



## BÖLÜM 10

### KRONİK TİROİDİTLER

Derya ÜNAL<sup>1</sup>

Tiroid fonksiyonu için gerekli bir element olan iyot dünya genelinde diyetle alının yeterli olmadığı durumlarda hipotiroidiye yol açmaktadır. Hipotiroidinin en sık nedeni iyot eksikliğidir. İyot yetersizliği görülmeyen ya da iyot yetersizliği açısından replasman programları yürütülen bölgelerde hipotiroidinin en sık sebebi kronik otoimmün tiroidit (hashimoto tiroiditi)tir(1). Bunun dışında fibrosklerozis ile giden riedel tiroiditi de IgG<sub>4</sub> ilişkili kronik tiroidittir(2). Karahatay ve ark. globus ile gelen hastalarda kronik tiroidit eşlik etme ihtimalinde dolayı tetkik edilmesi gerekliliğini vurgulamakta ve 3,7 kat daha fazla tiroidit görüldüğünü belirtmektedir(3).

#### KRONİK OTOİMMÜN TİROİDİT (HASHİMOTO TİROİDİTİ)

Hashimoto tiroiditi progresif olarak tiroid bezinin fonksiyonunun kaybı ile giden bir hastalıktır. Kadınlarda daha fazla olmakla birlikte her iki cinsiyette de otoimmün tiroiditlerden en sık görülenidir. Görülme sıklığı 1000'de 0,3-1,5 arasında değişmektedir. Genellikle 30-50 yaş aralığında izlenir ve diğer otoimmun hastalıklar eşlik edebilir(4). Lenfositik infiltrasyon ile başlayan ve folikül yıkımı ile sonuçlanan bir mekanizma rol oynamaktadır. İnfiltrasyon ve destrüksiyonda plazma hücreleri de rol alır ve infiltrasyon nedenli tiroid bezi büyür. Başlangıçta hashitoksikoz olarak isimlendirilen, tirotoksik bir dönem görülür. Bunun nedeni tiroid folikül hasarı nedenli dolaşma geçen tiroid hormonudur(4). Hasara neden olan hücre lenfositlerdir ve antijen olarak tiroglobulin, tiroid peroksidaz tanır. Antitiroglobulin (antiTg) ve antitiroid peroksidaz antikorları (antiTPO) oluşur.

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Primer aldesteronizmde sağlıklı kişilere göre otoantikorların yüksek olma ihtiyalinin arttığı belirtilmiş olup kronik tiroiditlerle ilişkili olabileceği savunulmuştur. Bunun nedeni minerelokortikoid reseptörlerin otoimmünite üzerine etkileri aracılığı ile olabileceği belirtilmiştir(38). Bu konuda daha çok araştırmaya ihtiyaç vardır.

## KAYNAKLAR

1. Hallowell JG, Staehling NW, Flanders WD, et al. Serum TSH, T4, and Thyroid Antibodies in the United States Population(1988 to 1994): National Health and Nutrition Examination Survey (NHANES III). *Journal of Clinical Endocrinology and Metabolism*. 2002;82(2):489–499. doi: 10.1210/jcem.87.2.8182
2. HAY ID. Thyroiditis: A Clinical Update. *Mayo Clinic Proceedings*. 1985;60(12):836–843. doi: 10.1016/S0025-6196(12)64789-2
3. Karahatay S, Ayan A, Aydin U et al. The increased risk of globus pharyngeus in patients with chronic thyroiditis: A case control study. *European Review for Medical and Pharmacological Sciences*. 2015;19(24):4722–4727.
4. Türkiye Endokrinoloji ve Metabolizma Derneği. Tiroid Hastalıkları Tanı ve Tedavi Kılavuzu. 2020. 1–245 p.
5. Tamai H, Ohsako N, Takeno K, et al. Changes in thyroid function in euthyroid subjects with a family history of graves' disease: A follow-up study of 69 patients. *Journal of Clinical Endocrinology and Metabolism*. 1980;51(5):1123–7. doi: 10.1210/jcem-51-5-1123
6. Kraiem Z, Baron E, Kahana L, et al. Changes in stimulating and blocking TSH receptor antibodies in a patient undergoing three cycles of transition from hypo to hyper-thyroidism and back to hypothyroidism. *Clinical endocrinology (Oxford)*. 1992;36(2):211–214. doi: 10.1111/j.1365-2265.1992.tb00960.x
7. Kahaly GJ, Diana T, Glang J, et al. press.endocrine.org/journal/jcem. *Journal of Clinical Endocrinology and Metabolism*. 1998;101(5): doi: 10.1210/jc.2016-1220
8. Hutchings PR, Cooke A, Dawe K, et al. A Thyroxine-containing Peptide Can Induce Murine Experimental Autoimmune Thyroiditis. *Journal of Experimental Medicine*. 1992;175:869–872. doi: 10.1084/jem.175.3.869
9. Bagchi N, Brown TR, Urdanivia E, et al. Induction of autoimmune thyroiditis in chickens by dietary iodine. *Science* (80-). 1985;230(4723):325–327. doi: 10.1126/science.4048936
10. Lomas J, Anderson GM, Domnick-Pierre K, et al. *The New England Journal of Medicine* Copyright © 2010 Massachusetts Medical Society. 1989;321(19):1306–1311.
11. Allen EM, Appel MC, Braverman LE. The effect of iodide ingestion on the development of spontaneous lymphocytic thyroiditis in the diabetes-prone BB/W rat. *Endocrinology*. 1986;118(5):1977–1981. doi: 10.1210/endo-118-5-1977
12. Boukis MA, Koutras DA, Souvatzoglou A, et al. Endemic Goiter *Journal of Clinical Endocrinology and Metabolism*. 2015;57(4):859–862. doi: 10.1210/jcem-57-4-859
13. Kraiem Z, Cho BY, Sadeh O, et al. The IgG subclass distribution of TSH receptor blocking antibodies in primary hypothyroidism. *Clinical endocrinology (Oxford)*. 1992;37(2):135–140. doi: 10.1111/j.1365-2265.1992.tb02297.x
14. Strieder TGA, Prummel MF, Tijssen JGP, et al. Risk factors for and prevalence of thyroid disorders in a cross-sectional study among healthy female relatives of patients with autoimmune thyroid disease. *Clinical endocrinology (Oxford)*. 2003;59(3):396–401. doi: 10.1046/j.1365-2265.2003.01862.x

15. Menconi F, Monti MC, Greenberg DA, et al. Molecular amino acid signatures in the MHC class II peptide-binding pocket predispose to autoimmune thyroiditis in humans and in mice. *Proceedings of the National Academy of Sciences of the United States of America.* 2008;105(37):14034–14039. doi: 10.1073/pnas.0806584105
16. Tomer Y, Davies TF. Searching for the Autoimmune Thyroid Disease Susceptibility Genes: From Gene Mapping to Gene Function. *Endocrine Reviews.* 2003;24(5):694–717. doi: 10.1210/er.2002-0030.
17. Brix TH, Kyvik KO, Hegedüs L. A population-based study of chronic autoimmune hypothyroidism in Danish twins. *Journal of Clinical Endocrinology and Metabolism.* 2000;85(2):536–539. doi: 10.1210/jcem.85.2.6385
18. Arata N, Ando T, Unger P, et al. By-stander activation in autoimmune thyroiditis: Studies on experimental autoimmune thyroiditis in the GFP+ fluorescent mouse. *Clinical Immunology.* 2006;121(1):108–117. doi: 10.1016/j.clim.2006.03.011
19. Ban Y, Greenberg DA, Concepcion E, et al. Amino acid substitutions in the thyroglobulin gene are associated with susceptibility to human and murine autoimmune thyroid disease. *Proceedings of the National Academy of Sciences of the United States of America.* 2003;100(25):15119–15124. doi: 10.1073/pnas.2434175100
20. Villanueva R, Greenberg DA, Davies TF, et al. Sibling recurrence risk in autoimmune thyroid disease. *Thyroid.* 2003;13(8):761–764. doi: 10.1089/105072503768499653
21. Kimura H, Davies TF. Thyroid-specific T cells in the normal Wistar rat. *Clinical Immunology and Immunopathology.* 1991;58(2):195–206. doi: 10.1016/0090-1229(91)90136-x
22. Tomer Y, Barbésino G, Greenberg DA, et al. Mapping the major susceptibility loci for familial Graves' and Hashimoto's diseases: Evidence for genetic heterogeneity and gene interactions. *Clinical Endocrinology and Metabolism.* 1999;84(12):4656–4664. doi: 10.1210/jcem.84.12.6216
23. Walsh JP, Ward LC, Burke V, et al. Small changes in thyroxine dosage do not produce measurable changes in hypothyroid symptoms, well-being, or quality of life: Results of a double-blind, randomized clinical trial. *Clinical Endocrinology and Metabolism.* 2006;91(7):2624–2630. doi: 10.1210/jc.2006-0099
24. Heufelder AE, Wenzel BE, Gorman CA, et al. Detection, cellular localization, and modulation of heat shock proteins in cultured fibroblasts from patients with extrathyroidal manifestations of graves' disease. *Clinical Endocrinology and Metabolism.* 1991;73(4):739–745. doi: 10.1210/jcem-73-4-739
25. Giordano C, Stassi G, Maria R De, et al. Potential Involvement of Fas and Its Ligand in the Pathogenesis of Hashimoto ' s Thyroiditis FasL expression by activated lymphocytes. *Science.* 1997;275(February):960–963. doi: 10.1126/science.275.5302.960
26. Neufeld DS, Platzer M, Dey TF. Reovirus induction of mhc class ii antigen in rat thyroid cells. *Endocrinology.* 1989;124(1):543–545. doi: 10.1210/endo-124-1-543
27. Jameson JL, Mandel SJ, Weetman AP. Hypothyroidism. *Harrison's Principles of Internal Medicine* içinde. New York: Mc Graw Hill Education; 2018. p. 2698–703.
28. Heufelder AE, Bahn RS. Tissue Eosinophilia Riedel ' s Invasive. *Clinical Endocrinology and Metabolism* 1996; Mar;81(3):977–984. doi: 10.1210/jcem.81.3.8772560
29. Hennessey J V. Riedel's thyroiditis: A clinical review. *J Clin Endocrinol Metab.* 2011;96(10):3031–41.
30. Brent GA, Weetman A. Hypothyroidism and Thyroiditis. *Williams Textbook of Endocrinology* içinde. Canada:Elsevier;2020 p. 404-432.
31. Kumar N, Gupta R, Sayed S, et al. Difficulties in diagnosis of Riedel's thyroiditis on aspiration cytology: A case report and brief review of the literature. *Diagnostic Cytopathology.* 2019;47(5):512–516. doi: 10.1002/dc.24130
32. Dilmaghani A, Sciences M, Street D. Accepted manuscript. 2020;1–7.

33. Erdogan MF, Anil C, Turkcapar N, et al. A case of Riedel's thyroiditis with pleural and pericardial effusions. *Endocrine*. 2009;35(3):297–301. doi: 10.1007/s12020-009-9168-0
34. Chong Xi R, Hong Qiao W, Yan L. Severe trachea compression caused by Riedel's thyroiditis: A case report and review of the literature. *Annals of Medicine and Surgery*. 2016;12(17):18–20. doi: 10.1016/j.amsu.2016.10.005
35. Slman R, Monpeyssen H, Desarnaud S, et al. Ultrasound, elastography, and fluorodeoxyglucose positron emission tomography/computed tomography imaging in riedel's thyroiditis: Report of two cases. *Thyroid*. 2011;21(7):799–804. doi: 10.1089/thy.2010.0242
36. Drieskens O, Blockmans D, Van Den Bruel A, et al. Riedel's thyroiditis and retroperitoneal fibrosis in multifocal fibrosclerosis positron emission tomographic findings. *Clinical Nuclear Medicine*. 2002;27(6):413–415. doi: 10.1097/00003072-200206000-00005
37. Kotilainen P, Airas L, Kojo T, et al. Positron emission tomography as an aid in the diagnosis and follow-up of Riedel's thyroiditis. *European Journal of Internal Medicine* 2004;15(3):186–189. doi: 10.1016/j.ejim.2004.03.002
38. Sabbadin C, Mian C, Nacamulli D, et al. Association of primary aldosteronism with chronic thyroiditis. *Endocrine*. 2017;55(1):303–306. doi: 10.1007/s12020-016-0880-2