

18. BÖLÜM

DUKTOSKOPİNİN TANI VE TEDAVİDEKİ YERİ

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Duktoskopi, patolojik meme başı akıntısı olan hastalarda, meme duktusunun yapısını görsel olarak ortaya koyan minimal invaziv mikroendoskopik bir yöntemdir. İlk kez Teboul'un, ultrason ile desteklediği rigid ve tek lümenli duktal endoskopi uygulamalarını bildirmesi ile ortaya çıkmıştır (1). Ardından 1991 yılında, Okazaki ve arkadaşları tarafından patolojik meme başı akıntısı olan 46 hasta üzerinde yapılan çalışma ile bildirilmiştir (2).

Meme kanserlerinin %95'i epitel kaynaklı olup karsinom olarak tanımlanır. Duktus ve lobül yapısının lümene bakan yüzlerindeki hücre proliferasyonu bazal membranı aşmadığı sürece, *in situ* karsinom olarak adlandırılır. Bazal membranı aşarak stromal invazyon gösterdiğinde invaziv karsinom olarak adlandırılır (3).

Meme hastalıklarının tanı, tedavi ve takibinde mamografi (MMG), ultrasongrafi (USG), Manyetik Rezonans Görüntüleme (MRI), ve malign hastalıkların takibinde Pozitron Emisyon Tomografisi (PET-CT) sıklıkla tercih edilen görüntüleme yöntemleridir. MMG 40 yaş üzeri kadınlarda tarama amaçlı kullanılmaktadır. İnvaziv meme kanserlerinin %90'ı MMG ile tespit edilebilmektedir (4). Dens meme yapısına sahip hastalarda ve 40 yaşın altındaki kadınlarda MMG'nin tanısal duyarlılığı düşmektedir. Bu hastalarda öncelikli olarak tercih edilen yöntem USG olmaktadır. Lezyonun solid veya kistik ayırımının yapılmasında, sınırlarının net olarak belirlenmesinde ve X işini içermemesi sebebiyle MMG'ye üstünlüğü

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KAYNAKÇA

1. Teboul M. Echo-histological "Acino-Ductal Analysis". Preliminary results. *Ultrasound Med Biol.* 1988;14 Suppl 1:89-95. doi: 10.1016/0301-5629(88)90051-8.
2. Akira Okazaki, Minoru Okazaki, Asaishi kazuaki, Hitoshi Satoh, Yoshiki Watanabe, Toshihiko Mikami, Kazunori Toda, Yutaka Okazaki, Koichi Nabeta, Koichi Hirata, Eime Nirimatsu, Fiberoptic Ductoscopy of the Breast: A New Diagnostic Procedure for Nipple Discharge, *Japanese Journal of Clinical Oncology*, Volume 21, Issue 3, June 1991, Pages 188–193, <https://doi.org/10.1093/oxfordjournals.jjco.a039459>
3. Sayek İ. "Temel Cerrahi" 2004 ; 78: 932-941. 40.
4. Smart CR, Hartmann WH, Beahrs OH, Garfinkel L. Insights into breast cancer screening of younger women. Evidence from the 14-year follow-up of the Breast Cancer Detection Demonstration Project. *Cancer.* 1993 Aug 15;72(4 Suppl):1449-56. doi: 10.1002/1097-0142(19930815)72:4+<1449::aid-cncr2820721406>3.0.co;2-c. PMID: 8339237.
5. Moon WK, Noh DY, Im JG. Multifocal, multicentric, and contralateral breast cancers: bilateral whole-breast US in the preoperative evaluation of patients. *Radiology.* 2002 Aug;224(2):569-76. doi: 10.1148/radiol.2242011215. PMID: 12147858
6. Sickles EA, Filly RA, Callen PW. Benign breast lesions: ultrasound detection and diagnosis. *Radiology.* 1984 May;151(2):467-70. doi: 10.1148/radiology.151.2.6709920. PMID: 6709920.
7. Hussain AN, Pollicarpio C, Vincent MT. Evaluating nipple discharge. *Obstet Gynecol Surv.* 2006 Apr;61(4):278-83. doi: 10.1097/01.ogx.0000210242.44171.f6. PMID: 16551379.
8. Vargas HI, Vargas MP, Eldrageely K, Gonzalez KD, Khalkhali I. Outcomes of clinical and surgical assessment of women with pathological nipple discharge. *Am Surg.* 2006 Feb;72(2):124-8. PMID: 16536240.
9. Goksel HA, Yagmurdur MC, Demirhan B, Isiklar I, Karakayali H, Bilgin N, Haberal M. Management strategies for patients with nipple discharge. *Langenbecks Arch Surg.* 2005 Feb;390(1):52-8. doi: 10.1007/s00423-004-0515-6. Epub 2004 Sep 14. PMID: 15372239.
10. Galvin R, Joyce D, Downey E, Boland F, Fahey T, Hill AK. Development and validation of a clinical prediction rule to identify suspected breast cancer: a prospective cohort study. *BMC Cancer.* 2014 Oct 3;14:743. doi: 10.1186/1471-2407-14-743. PMID: 25277332; PMCID: PMC4197234.
11. Lesetedici C, Rayne S, Kruger D, Benn CA. Indicators of breast cancer in patients undergoing microdochectomy for a pathological nipple discharge in a middle-income country. *J Surg Res.* 2017 Dec;220:336-340. doi: 10.1016/j.jss.2017.06.046. Epub 2017 Aug 18. PMID: 29180200.
12. Sanders LM, Daigle M. The Rightful Role of MRI after Negative Conventional Imaging in the Management of Bloody Nipple Discharge. *Breast J.* 2016 Mar-Apr;22(2):209-12. doi: 10.1111/tbj.12551. Epub 2015 Dec 19. PMID: 26684050.
13. van Gelder L, Bisschops RH, Menke-Pluymers MB, Westenend PJ, Plaisier PW. Magnetic resonance imaging in patients with unilateral bloody nipple discharge; useful when conventional diagnostics are negative? *World J Surg.* 2015 Jan;39(1):184-6. doi: 10.1007/s00268-014-2701-1. PMID: 25123174.

14. de Paula IB, Campos AM. Breast imaging in patients with nipple discharge. *Radiol Bras.* 2017 Nov-Dec;50(6):383-388. doi: 10.1590/0100-3984.2016.0103. PMID: 29307929; PMCID: PMC5746883.
15. Expert Panel on Breast Imaging; Lee SJ, Trikha S, Moy L, Baron P, diFlorio RM, Green ED, Heller SL, Holbrook AI, Lewin AA, Lourenco AP, Niell BL, Slanetz PJ, Stuckey AR, Vincoff NS, Weinstein SP, Yepes MM, Newell MS. ACR Appropriateness Criteria® Evaluation of Nipple Discharge. *J Am Coll Radiol.* 2017 May;14(5S):S138-S153. doi: 10.1016/j.jacr.2017.01.030. PMID: 28473070.
16. Bender O, Balci FL, Yüney E, Akbulut H. Scarless endoscopic papillomectomy of the breast. *Onkologie.* 2009 Mar;32(3):94-8. doi: 10.1159/000195694. Epub 2009 Feb 13. PMID: 19295246.
17. Waaijer L, van Diest PJ, Verkooijen HM, Dijkstra NE, van der Pol CC, Borel Rinkes IH, Witkamp AJ. Interventional ductoscopy in patients with pathological nipple discharge. *Br J Surg.* 2015 Dec;102(13):1639-48. doi: 10.1002/bjs.9950. Epub 2015 Oct 8. PMID: 26447629.
18. Makita M, Akiyama F, Gomi N, Iwase T. Mammary ductoscopy and watchful follow-up substitute microdochectomy in patients with bloody nipple discharge. *Breast Cancer.* 2016 Mar;23(2):242-51. doi: 10.1007/s12282-014-0561-z. Epub 2014 Aug 24. PMID: 25150843.
19. Filipe MD, Waaijer L, van der Pol C, van Diest PJ, Witkamp AJ. Interventional Ductoscopy as an Alternative for Major Duct Excision or Microdochectomy in Women Suffering Pathologic Nipple Discharge: A Single-center Experience. *Clin Breast Cancer.* 2020 Jun;20(3):e334-e343. doi: 10.1016/j.clbc.2019.12.008. Epub 2020 Jan 27. PMID: 32081573.
20. Chang YK, Chen CT, Wang M, Yang Y, Mark B, Zheng AQ, Kwong A. Could ductoscopy alleviate the need of microdochectomy in pathological nipple discharge? *Breast Cancer.* 2020 Jul;27(4):607-612. doi: 10.1007/s12282-020-01051-w. Epub 2020 Feb 1. PMID: 32008216.
21. Liu GY, Lu JS, Shen KW, Wu J, Chen CM, Hu Z, Shen ZZ, Zhang TQ, Shao ZM. Fiberoptic ductoscopy combined with cytology testing in the patients of spontaneous nipple discharge. *Breast Cancer Res Treat.* 2008 Mar;108(2):271-7. doi: 10.1007/s10549-007-9598-4. Epub 2007 May 2. PMID: 17473979.
22. Ling H, Liu GY, Lu JS, Love S, Zhang JX, Xu XL, Xu WP, Shen KW, Shen ZZ, Shao ZM. Fiberoptic ductoscopy-guided intraductal biopsy improve the diagnosis of nipple discharge. *Breast J.* 2009 Mar-Apr;15(2):168-75. doi: 10.1111/j.1524-4741.2009.00692.x. PMID: 19292803.
23. Waaijer L, Filipe MD, Simons J, van der Pol CC, de Boorder T, van Diest PJ, Witkamp AJ. Detection of breast cancer precursor lesions by autofluorescence ductoscopy. *Breast Cancer.* 2021 Jan;28(1):119-129. doi: 10.1007/s12282-020-01136-6. Epub 2020 Jul 28. PMID: 32725533; PMCID: PMC7796885.
24. Gui G, Panopoulou E, Tang S, Twelves D, Kabir M, Ward A, Montgomery C, Nerurkar A, Osin P, Isacke CM. The INTEND 1 randomized controlled trial of duct endoscopy as an indicator of margin excision in breast conservation surgery. *Breast Cancer Res Treat.* 2021 Jan 4. doi: 10.1007/s10549-020-06065-8. Epub ahead of print. PMID: 33392842.

25. Deshmane V. Intraductal approach to breast cancer: the role of mammary ductoscopy. *Indian J Surg Oncol.* 2010 Sep;1(3):228-31. doi: 10.1007/s13193-011-0050-1. Epub 2011 Mar 22. PMID: 22693370; PMCID: PMC3244240.
26. Kamali S, Bender O, Aydin MT, Yuney E, Kamali G. Ductoscopy in the evaluation and management of nipple discharge. *Ann Surg Oncol.* 2010 Mar;17(3):778-83. doi: 10.1245/s10434-009-0820-y. Epub 2009 Dec 11. PMID: 20012502.