

BÖLÜM 33



Geriatrik Hastalarda Atrial Fibrillation Yönetimi

Merve GÜNER OYTUN¹

Meltem Gülbahar HALİL²

GİRİŞ

Atrial Fibrillation (AF), klinikte en sık karşılaşılan aritmidektir. AF insidansı ve prevalansı yaş ilerledikçe artmaktadır (1). 49 yaş ve altında AF prevalansı %0.12- 0.16 arasında iken bu oran 60-70 yaş arasında %3.7-4.2'ye kadar yükselmektedir. 80 yaş ve üzeri bireylerde ise %10-17 arasında olduğu bildirilmiştir (2). Yaş ile birlikte hipertansiyon, konjestif kalp yetmezliği, diabetes mellitus, koroner arter hastalığı ve kapak hastalığı AF gelişimi için bağımsız risk faktörleri olarak kabul edilmektedir (3). Hastaların çoğunda asemptomatik seyretmesine karşın AF tromboemboli riskinde ve buna bağlı olarak inme riskinde artışla ilişkilendirilmiştir. Atrial fibrilasyonlu hastalar inme, kalp yetmezliği, pacemaker implantasyonu ihtiyacı ve antikoagulan ve antiaritmik tedavilere bağlı istenmeyen olaylar gibi nedenlerle daha sık hospitalize edilmektedir (1). Bunlara ek olarak AF kırılganlık, kognitif bozukluk (demansla birlikte veya demansın eşlik etmediği), fiziksel performansta azalma ve fonksiyonelliğin kaybı gibi durumlarla da yakından ilişkilidir (4-6).

AF riskini arttıran çeşitli faktörler bulunmaktadır, bunlar değiştirilebilir ve değiştirilemez faktörler olarak gruplandırılabilir (7). Vücut kitle indeksi, diabetes mellitus varlığı, obstruktif uyku apnesi varlığı, hipertansiyon varlığı değiştirilebilir risk faktörleri olarak kabul edilirken; genetik yatkınlık, cinsiyet, etnik köken ve yaş değiştirilemeyen risk faktörleri arasındadır. Bu risk faktörleri yapısal ve histopatolojik değişikliklere neden olarak AF'ye yatkınlığı artırmaktadır (8). AF'nin ortaya çıkması için hem atrial ektopik atımları tetikleyebilen ve AF paroksizmlerine yol açabilen kritik bir anormal doku kütlesi(anatomik substrat) hem de başlatıcı bir faktör gereklidir. Ektopik tetikleyici odakların ana kaynağı pulmoner venler olabilir(9). Bununla birlikte, yaş ile AF arasındaki patofizyolojik mekanizma tam olarak anlaşılamamıştır. Yaşlı hastalarda, birden fazla komorbiditenin varlığı, yaşılanmanın etkisine karşı çoklu morbiditelerin AF gelişimi üzerindeki etkisini tek başına belirlemeyi zorlaştırmaktadır. Hipertansiyon, iskemik kalp hastalığı, kalp yetmezliği, kapak hastalığı ve di-

¹ Uzm. Dr., Hacettepe Üniversitesi Tıp Fakültesi Geriatri BD., mguner54@gmail.com

² Prof. Dr., Hacettepe Üniversitesi Tıp Fakültesi Geriatri BD., meltemgulhan.halil@hacettepe.edu.tr

lidir. Kapsamlı geriatrik değerlendirme AF'li yaşlı hastalarda hasta merkezli kararların optimize edilmesine yardımcı olmaktadır(65).

Randomize- kontrollü çalışmalar ve gözlemsel çalışmalar, yaşlı hastaların çoğunda YO-AK'ların VKA'ya göre klinik yarar sağladığını gösterse de, kırılganlıkla yaşayan, fonksiyonel kaybı olan ve ciddi kognitif bozukluğu olan hastalarda klinik kanıtlar yetersizdir. Yaşlı erişkinlerde AF tedavisine ilişkin kararlar daha spesifik ve bütüncül bir yaklaşım gerektirir; kapsamlı geriatrik değerlendirme ve uygun kırılganlık araçları yapılan kırılganlık değerlendirmesi tedavinin biryselleştirilmesinde yardımcı olabilir. Oral antikoagulan tedavi başlanması karar verilirken kronolojik yaştan ziyade bireyin kırılganlığı, fonksiyonel durumu, kognitif durumu gibi faktörlere dikkat edilmelidir. Fakat bu durumların varlığı oral antikoagulan tedavi için mutlak kontrendikasyonlar olarak görülmemelidir. Düşme riski, YOAK kullanımı için bir kontrendikasyon olarak düşünülmemelidir. Yüksek kanama riski oral antikoagulan tedavi için bir kontrendikasyon olarak değerlendirilmemelidir ve sağlık çalışanlarını değiştirilebilir kanama risk faktörlerini değerlendirmeye ve yönetmeye yönlendirmelidir(65).

KAYNAKLAR

- Benjamin EJ, Levy D, Vaziri SM, et al. Independent risk factors for atrial fibrillation in a population-based cohort. The Framingham Heart Study. *Jama.* 1994;271(11):840-4.
- Zoni-Berisso M, Lercari F, Carazza T, et al. Epidemiology of atrial fibrillation: European perspective. *Clin Epidemiol.* 2014;6:213-20.
- Kannel WB, Abbott RD, Savage DD, et al. Epidemiologic features of chronic atrial fibrillation: the Framingham study. *N Engl J Med.* 1982;306(17):1018-22.
- Alonso A, Arenas de Larriva AP. Atrial Fibrillation, Cognitive Decline And Dementia. *Eur Cardiol.* 2016;11(1):49-53.
- Magnani JW, Wang N, Benjamin EJ, et al. Atrial Fibrillation and Declining Physical Performance in Older Adults: The Health, Aging, and Body Composition Study. *Circ Arrhythm Electrophysiol.* 2016;9(5):e003525.
- Wilkinson C, Todd O, Clegg A, et al. Management of atrial fibrillation for older people with frailty: a systematic review and meta-analysis. *Age Ageing.* 2019;48(2):196-203.
- Aronson D, Shalev V, Katz R, et al. Risk Score for Prediction of 10-Year Atrial Fibrillation: A Community-Based Study. *Thromb Haemost.* 2018;118(9):1556-63.
- Staerk L, Sherer JA, Ko D, et al. Atrial Fibrillation: Epidemiology, Pathophysiology, and Clinical Outcomes. *Circ Res.* 2017;120(9):1501-17.
- Haïssaguerre M, Jaïs P, Shah DC, et al. Spontaneous initiation of atrial fibrillation by ectopic beats originating in the pulmonary veins. *N Engl J Med.* 1998;339(10):659-66.
- Zathar Z, Karunatileke A, Fawzy AM, et al. Atrial Fibrillation in Older People: Concepts and Controversies. *Front Med (Lausanne).* 2019;6:175.
- Karamichalakis N, Letsas KP, Vlachos K, et al. Managing atrial fibrillation in the very elderly patient: challenges and solutions. *Vasc Health Risk Manag.* 2015;11:555-62.
- Freedman B, Camm J, Calkins H, et al. Screening for Atrial Fibrillation: A Report of the AF-SCREEN International Collaboration. *Circulation.* 2017;135(19):1851-67.
- Camm AJ, Kirchhof P, Lip GY, et al. Guidelines for the management of atrial fibrillation: the Task Force for the Management of Atrial Fibrillation of the European Society of Cardiology (ESC). *Eur Heart J.* 2010;31(19):2369-429.
- Wilde AAM, Semsarian C, Márquez MF, et al. European Heart Rhythm Association (EHRA)/Heart Rhythm Society (HRS)/Asia Pacific Heart Rhythm Society (APHRS)/Latin American Heart Rhythm Society (LAHRS) Expert Consensus Statement on the state of genetic testing for cardiac diseases. *Europace.* 2022;24(8):1307-67.
- Fitzmaurice DA, Hobbs FD, Jowett S, et al. Screening versus routine practice in detection of atrial fibrillation in patients aged 65 or over: cluster randomised controlled trial. *Bmj.* 2007;335(7616):383.
- Lowres N, Neubeck L, Salkeld G, et al. Feasibility and cost-effectiveness of stroke prevention through community screening for atrial fibrillation using iPhone ECG in pharmacies. The SEARCH-AF study. *Thromb Haemost.* 2014;111(6):1167-76.
- Sandhu RK, Healey JS. Is Screening for Atrial Fibrillation and Its Risk Factors Useful and Cost-Effective? *Card Electrophysiol Clin.* 2021;13(1):235-41.
- Wiesel J, Arbesfeld B, Schechter D. Comparison of the Microlife blood pressure monitor with the Omron blood pressure monitor for detecting atrial fibrillation. *Am J Cardiol.* 2014;114(7):1046-8.
- Mc MD, Chong JW, Soni A, et al. PULSE-SMART: Pulse-Based Arrhythmia Discrimination Using a Novel Smartphone Application. *J Cardiovasc Electrophysiol.* 2016;27(1):51-7.
- Tieleman RG, Plantinga Y, Rinkes D, et al. Validation

- and clinical use of a novel diagnostic device for screening of atrial fibrillation. *Europace*. 2014;16(9):1291-5.
21. Petryszyn P, Niewinski P, Staniak A, et al. Effectiveness of screening for atrial fibrillation and its determinants. A meta-analysis. *PLoS One*. 2019;14(3):e0213198.
 22. Mairesse GH, Moran P, Van Gelder IC, et al. Screening for atrial fibrillation: a European Heart Rhythm Association (EHRA) consensus document endorsed by the Heart Rhythm Society (HRS), Asia Pacific Heart Rhythm Society (APHRS), and Sociedad Latinoamericana de Estimulación Cardíaca y Electrofisiología (SOLAECE). *Europace*. 2017;19(10):1589-623.
 23. Hindricks G, Potpara T, Dagres N, et al. 2020 ESC Guidelines for the diagnosis and management of atrial fibrillation developed in collaboration with the European Association for Cardio-Thoracic Surgery (EACTS): The Task Force for the diagnosis and management of atrial fibrillation of the European Society of Cardiology (ESC) Developed with the special contribution of the European Heart Rhythm Association (EHRA) of the ESC. *Eur Heart J*. 2021;42(5):373-498.
 24. Xue QL. The frailty syndrome: definition and natural history. *Clin Geriatr Med*. 2011;27(1):1-15.
 25. Li G, Thabane L, Ioannidis G, et al. Comparison between frailty index of deficit accumulation and phenotypic model to predict risk of falls: data from the global longitudinal study of osteoporosis in women (GLOW) Hamilton cohort. *PLoS One*. 2015;10(3):e0120144.
 26. Fried LP, Tangen CM, Walston J, et al. Frailty in older adults: evidence for a phenotype. *J Gerontol A Biol Sci Med Sci*. 2001;56(3):M146-56.
 27. Mitnitski AB, Mogilner AJ, Rockwood K. Accumulation of deficits as a proxy measure of aging. *ScientificWorldJournal*. 2001;1:323-36.
 28. Jones DM, Song X, Rockwood K. Operationalizing a frailty index from a standardized comprehensive geriatric assessment. *J Am Geriatr Soc*. 2004;52(11):1929-33.
 29. Parker SG, McCue P, Phelps K, et al. What is Comprehensive Geriatric Assessment (CGA)? An umbrella review. *Age Ageing*. 2018;47(1):149-55.
 30. Lefebvre MC, St-Onge M, Glazer-Cavanagh M, et al. The Effect of Bleeding Risk and Frailty Status on Anticoagulation Patterns in Octogenarians With Atrial Fibrillation: The FRAIL-AF Study. *Can J Cardiol*. 2016;32(2):169-76.
 31. Wojszel ZB, Kasiukiewicz A. Determinants of anticoagulant therapy in atrial fibrillation at discharge from a geriatric ward: cross sectional study. *J Thromb Thrombolysis*. 2020;49(1):18-26.
 32. Wilkinson C, Clegg A, Todd O, et al. Atrial fibrillation and oral anticoagulation in older people with frailty: a nationwide primary care electronic health records cohort study. *Age Ageing*. 2021;50(3):772-9.
 33. de Groot JR, Weiss TW, Kelly P, et al. Edoxaban for stroke prevention in atrial fibrillation in routine clinical care: 1-year follow-up of the prospective observational ETNA-AF-Europe study. *Eur Heart J Cardiov*
 34. Mlynarska A, Mlynarski R, Marcisz C, et al. Modified Frailty as a Novel Factor in Predicting the Maintenance of the Sinus Rhythm After Electrical Cardioversion of Atrial Fibrillation in the Elderly Population. *Clin Interv Aging*. 2020;15:1193-9.
 35. Orkaby AR, Kornej J, Lubitz SA, et al. Association Between Frailty and Atrial Fibrillation in Older Adults: The Framingham Heart Study Offspring Cohort. *J Am Heart Assoc*. 2021;10(1):e018557.
 36. Pilotto A, Gallina P, Copetti M, et al. Warfarin Treatment and All-Cause Mortality in Community-Dwelling Older Adults with Atrial Fibrillation: A Retrospective Observational Study. *Journal of the American Geriatrics Society*. 2016;64(7):1416-24.
 37. Madhavan M, Holmes DN, Piccini JP, et al. Association of frailty and cognitive impairment with benefits of oral anticoagulation in patients with atrial fibrillation. *Am Heart J*. 2019;211:77-89.
 38. Saczynski JS, Sanghaji SR, Kiefe CI, et al. Geriatric Elements and Oral Anticoagulant Prescribing in Older Atrial Fibrillation Patients: SAGE-AF. *Journal of the American Geriatrics Society*. 2020;68(1):147-54.
 39. Gugganig R, Aeschbacher S, Leong DP, et al. Frailty to predict unplanned hospitalization, stroke, bleeding, and death in atrial fibrillation. *Eur Heart J Qual Care Clin Outcomes*. 2021;7(1):42-51.
 40. Proietti M, Romiti GF, Vitolo M, et al. Epidemiology and impact of frailty in patients with atrial fibrillation in Europe. *Age Ageing*. 2022;51(8).
 41. Elias MF, Sullivan LM, Elias PK, et al. Atrial fibrillation is associated with lower cognitive performance in the Framingham offspring men. *J Stroke Cerebrovasc Dis*. 2006;15(5):214-22.
 42. Bunch TJ, Weiss JP, Crandall BG, et al. Atrial fibrillation is independently associated with senile, vascular, and Alzheimer's dementia. *Heart Rhythm*. 2010;7(4):433-7.
 43. Dublin S, Anderson ML, Haneuse SJ, et al. Atrial fibrillation and risk of dementia: a prospective cohort study. *J Am Geriatr Soc*. 2011;59(8):1369-75.
 44. Hugo J, Ganguli M. Dementia and cognitive impairment: epidemiology, diagnosis, and treatment. *Clin Geriatr Med*. 2014;30(3):421-42.
 45. van Veluw SJ, Shih AY, Smith EE, et al. Detection, risk factors, and functional consequences of cerebral microinfarcts. *Lancet Neurol*. 2017;16(9):730-40.
 46. Diener HC, Hart RG, Koudstaal PJ, et al. Atrial Fibrillation and Cognitive Function: JACC Review Topic of the Week. *J Am Coll Cardiol*. 2019;73(5):612-9.
 47. Chatap G, Giraud K, Vincent JP. Atrial fibrillation in the elderly: facts and management. *Drugs Aging*. 2002;19(11):819-46.
 48. Cheng W, Liu W, Li B, et al. Relationship of Anticoagulant Therapy With Cognitive Impairment Among Patients With Atrial Fibrillation: A Meta-Analysis and Systematic Review. *J Cardiovasc Pharmacol*. 2018;71(6):380-7.
 49. Moffitt P, Lane DA, Park H, et al. Thromboprophylaxis in atrial fibrillation and association with

- cognitive decline: systematic review. *Age Ageing.* 2016;45(6):767-75.
50. Jacobs V, May HT, Bair TL, et al. Long-Term Population-Based Cerebral Ischemic Event and Cognitive Outcomes of Direct Oral Anticoagulants Compared With Warfarin Among Long-term Anticoagulated Patients for Atrial Fibrillation. *Am J Cardiol.* 2016;118(2):210-4.
 51. Jankowska-Polańska B, Katarzyna L, Lidia A, et al. Cognitive function and adherence to anticoagulation treatment in patients with atrial fibrillation. *J Geriatr Cardiol.* 2016;13(7):559-65.
 52. Rodriguez-Bernal CL, Peiró S, Hurtado I, et al. Primary Nonadherence to Oral Anticoagulants in Patients with Atrial Fibrillation: Real-World Data from a Population-Based Cohort. *J Manag Care Spec Pharm.* 2018;24(5):440-8.
 53. Phelan EA, Mahoney JE, Voit JC, et al. Assessment and management of fall risk in primary care settings. *Med Clin North Am.* 2015;99(2):281-93.
 54. Deandrea S, Bravi F, Turati F, et al. Risk factors for falls in older people in nursing homes and hospitals. A systematic review and meta-analysis. *Arch Gerontol Geriatr.* 2013;56(3):407-15.
 55. Malik V, Gallagher C, Linz D, et al. Atrial Fibrillation Is Associated With Syncope and Falls in Older Adults: A Systematic Review and Meta-analysis. *Mayo Clin Proc.* 2020;95(4):676-87.
 56. Atwood JE, Myers JN, Tang XC, et al. Exercise capacity in atrial fibrillation: a substudy of the Sotalol-Amiodarone Atrial Fibrillation Efficacy Trial (SAFE-T). *Am Heart J.* 2007;153(4):566-72.
 57. Gage BF, Birman-Deych E, Kerzner R, et al. Incidence of intracranial hemorrhage in patients with atrial fibrillation who are prone to fall. *Am J Med.* 2005;118(6):612-7.
 58. Man-Son-Hing M, Nichol G, Lau A, et al. Choosing antithrombotic therapy for elderly patients with atrial fibrillation who are at risk for falls. *Arch Intern Med.* 1999;159(7):677-85.
 59. Hagerty T, Rich MW. Fall risk and anticoagulation for atrial fibrillation in the elderly: A delicate balance. *Cleve Clin J Med.* 2017;84(1):35-40.
 60. Shariff N, Desai RV, Patel K, et al. Rate-control versus rhythm-control strategies and outcomes in septuagenarians with atrial fibrillation. *Am J Med.* 2013;126(10):887-93.
 61. Paciullo F, Proietti M, Bianconi V, et al. Choice and Outcomes of Rate Control versus Rhythm Control in Elderly Patients with Atrial Fibrillation: A Report from the REPOSI Study. *Drugs Aging.* 2018;35(4):365-73.
 62. Tsadok MA, Jackevicius CA, Essebag V, et al. Rhythm versus rate control therapy and subsequent stroke or transient ischemic attack in patients with atrial fibrillation. *Circulation.* 2012;126(23):2680-7.
 63. Ha AC, Breithardt G, Camm AJ, et al. Health-related quality of life in patients with atrial fibrillation treated with rhythm control versus rate control: insights from a prospective international registry (Registry on Cardiac Rhythm Disorders Assessing the Control of Atrial Fibrillation: RECORD-AF). *Circ Cardiovasc Qual Outcomes.* 2014;7(6):896-904.
 64. Fumagalli S, Said SAM, Laroche C, et al. Age-Related Differences in Presentation, Treatment, and Outcome of Patients With Atrial Fibrillation in Europe: The EORP-AF General Pilot Registry (EURObservational Research Programme-Atrial Fibrillation). *JACC Clin Electrophysiol.* 2015;1(4):326-34.
 65. Polidori MC, Alves M, Bahat G, et al. Atrial fibrillation: a geriatric perspective on the 2020 ESC guidelines. *Eur Geriatr Med.* 2022;13(1):5-18.