K, Shimizu K. Video-assisted breast surgery can sample the second and third sentinel nodes to omit axillary node dissection for sentinel-node-positive patients. *Surg Endosc.* 2009;23(7):1574-1580. doi:10.1007/s00464-009-0343-4
23. Leff DR, Vashisht R, Yongue G, Keshtgar M, Yang G-Z, Darzi A. Endoscopic breast surgery: where are we now and what might the future hold for video-assisted breast surgery? *Breast Cancer Res Treat.* 2011;125(3):607-625. doi:10.1007/s10549-010-1258-4
24. Ingram D. Is it time for breast cancer surgeons to embrace endoscopic-assisted mastectomy? *ANZ J Surg.* 2008;78(10):837-838. doi:10.1111/j.1445-2197.2008.04676.x
25. Saimura M, Mitsuyama S, Anan K, et al. Endoscopy-assisted breast-conserving surgery for early breast cancer. *Asian J Endosc Surg.* 2013;6(3):203-208. doi:10.1111/ases.12018
26. Ozaki S, Ohara M. Endoscopy-assisted breast-conserving surgery for breast cancer patients. *Gland Surg.* 2014;3(2):94-108. doi:10.3978/j.issn.2227-684X.2013.12.04
27. Lee E-K, Kook S-H, Park Y-L, Bae W-G. Endoscopy-assisted breast-conserving surgery for early breast cancer. *World J Surg.* 2006;30(6):957-964. doi:10.1007/s00268-005-0202-y
28. Saimura M, Mitsuyama S, Anan K, et al. Endoscopy-assisted breast-conserving surgery for early breast cancer. *Asian J Endosc Surg.* 2013;6(3):203-208. doi:10.1111/ases.12018
29. Ozaki S, Ohara M, Shigematsu H, et al. Technical feasibility and cosmetic advantage of hybrid endoscopy-assisted breast-conserving surgery for breast cancer patients. *J Laparoendosc Adv Surg Tech A.* 2013;23(2):91-99. doi:10.1089/lap.2012.0224
30. Takemoto N, Koyanagi A, Yamamoto H. Comparison between endoscope-assisted partial mastectomy with filling of dead space using absorbable mesh and conventional conservative method on cosmetic outcome in patients with stage I or II breast cancer. *Surg Laparosc Endosc Percutan Tech.* 2012;22(1):68-72. doi:10.1097/SLE.0b013e3182414b25
31. Yamashita K, Shimizu K. Transaxillary retromammary route approach of video-assisted breast surgery enables the inner-side breast cancer to be resected for breast conserving surgery. *Am J Surg.* 2008;196(4):578-581. doi:10.1016/j.amjsurg.2008.06.028
32. Yamashita K, Shimizu K. Endoscopic video-assisted breast surgery: procedures and short-term results. *J Nippon Med Sch.* 2006;73(4):193-202. doi:10.1272/jnms.73.193
33. Sanuki J, Fukuma E, Wadamori K, Higa K, Sakamoto N, Tsunoda Y. Volume replacement with polyglycolic acid mesh for correcting breast deformity after endoscopic conservative surgery. *Clin Breast Cancer.* 2005;6(2):175. doi:10.1016/s1526-8209(11)70718-2
34. Park HS, Lee JS, Lee JS, Park S, Kim S-I, Park B-W. The feasibility of endoscopy-assisted breast conservation surgery for patients with early breast cancer. *J Breast Cancer.* 2011;14(1):52-57. doi:10.4048/jbc.2011.14.1.52
35. Fan L-J, Jiang J, Yang X-H, et al. A prospective study comparing endoscopic subcutaneous mastectomy plus immediate reconstruction with implants and breast conserving surgery for breast cancer. *Chin Med J (Engl).* 2009;122(24):2945-2950.
36. Ito K-I, Kanai T, Gomi K, et al. Endoscopic-assisted skin-sparing mastectomy combined with sentinel node biopsy. *ANZ J Surg.* 2008;78(10):894-898. doi:10.1111/j.1445-2197.2008.04687.x
37. Kitamura K, Hashizume M, Sugimachi K, et al. Early experience of endoscopic extirpation of benign breast tumors via an extra-mammary incision. *Am J Surg.* 1998;176(3):235-238. doi:10.1016/s0002-9610(98)00143-3
38. Kitamura K, Inoue H, Ishida M, Kinoshita J, Hashizume M, Sugimachi K. Endoscopic extirpa-

- tion of benign breast tumors using an extramammary approach. *Am J Surg*. 2001;181(3):211-214. doi:10.1016/s0002-9610(01)00562-1
39. Tamaki Y, Sakita I, Miyoshi Y, et al. Transareolar endoscopy-assisted partial mastectomy: a preliminary report of six cases. *Surg Laparosc Endosc Percutan Tech*. 2001;11(6):356-362. doi:10.1097/00129689-200112000-00003
 40. Sprangers MA, Groenvold M, Arraras JI, et al. The European Organization for Research and Treatment of Cancer breast cancer-specific quality-of-life questionnaire module: first results from a three-country field study. *J Clin Oncol*. 1996;14(10):2756-2768. doi:10.1200/JCO.1996.14.10.2756
 41. Brady MJ, Cella DF, Mo F, et al. Reliability and validity of the Functional Assessment of Cancer Therapy-Breast quality-of-life instrument. *J Clin Oncol*. 1997;15(3):974-986. doi:10.1200/JCO.1997.15.3.974
 42. Clough KB, Kaufman GJ, Nos C, Buccimazza I, Sarfati IM. Improving breast cancer surgery: a classification and quadrant per quadrant atlas for oncoplastic surgery. *Ann Surg Oncol*. 2010;17(5):1375-1391. doi:10.1245/s10434-009-0792-y
 43. Serra-Renom JM, Serra-Mestre JM, Martinez L, D'Andrea F. Endoscopic reconstruction of partial mastectomy defects using latissimus dorsi muscle flap without causing scars on the back. *Aesthetic Plast Surg*. 2013;37(5):941-949. doi:10.1007/s00266-013-0192-3
 44. Boetes C, Mus RD, Holland R, et al. Breast tumors: comparative accuracy of MR imaging relative to mammography and US for demonstrating extent. *Radiology*. 1995;197(3):743-747. doi:10.1148/radiology.197.3.7480749
 45. Amano G, Ohuchi N, Ishibashi T, Ishida T, Amari M, Satomi S. Correlation of three-dimensional magnetic resonance imaging with precise histopathological map concerning carcinoma extension in the breast. *Breast Cancer Res Treat*. 2000;60(1):43-55. doi:10.1023/a:1006342711426
 46. Schouten van der Velden AP, Schlooz-Vries MS, Boetes C, Wobbes T. Magnetic resonance imaging of ductal carcinoma in situ: what is its clinical application? A review. *Am J Surg*. 2009;198(2):262-269. doi:10.1016/j.amjsurg.2009.01.010
 47. Obdeijn I-M, Tilanus-Linthorst MMA, Spronk S, et al. Preoperative breast MRI can reduce the rate of tumor-positive resection margins and reoperations in patients undergoing breast-conserving surgery. *AJR Am J Roentgenol*. 2013;200(2):304-310. doi:10.2214/AJR.12.9185
 48. Turnbull L, Brown S, Harvey I, et al. Comparative effectiveness of MRI in breast cancer (COMICE) trial: a randomised controlled trial. *Lancet*. 2010;375(9714):563-571. doi:10.1016/S0140-6736(09)62070-5
 49. Krekel NMA, Haloua MH, Lopes Cardozo AMF, et al. Intraoperative ultrasound guidance for palpable breast cancer excision (COBALT trial): a multicentre, randomised controlled trial. *Lancet Oncol*. 2013;14(1):48-54. doi:10.1016/S1470-2045(12)70527-2
 50. Haloua MH, Krekel NMA, Coupé VMH, et al. Ultrasound-guided surgery for palpable breast cancer is cost-saving: results of a cost-benefit analysis. *Breast*. 2013;22(3):238-243. doi:10.1016/j.breast.2013.02.002
 51. Yu C-C, Chiang K-C, Kuo W-L, Shen S-C, Lo Y-F, Chen S-C. Low re-excision rate for positive margins in patients treated with ultrasound-guided breast-conserving surgery. *Breast*. 2013;22(5):698-702. doi:10.1016/j.breast.2012.12.019