31.
BÖLÜM

LENFÖDEM KONSERVATİF TEDAVİSİ

Tuğba BAYSAK TUNÇAY [1]

Lenfödem, edinsel veya konjenital sebepler sonucu lenfatik transportun bozulması nedeniyle yüksek molekül ağırlıklı proteinlerin intertisyumda birikmesiyle oluşur. İntertisyumda protein birikimi inflamasyonu başlatır. Fibrozis ve yağ dokusu artışı ile doku elastikiyeti bozulur. Mevcut durum ilerledikçe kaşıntı, deri enfeksiyonları ve trofik deri değişiklikleri gelişebilir.[1] Buna bağlı olarak lenfödem anksiyete, depresyon ve sosyal kaçınmaya sebep olarak hastaların yaşam kalitesini etkiler.[2]

Lenfödem primer ve sekonder lenfödem olarak sınıflandılır. Lenfatik sistemin konjenital anomalileri primer lenfödemi oluşturur. Sekonder lenfödem daha yaygındır. Enfeksiyon, cerrahi ya da travmatik hasar sonucu gelişir.[3] Filaryazis gelişmekte olan ülkelerde sekonder lenfödemin en sık nedenidir.[4] Gelişmiş ülkelerde ise kanser tedavileri en sık nedendir. Meme kanseri cerrahisi sonrası lenfödem ortalama %21 oranında görülür.[5] Cerrahi tipi, aksiller lenf nodu diseksiyonu, aksiller radyasyon ve sistemik tedavi alıp almama bu oranı etkiler. Aksiller lenf nodu diseksiyonu sonrası lenfödem insidansı %11,8-53,5 iken sentinel lenf nodu diseksiyonu sonrası insidans %0-15,8 'dir.[6-7] Radyoterapi alanlarda lenfödem görülmesi almayanlara oranla 1.46 daha fazla bildirilmiştir.[8] Obezite lenfödemin artmasına ve konservatif tedavilerin yetersizliğine neden olur. Vücut kitle indeksi >30 ise lenfödem riski artmıştır.[9]

TANI VE DEĞERLENDİRME YÖNTEMLERİ

Lenfödem tipik olarak sinsi bir şekilde başlar. Hastalar şişlik, ağırlık hissi, gerginlik ve ağrı hissedebilir.[10] Hastanın öyküsü ayırıcı tanılar için önemlidir.

[1] Uzm. Dr., VM Medicalpark Pendik Hastanesi, Fizik Tedavi ve Rehabilitasyon Kliniği, tbaysak@gmail.com

standart yaklaşımıdır. Konservatif tedavinin başarısız olduğu hastalar için cerrahi seçenekler mevcuttur. Hastalığın doğasını daha iyi anladığımızda lenfödem hastaları için daha kapsamlı tedavi seçenekleri sunulabilecektir.

KAYNAKLAR

1. Executive Committee. The diagnosis and treatment of peripheral lymphedema: 2016 consensus document of the International Society of Lymphology. Lymphology 2016;49:170–84.
2. Morgan PA, Franks PJ, Moffatt CJ. Health-related quality of life with lymphoedema: a review of the literature. Int Wound J. 2005;2(1):47-62.
3. Grada AA, Phillips TJ. Lymphedema: Pathophysiology and clinical manifestations. J Am Acad Dermatol 2017;77:1009–20.
4. World Health Organization. Lymphatic filariasis: Epidemiology. http://www.who.int/lymphatic_filariasis/epidemiology/en/
5. Smile TD, Tendulkar R, Schwarz G, Arthur D, Grobmyer S, Valente S, et al. A review of treatment for breast cancer-related lymphedema. Am J Clin Oncol 2018;41:178–90.
6. Nguyen TT, Hoskin TL, Habermann EB, Cheville AL, Boughey JC. Breast cancer-related lymphedema risk is related to multidisciplinary treatment and not surgery alone: results from a large cohort study. Annals of Surgical Oncology 2017;24:2972–80
7. Gebruers N, Verbelen H, De Vrieze T, Vos L, Devoogdt N, Fias L, Tjalma W. Current and future perspectives on the evaluation, prevention and conservative management of breast cancer related lymphoedema: A best practice guideline. Eur J Obstet Gynecol Reprod Biol 2017;216:245–53
8. Lee TS, Kilbreath SI, Refshauge KM, Herbert RD, Beith JM. Prognosis of the upper limb following surgery and radiation for breast cancer. Breast Cancer Res Treat 2008; 110(1):19-37
9. Mehrara BJ, Greene AK. Lymphedema and obesity: is there a link? Plast Reconstr Surg. 2014;134(1):154e-160e
10. Kayiran O, De La Cruz C, Tane K, Soran A. Lymphedema: from diagnosis to treatment. Turk J Surg. 2017;33(2):51-57
11. Borman P. Lenfödem rehabilitasyonu. Beyazova M, Gökçe Kutsal YG, editörler. Özel Rehabilitasyon Alanları. Fiziksel Tıp ve Rehabilitasyon. 3. Baskı. Ankara: Güneş Tıp Kitabevleri; 2016. p.1241-70
12. Johnson KC, Kennedy AG, Henry SM. Clinical measurements of lymphedema. Lymphat Res Biol 2014;12(4):216-21.
13. Armer JM, Hulett JM, Bernas M, Ostby P, Stewart BR, Cormier JN. Best practice guidelines in assessment, risk reduction, management, and surveillance for post-breast cancer lymphedema. Curr Breast Cancer Rep 2013;5(2):134-44
14. Armer JM, Stewart BR. A comparison of four diagnostic criteria for lymphedema in a postbreast cancer population. Lymphatic Res Bio 2005;3(4):208-17
15. Ward LC, Czerniec S, Kilbreath SL. Operational equivalence of bioimpedance indices and perometry for the assessment of unilateral arm lymphedema. Lymphat Res Biol 2009;7(2):81-5.
16. Fu MR, Cleland CM, Guth AA, Kayal M, Haber J, Cartwright F, et al. L-dex ratio in detecting breast cancer-related lymphedema: reliability, sensitivity, and specificity. Lymphology 2013;46(2):85-96.
17. Greene AK, Goss JA. Diagnosis and Staging of Lymphedema. Semin Plast Surg 2018;32:12–6
18. Suehiro K, Morikage N, Murakami M, Yamashita O, Samura M, Hamano K. Significance of ultrasound examination of skin and subcutaneous tissue in secondary lower extremity lymphedema. Ann Vasc Dis 2013;6(2): 180-8

19. White RD, Weir-McCall JR, Budak MJ, Waugh SA, Munnoch DA, Sudarshan TA. Contrast-enhanced magnetic resonance lymphography in the assessment of lower limb lymphoedema. Clin Radiol 2014;69(11): e435-44.
20. Yamamoto T, Narushima M, Yoshimatsu H, Yamamoto N, Kikuchi K, Todokoro T, et al. Dynamic Indocyanine Green (ICG) lymphography for breast cancer-related arm lymphedema. Ann Plast Surg 2014;73(6):706-9
21. Cerrahoglu L, Cerrahoglu M. Lenfödem rehabilitasyonu. In: Oğuz H, Çakırbay H, Yanık B, editörler. Tıbbi Rehabilitasyon. 3. Baskı. İstanbul: Nobel Tip Kitabevi. 2015. p.1077-90.
22. Zuther EJ. Complete decongestive therapy. In: Zuther EJ, Norton S, eds. Lymphedema Management: The Comprehensive Guide for Practitioners. 3rd ed. New York: Thieme Medical Publishers; 2013. p.127-63.
23. Smile TD, Tendulkar R, Schwarz G, et al. A review of treatment for breast cancer-related lymphedema: paradigms for clinical practice. Am J Clin Oncol. 2018;41(2):178-190.
24. Gebruers N, Verbelen H, De Vrieze T, Vos L, Devoogdt N, Fias L, Tjalma W. Current and future perspectives on the evaluation, prevention and conservative management of breast cancer related lymphoedema: A best practice guideline. Eur J Obstet Gynecol Reprod Biol 2017;216:245–53
25. Liao SF, Li SH, Huang HY, Chen ST, Kuo SJ, Chen DR , et al. The efficacy of complex decongestive physiotherapy (CDP) and predictive factors of lymphedema severity and response to CDP in breast cancer-related lymphedema (BCRL). Breast 2013;22(5):703-6.
26. Eyigör S, Cinar E, Caramat I, Unlu BK. Factors influencing response to lymphedema treatment in patients with breast cancer-related lymphedema. Support Care Cancer 2015;23(9):2705-10.
27. Wittlinger H, Wittlinger D, Wittlinger A, Wittlinger M. Theoretical principles of manual lymph drainage. Dr. Vodder's Manual Lymph Drainage: A Practical Guide. 8th ed. Stuttgart, Germany: Thieme Verlag; 2011. p.2-33
28. Schaverien MV, Moeller JA, Cleveland SD. Nonoperative Treatment of Lymphedema. Semin Plast Surg 2018;32:17–21
29. Zimmermann A, Wozniewski M, Szklarska A, Lipowicz A, Szuba A. Efficacy of manual lymphatic drainage in preventing secondary lymphedema after breast cancer surgery. Lymphology 2012;45(3):103-12.
30. Korosec BJ. Manual lymphatic drainage therapy. Home Health Care Mang Pract 2004;16(6):499-511
31. Thompson B, Gaitatzis K, Jonge X et all.Manual lymphatic drainage treatment for lymphedema: a systematic review of the literature. Cancer Surviv. 2020
32. Badger CM, Peacock JL, Mortimer PS. A randomized, controlled, parallel-group clinical trial comparing multilayer bandaging followed by hosiery versus hosiery alone in the treatment of patients with lymphedema of the limb. Cancer 2000;88(12):2832-7.
33. Feldman JL, Stout NL, Wanchai A, Stewart BR, Cormier JN, Armer JM. Intermittent pneumatic compression therapy: a systematic review. Lymphology. 2012;45(1):13-25.
34. National Lymphedema Network (NLN). Position Statement of the National Lymphedema Network. Topic: Exercise. http://www.lymphnet.org/pdfDocs/nlnexercise.pdf
35. Moseley AL, Piller NB, Carati CJ. The effect of gentle arm exercise and deep breathing on secondary arm lymphoedema. Lymphology 2005;38(3):136-45.
36. Kilbreath SL, Refshauge KM, Beith JM, Ward LC, Lee M, Simpson JM, et al. Upper limb progressive resistance training and stretching exercises following surgery for early breast cancer: a randomized controlled trial. Breast Cancer Res Treat 2012;133(2):667-76
37. Hayes SC, Reul-Hirche H, Turner J. Exercise and secondary lymphedema: safety, potential benefits, and research issues. Med Sci Sports Exerc 2009;41(3):483-9.
38. Hayes J, Speck RM, Schmitz KH. Waterbased exercise for patients with chronic arm lymphedema: a randomized controlled pilot trial. Am J Phys Med Rehabil 2013;92(4):312- 9.

39. Loudon A, Barnett T, Piller N, Immink MA, Williams AD. Yoga management of breast cancer-related lymphoedema: a randomised controlled pilot-trial. BMC Complement Altern Med 2014;14:214.
40. . Blum KS, Karaman S, Proulx ST, Ochsenbein AM, Luciani P, Leroux JC, et al. Chronic highfat diet impairs collecting lymphatic vessel function in mice. PLoS One 2014;8;9(4): e94713.
41. Belmonte R, Tejero M, Ferrer M, Muniesa JM, Duarte E, Cunillera O, et al. Efficacy of lowfrequency low-intensity electrotherapy in the treatment of breast cancer-related lymphoedema: a cross-over randomized trial. Clin Rehabil 2012;26(7):607-18
42. Omar MTA, Shaheen AA, Zafar HA. A systematic review of the effect of low-level laser therapy in the management of breast cancerrelated lymphedema. Support Care Cancer 2012;20(11):2977-84.
43. Smykla A, Walewicz K, Trybulski R, Halski T, Kucharzeewski M, Kucio C, et al. Effect of Kinesiology Taping on breast cancer-related lymphedema: a randomized single-blind controlled pilot study. Biomed Res Int 2013; 2013:767106.
44. Kasawara K, Mapa J, Ferreira V et all. Effects of kinesio taping on breast cancer-related lymphedema: A meta-analysisin clinical trials. Physiother theory pract.2018;34(5):337-345.
45. Gothard L, Haviland J, Bryson P, Laden G, Glover M, Harrison S, et al. Randomised phase II trial of hyperbaric oxygen therapy in patients with chronic arm lymphoedema after radiotherapy for cancer. Radiother Oncol 2010;97(1):101-7.
46. Chien T, Liu C, Fang C. The effect of acupuncture in breast cancer-related lymphoedema: A systematic review and meta-analysis. Integrative Cancer Therapies 2019;18 doi: 10.1177/1534735419866910.
47. Poage EG, Rodrick JR, Wanchai A, Stewart BR, Cormier JN, Armer JM. Exploring the usefulness of botanicals as an adjunctive treatment for lymphedema: a systematic search and review. PM R 2015;7:296– 310. 10.1016/j.pmrj.2014.09.01