

## Bölüm 9

# ERKEN EVRE MEME KANSERİNDE AKSILLA YÖNETİMİ

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## GİRİŞ

Meme kanseri kadınlarda görülen kanser türleri içinde 1.sıklıkta görülen ve en sık ölüme neden olanıdır. Görülme 30 yaşından küçüklerde az olmakla beraber menopozla birlikte görülmeye sıklığı artmaktadır. Erkeklerde meme kanseri nadir görülmekle beraber görüldüğünde genellikle ileri evrelerdedir. Gelişmiş ülkelerde daha sık görülmesine rağmen geri kalmış ve gelişmekte olan ülkelerde de görülmeye sıklığı gün geçtikçe artmaktadır.

Meme kanserinin tedavisini, cerrahi tedavi, kemoterapi, radyoterapi, hormon tedavisi immünoterapi, palyatif ve destekleyici tedavi olarak sıralayabiliriz.

Bunlardan cerrahi tedavi hastalığın evresine göre değişmekle birlikte primer veya tamalayıcı olarak hala en çok tercih edilen, en yaygın uygulanan ve başarı sağlayan tedavi yöntemidir. Memenin lenf akımının büyük kısmı aksillaya yönelik gösterdiği, aksiller lenf bezleri bu lenf sıvısı akım ve trafiginin tam kontrol noktası olduğundan tanı, evreleme, tedavi ve прогнозun belirlenmesinde aksilla yönetimi önemlidir.

Lenf nodlarının çıkarılması tarihte 16. yüzyılda başlamıştır. Modern meme cerrahisinin tanımı ise William Halsted ile 19. yüzyılda başlamıştır(1). Daha sonra, 1930'lu yıllarda, D.H Patey, meme dokusunu ve aksiller içeriği alırken pektoral kasın korunmasına sağlayan modifiye radikal mastektomiyi (MRM) tanımlayıp yaygınlaştırdı. Bu operasyon, uzun süreli takiplerde pektoral kasları korurken yalnızca meme kanseri tekrarlamadığı gibi aynı zamanda radikal mastektomiyle karşılaştırıldığında sağkalım sonuçlarında da bir farklılık göstermediğinden radikal mastektominin yerini almıştır(2).

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## SONUÇ

SLNB'nin ilk uygulanmasından başlayarak kabul görmesi, geliştirilmesi, bilimsel çalışmalar ile detaylarının tartışılarak tekamül etmesi erken meme kanserlerinde aksiller yönetimde çok olumlu sonuçlar doğurmuştur. SLNB'nin gelişmesiyle nod negatif erken evre meme kanserlerinin прогноз ve tedavi yönetiminde ALNB ye göre morbiditesi daha düşük olan bu yöntemin daha yaygın uygulanmasıyla sonuçlanmıştır. Morbidideki azalma nedeniyle çoğu hastalarda ALND yerini almıştır. Aksiller lenfatik haritalanmada ve lokal kontrolün sağlanması için SLNB'nin daha da gelişeceğini ve dezavantajların ve çekincelerin olduğu durumlarda da bu gelişim süreci sayesinde tekamül ederek kullanılabileceği öngörü ve umudunu taşımaktayız.

**Anahtar kelimeler:** Erken evre meme kanseri, Meme kanseri, Sentinel lenf nodu, Aksiller lenf nodu, ALND, SLNB

## KAYNAKLAR

1. Halsted WS: I. The results of operations for the cure of cancer of the breast performed at the Johns Hopkins Hospital from June, 1889, to January, 1894. Annals of surgery 1894; 20:497
2. Adair F, Berg J, Joubert L, et al: Long-term followup of breast cancer patients: The 30-year report. Cancer 1974; 33:1145-1150
3. Carter CL, Allen C, Henson DE: Relation of tumor size, lymph node status, and survival in 24,740 breast cancer cases. Cancer 1989; 63:181-187
4. McCready DR, Hortobagyi GN, Kau SW, et al: The prognostic significance of lymph node metastases after preoperative chemotherapy for locally advanced breast cancer. Archives of Surgery 1989; 124:21-25
5. Valero MG, Golshan M: Management of the Axilla in Early Breast Cancer, in Optimizing Breast Cancer Management Springer, 2018, pp 39-52
6. Veronesi U, Paganelli G, Viale G, et al: A randomized comparison of sentinel-node biopsy with routine axillary dissection in breast cancer. New England Journal of Medicine 2003; 349:546-553
7. Noguchi M, Miwa K, Michigishi T, et al: The role of axillary lymph node dissection in breast cancer management. Breast Cancer 1997; 4:143
8. Moore KL, Dalley AF, Agur AM: Clinically oriented anatomy. Lippincott Williams & Wilkins, 2013
9. Veronesi U, Rilke F, Luini A, et al: Distribution of axillary node metastases by level of invasion. An analysis of 539 cases. Cancer 1987; 59:682-687
10. Fisher B: The accuracy of clinical nodal staging and of limited axillary dissection as a determinant of histologic nodal status in carcinoma of the breast. Surg Gynecol Obstet 1981; 152:765-772
11. Halsted WS: I. The results of radical operations for the cure of carcinoma of the breast. Annals of surgery 1907; 46:1
12. Kocakuşak A, Şahin M, Yaşa MA, et al: Erken Evre Meme Kanserinde Sentinel Lenf Nodu Biyopsisi Sonuçlarımız. Medical Bulletin of Haseki/Haseki Tip Bulteni 2011; 49:
13. Blanchard DK, Donohue JH, Reynolds C, et al: Relapse and morbidity in patients undergoing sentinel lymph node biopsy alone or with axillary dissection for breast cancer. Archives of Surgery 2003; 138:482-488
14. Simmons RM, Smith SMR, Osborne MP: Methylene blue dye as an alternative to isosulfan blue dye for sentinel lymph node localization. The breast journal 2001; 7:181-183

15. Sabiston DC, Townsend CM, Beauchamp R: *Sabiston textbook of surgery: the biological basis of modern surgical practice*, WB Saunders, 2001
16. Michaelson JS, Silverstein M, Sgroi D, et al: The effect of tumor size and lymph node status on breast carcinoma lethality. *Cancer: Interdisciplinary International Journal of the American Cancer Society* 2003; 98:2133-2143
17. Fisher B, Jeong J-H, Anderson S, et al: Twenty-five-year follow-up of a randomized trial comparing radical mastectomy, total mastectomy, and total mastectomy followed by irradiation. *New England Journal of Medicine* 2002; 347:567-575
18. Wickerham DL, Costantino JP, Mamounas EP, et al: The landmark surgical trials of the national surgical adjuvant breast and bowel project. *World journal of surgery* 2006; 30:1138-1146
19. Giuliano AE, Kirgan DM, Guenther JM, et al: Lymphatic mapping and sentinel lymphadenectomy for breast cancer. *Annals of surgery* 1994; 220:391
20. Albertini JJ, Lyman GH, Cox C, et al: Lymphatic mapping and sentinel node biopsy in the patient with breast cancer. *Jama* 1996; 276:1818-1822
21. Veronesi U, Galimberti V, Zurruda S, et al: Sentinel lymph node biopsy as an indicator for axillary dissection in early breast cancer. *European journal of cancer* 2001; 37:454-458
22. Kim T, Giuliano AE, Lyman GH: Lymphatic mapping and sentinel lymph node biopsy in early-stage breast carcinoma: a metaanalysis. *Cancer* 2006; 106:4-16
23. Orr RK: The impact of prophylactic axillary node dissection on breast cancer survival—a Bayesian meta-analysis. *Annals of surgical oncology* 1999; 6:109-116
24. D'Angelo-Donovan DD, Dickson-Witmer D, Petrelli NJ: Sentinel lymph node biopsy in breast cancer: a history and current clinical recommendations. *Surgical oncology* 2012; 21:196-200
25. Del Bianco P, Zavagno G, Burelli P, et al: Morbidity comparison of sentinel lymph node biopsy versus conventional axillary lymph node dissection for breast cancer patients: results of the sentinella-GIVOM Italian randomised clinical trial. *European Journal of Surgical Oncology (EJSO)* 2008; 34:508-513
26. Giuliano AE, Hunt KK, Ballman KV, et al: Axillary dissection vs no axillary dissection in women with invasive breast cancer and sentinel node metastasis: a randomized clinical trial. *Jama* 2011; 305:569-575
27. Krag DN, Weaver DL, Alex JC, et al: Surgical resection and radiolocalization of the sentinel lymph node in breast cancer using a gamma probe. *Surgical oncology* 1993; 2:335-340
28. Radovanovic Z, Golubovic A, Plzak A, et al: Blue dye versus combined blue dye—radioactive tracer technique in detection of sentinel lymph node in breast cancer. *European Journal of Surgical Oncology (EJSO)* 2004; 30:913-917
29. Hung W, Chan C, Ying M, et al: Randomized clinical trial comparing blue dye with combined dye and isotope for sentinel lymph node biopsy in breast cancer. *British Journal of Surgery: Incorporating European Journal of Surgery and Swiss Surgery* 2005; 92:1494-1497
30. Li J, Chen X, Qi M, et al: Sentinel lymph node biopsy mapped with methylene blue dye alone in patients with breast cancer: A systematic review and meta-analysis. *PloS one* 2018; 13:e0204364
31. Saha S, Jacklin R, Siddika A, et al: Safety of radioactive sentinel node biopsy for breast cancer and the pregnant surgeon—A review. *International journal of surgery* 2016; 36:298-304
32. Pandit-Taskar N, Dauer LT, Montgomery L, et al: Organ and fetal absorbed dose estimates from <sup>99m</sup>Tc-sulfur colloid lymphoscintigraphy and sentinel node localization in breast cancer patients. *Journal of Nuclear Medicine* 2006; 47:1202-1208
33. Kantaraksa N, Kongdan Y, Suvikapakornkul R, et al: The relative false negative rate of isosulfan blue in detecting sentinel lymph nodes in early breast cancer. *Journal of the Medical Association of Thailand* 2012; 95:181
34. Higgins JP, Thompson SG, Deeks JJ, et al: Measuring inconsistency in meta-analyses. *Bmj* 2003; 327:557-560
35. Wiatrek R, Kruper L: Sentinel lymph node biopsy indications and controversies in breast cancer. *Maturitas* 2011; 69:7-10
36. KAPKAÇ M, CANTÜRK NZ: Meme Kanserinde Aksillaya Güncel Yaklaşımlar. *Turkiye Klinikleri Journal of General Surgery Special Topics* 2013; 6:77-83

37. Chung MA, Wazer D, Cady B: Contemporary management of breast cancer. *Obstetrics and Gynecology Clinics* 2002; 29:173-188
38. van Rijk MC, Peterse JL, Nieweg OE, et al: Additional axillary metastases and stage migration in breast cancer patients with micrometastases or submicrometastases in sentinel lymph nodes. *Cancer* 2006; 107:467-471
39. Leikola J, Heikkilä P, von Smitten K, et al: The prevalence of axillary lymph-node metastases in patients with pure tubular carcinoma of the breast and sentinel node biopsy. *European Journal of Surgical Oncology (EJSO)* 2006; 32:488-491
40. Harlow SP, Weaver D: Sentinel lymph node biopsy in breast cancer: Techniques, UptoDate, 2014
41. Pepels MJ, Vestjens JH, De Boer M, et al: Safety of avoiding routine use of axillary dissection in early stage breast cancer: a systematic review. *Breast cancer research and treatment* 2011; 125:301-313
42. Singletary SE, Allred C, Ashley P, et al: Revision of the American Joint Committee on Cancer staging system for breast cancer. *Journal of clinical oncology* 2002; 20:3628-3636
43. Nemoto T, Vana J, Bedwani RN, et al: Management and survival of female breast cancer: results of a national survey by the American College of Surgeons. *Cancer* 1980; 45:2917-2924
44. Sato K, Shigenaga R, Ueda S, et al: Sentinel lymph node biopsy for breast cancer. *Journal of surgical oncology* 2007; 96:322-329
45. Schwartz GF, Giuliano AE, Veronesi U, et al: Proceedings of the consensus conference on the role of sentinel lymph node biopsy in carcinoma of the breast, April 19-22, 2001, Philadelphia, Pennsylvania. *Cancer* 2002; 94:2542-2551
46. Gianniarie F, Alazraki N, Aarsvold JN, et al: The EANM and SNMMI practice guideline for lymphoscintigraphy and sentinel node localization in breast cancer. *European journal of nuclear medicine and molecular imaging* 2013; 40:1932-1947
47. Abdollahi A, Jangjoo A, Kakhki VD, et al: Factors affecting sentinel lymph node detection failure in breast cancer patients using intradermal injection of the tracer. *Revista española de medicina nuclear* 2010; 29:73-77
48. Pepels MJ, De Boer M, Bult P, et al: Regional recurrence in breast cancer patients with sentinel node micrometastases and isolated tumor cells. *Annals of surgery* 2012; 255:116-121
49. Salhab M, Patani N, Mokbel K: Sentinel lymph node micrometastasis in human breast cancer: an update. *Surgical oncology* 2011; 20:e195-e206
50. Alkhatib W, Connor C, Fang F: Solitary positive sentinel lymph node accompanied by negative sentinel lymph node (s) is predictive of a negative completion axillary lymph node dissection. *The American Journal of Surgery* 2007; 194:856-859
51. García JC, Muñoz AP, Portela MD, et al: Prevalence of micrometastases and isolated tumor cells in the sentinel node in early stage breast cancer. *Revista Española de Medicina Nuclear e Imagen Molecular (English Edition)* 2012; 31:78-82
52. Katz A, Smith BL, Golshan M, et al: Nomogram for the prediction of having four or more involved nodes for sentinel lymph node-positive breast cancer. *Journal of Clinical Oncology* 2008; 26:2093-2098
53. Mittendorf EA, Hunt KK, Boughey JC, et al: Incorporation of sentinel lymph node metastasis size into a nomogram predicting non-sentinel lymph node involvement in breast cancer patients with a positive sentinel lymph node. *Annals of surgery* 2012; 255:109
54. Wang SJ, Emery R, Fuller CD, et al: Conditional survival in gastric cancer: a SEER database analysis. *Gastric Cancer* 2007; 10:153-158
55. Joslyn SA, Konety BR: Effect of axillary lymphadenectomy on breast carcinoma survival. *Breast cancer research and treatment* 2005; 91:11-18
56. Weir L, Speers C, D'yachkova Y, et al: Prognostic significance of the number of axillary lymph nodes removed in patients with node-negative breast cancer. *Journal of clinical oncology* 2002; 20:1793-1799

57. Van der Wal B, Butzelaar R, Van der Meij S, et al: Axillary lymph node ratio and total number of removed lymph nodes: predictors of survival in stage I and II breast cancer. European Journal of Surgical Oncology (EJSO) 2002; 28:481-489
58. Ford D, Easton DF, Bishop DT, et al: Risks of cancer in BRCA1-mutation carriers. The Lancet 1994; 343:692-695
59. Guillot E, Vaysse C, Goetgeluck J, et al: Extensive pure ductal carcinoma in situ of the breast: identification of predictors of associated infiltrating carcinoma and lymph node metastasis before immediate reconstructive surgery. The Breast 2014; 23:97-103
60. Bijker N, Peterse JL, Duchateau L, et al: Risk factors for recurrence and metastasis after breast-conserving therapy for ductal carcinoma-in-situ: analysis of European Organization for Research and Treatment of Cancer Trial 10853. Journal of Clinical Oncology 2001; 19:2263-2271
61. Fisher ER, Dignam J, Tan-Chiu E, et al: Pathologic findings from the National Surgical Adjuvant Breast Project (NSABP) eight-year update of Protocol B-17: intraductal carcinoma. Cancer 1999; 86:429-438
62. Fisher B, Dignam J, Wolmark N, et al: Tamoxifen in treatment of intraductal breast cancer: National Surgical Adjuvant Breast and Bowel Project B-24 randomised controlled trial. The Lancet 1999; 353:1993-2000
63. Jin Kim H, Heerdt AS, Cody III HS, et al: Sentinel lymph node drainage in multicentric breast cancers. The breast journal 2002; 8:356-361
64. Pierga J-Y, Girre V, Laurence V, et al: Characteristics and outcome of 1755 operable breast cancers in women over 70 years of age. The Breast 2004; 13:369-375
65. Hughes KS, Schnaper LA, Bellon JR, et al: Lumpectomy plus tamoxifen with or without irradiation in women age 70 years or older with early breast cancer: long-term follow-up of CALGB 9343. Journal of clinical oncology 2013; 31:2382
66. Martelli G, Boracchi P, Ardoino I, et al: Axillary dissection versus no axillary dissection in older patients with T1N0 breast cancer: 15-year results of a randomized controlled trial. Annals of surgery 2012; 256:920-924
67. Martelli G, Boracchi P, Orenti A, et al: Axillary dissection versus no axillary dissection in older T1N0 breast cancer patients: 15-year results of trial and out-trial patients. European Journal of Surgical Oncology (EJSO) 2014; 40:805-812
68. Heuts E, van der Ent F, Kengen R, et al: Results of sentinel node biopsy not affected by previous excisional biopsy. European Journal of Surgical Oncology (EJSO) 2006; 32:278-281
69. Haigh PI, Hansen NM, Qi K, et al: Biopsy method and excision volume do not affect success rate of subsequent sentinel lymph node dissection in breast cancer. Annals of surgical oncology 2000; 7:21-27
70. Renaudeau C, Lefebvre-Lacoeuille C, Campion L, et al: Evaluation of sentinel lymph node biopsy after previous breast surgery for breast cancer: GATA study. The Breast 2016; 28:54-59
71. Lyman GH, Somerfield MR, Bosserman LD, et al: Sentinel lymph node biopsy for patients with early-stage breast cancer: American Society of Clinical Oncology clinical practice guideline update. Journal of Clinical Oncology 2016;
72. Spanheimer PM, Graham MM, Sugg SL, et al: Measurement of uterine radiation exposure from lymphoscintigraphy indicates safety of sentinel lymph node biopsy during pregnancy. Annals of surgical oncology 2009; 16:1143-1147