ATRİYAL FİBRİLASYON TANIMI VE EPİDEMİYOLOJİSİ

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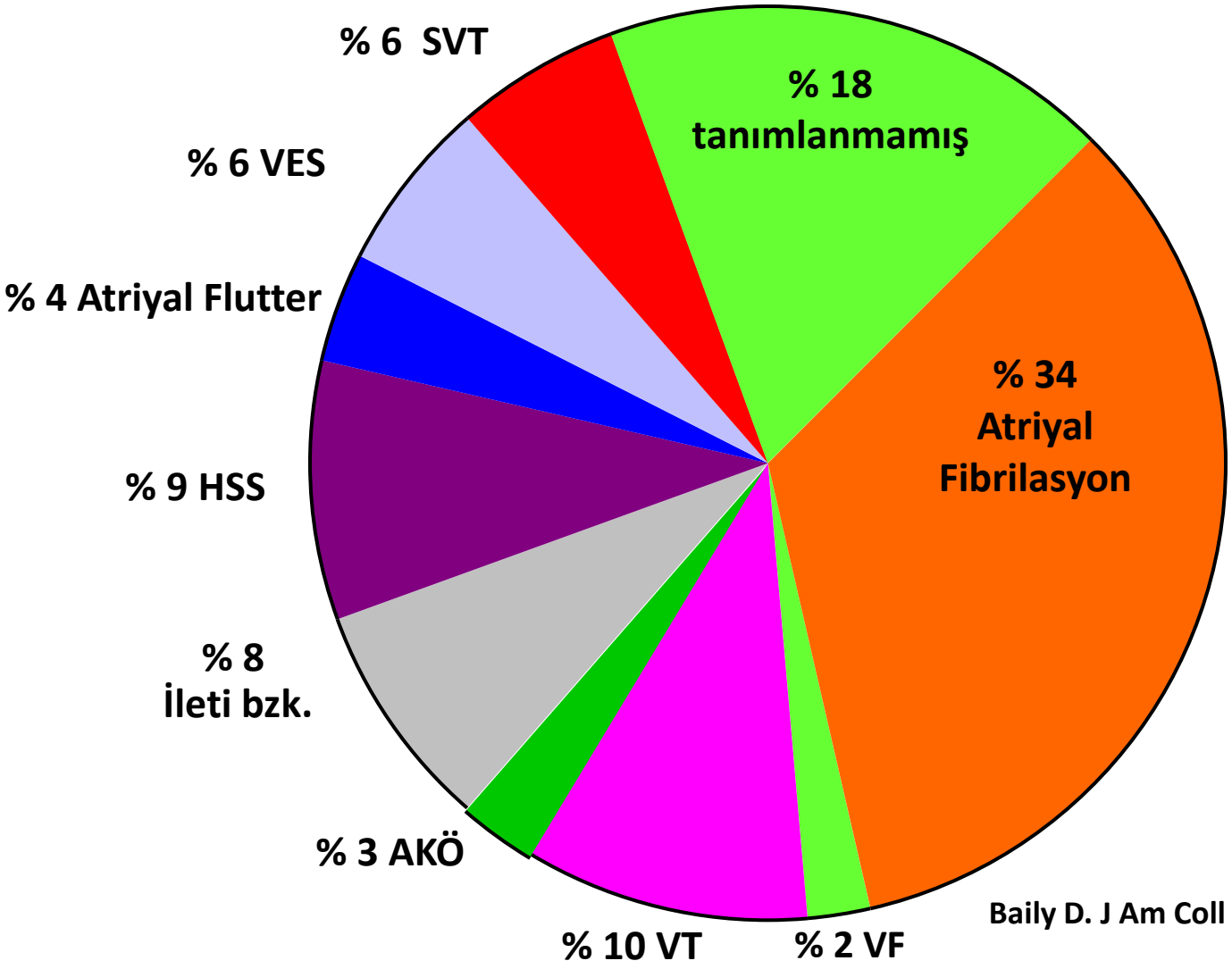
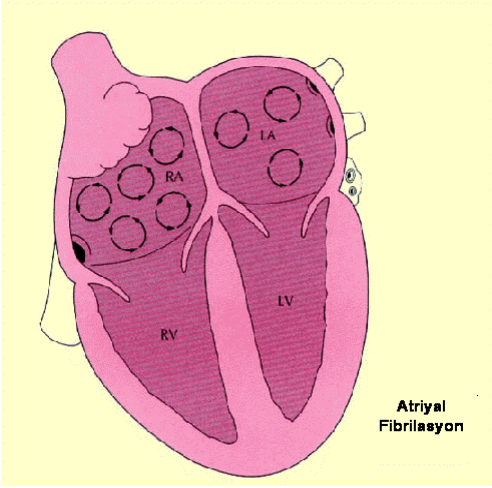
Adana Uygulama ve Araştırma Merkezi
Kardiyoloji Ana Bilim Dalı

Atriyal Fibrilasyon Zirvesi
31 Mayıs 2014, Antalya

Aritmili hastaların 1/3'nü oluşturur



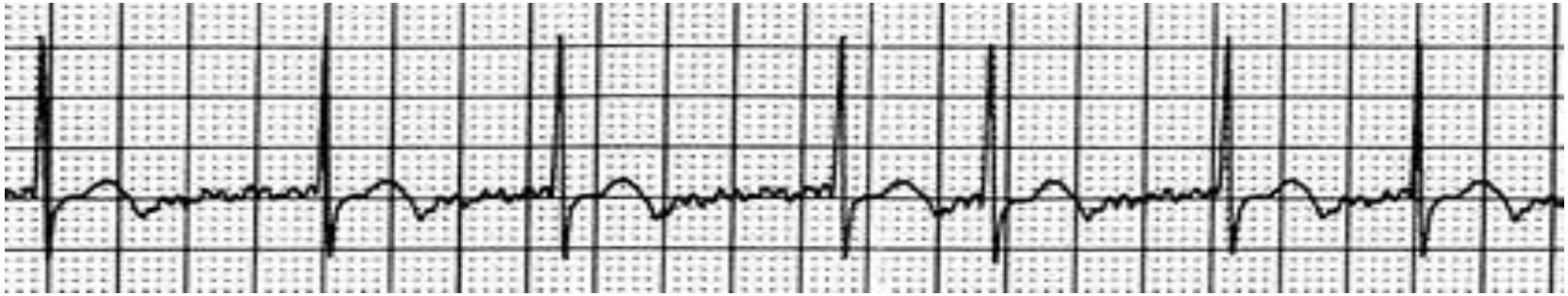
Baily D. J Am Coll Cardiol. 1992;19(3):41A.



- Atriyal fibrilasyon atriyumların düzensiz elektriksel aktivitesi sonucu gelişen, atriyal mekanik işlev kaybıyla karakterize supraventriküler bir taşiaritmidir.

Crystal E. Cardiol Clin 2004;22:1-8.

Atriyal Fibrilasyon Tanımı



EKG bulguları 1909 yılında Sir Thomas Lewis tarafından tanımlandı.

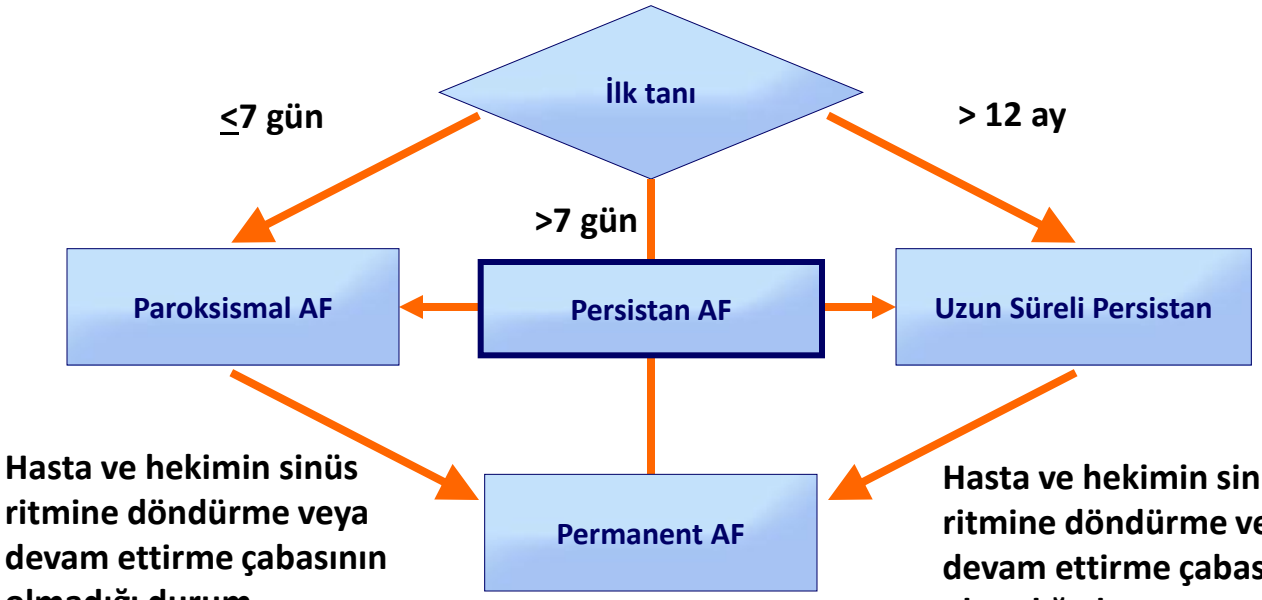
R-R intervali düzensizdir (AV ileti varsa)

Tekrarlayan belirgin P dalgası yoktur

Atriyal aktivite düzensizdir ve atriyal siklus uzunluğu değişkendir ve < 200 ms (> 300 atım/dk)

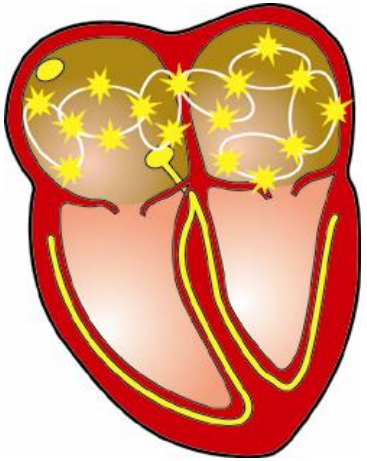
January, CT et al.
2014 AHA/ACC/HRS Atrial Fibrillation Guideline

AF Süresine Göre Tanım



January, CT et al.
2014 AHA/ACC/HRS Atrial Fibrillation Guideline

Nonvalvuler AF



- Romatizmal mitral kapak hastalığı olmaması
- Mekanik veya biyoprotez kalp kapağı bulunmaması
- Mitral kapak tamiri öyküsünün olmaması

January, CT et al.
2014 AHA/ACC/HRS Atrial Fibrillation Guideline

Subklinik AF

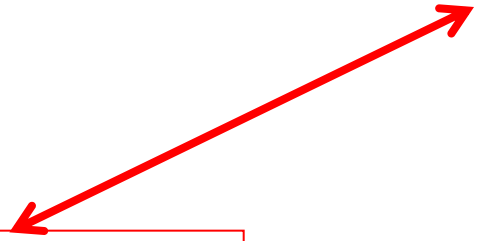
- AF öyküsü olmayan bir kişide sadece monitörizasyon teknikleriyle saptanan asemptomatik AF ataklarını tanımlar.
- Sessiz AF
- Asemptomatik AF

Healey JS et al. Subclinical atrial fibrillation and the risk of stroke. N Engl J Med 2012; 366:120.

Subklinik AF

- **Semptomlar:**
  - **Çarpıntı**
  - **Halsizlik**
  - **Nefes darlığı**
  - **Sersemlik**
  - **Göğüs ağrısı**
  - **Başdönmesi**

- **Komplikasyonlar:**
  - **Bozulmuş yaşam kalitesi**
  - **KKY**
  - **TIA/İnme**
  - **Tromboemboli**
  - **Hospitalizasyon**
  - **Artmış mortalite**



Asemptomatik

- Hastaların 1/3'üne yakını asemptomatiktir

- Holter / transtelefonik çalışmalar:

  -Asemptomatik ataklar, semptomatiklerden 10-12 kat daha sıktır

Savelieva I, et al. *Pacing Clin Electrophysiol*. 2000;23:145-48.
Page RL, et al. *Circulation*. 2003;107:1141-45. 3. Defaye P, et al. *Pacing Clin Electrophysiol.* 1998;21:250-55.

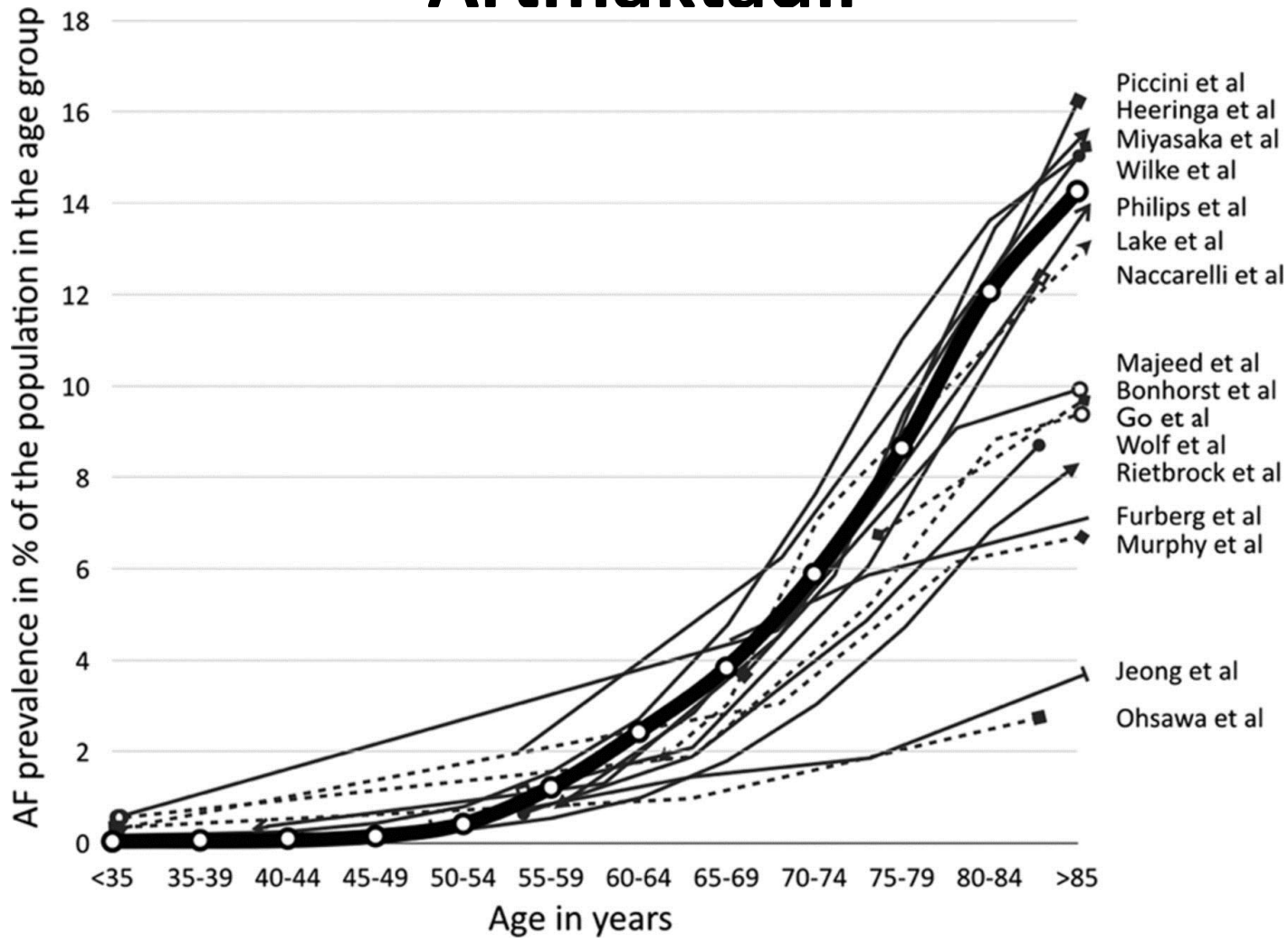
Lone AF

- Fizik muayene, EKG, göğüs röntgeni ve EKO'da belirlenen yapısal kardiyak bir anormallik olmaksızın gelişen AF varlığını tanımlar.
- Sıklıkla komorbiditesi olmayan gençlerdeki AF için kullanılan bir terimdir.
- Bazı olgularda intrinsik elektriksel hastalık göstergesi olabilir.
- Tüm AF olgularının % 2-31'inde.
- Non-lone AF'ye dönüşebilir.

Tsang SM. Progress in Cardiovascular Diseases 2005; 48:1-8.

Atriyal Fibrilasyon Epidemiyolojisi

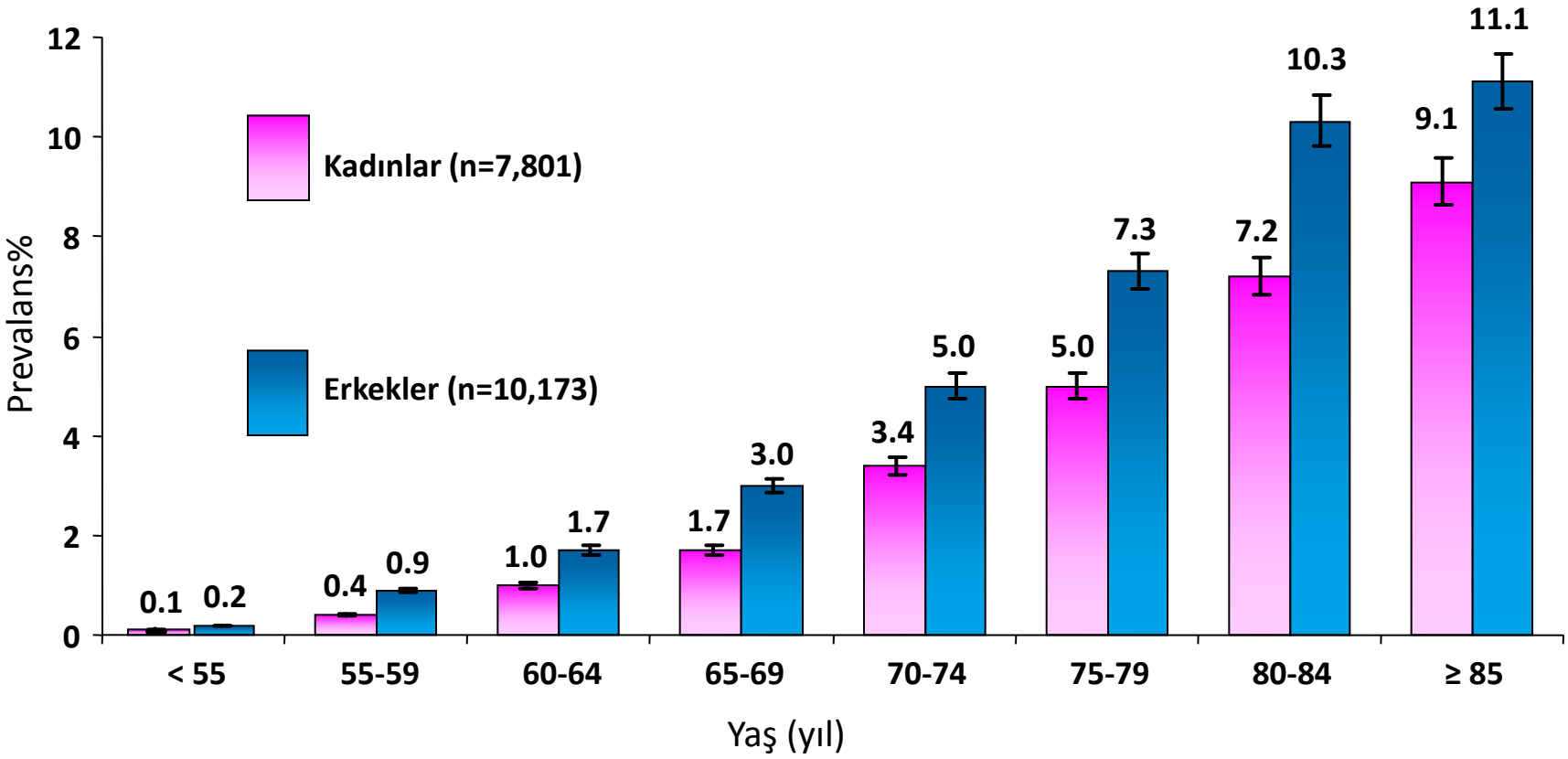
AF Prevalansı Artan Yaşla Birlikte Artmaktadır



Andrade J et al. Circulation Research. 2014;114:1453-1468

AF Prevalansı erkeklerde daha fazladır

The ATRIA study (the AnTicoagulation and Risk factors In Atrial fibrillation)



Go AS. ATRIA Study.. *JAMA* 2001;285:2370–2375.

AF Prevalansı

Genel AF prevalansı

% 1-2

Lloyd-Jones DM, et al. Circulation 2004;110:1042-1046;

Prevalans

40 yaş altındakilerde

< % 0.5

Furberg CD, Psaty BM, Manolio TA, et al.
Prevalence of atrial fibrillation in elderly subjects
(the Cardiovascular Health Study).
***Am J Cardiol* 1994;74:236–41.**

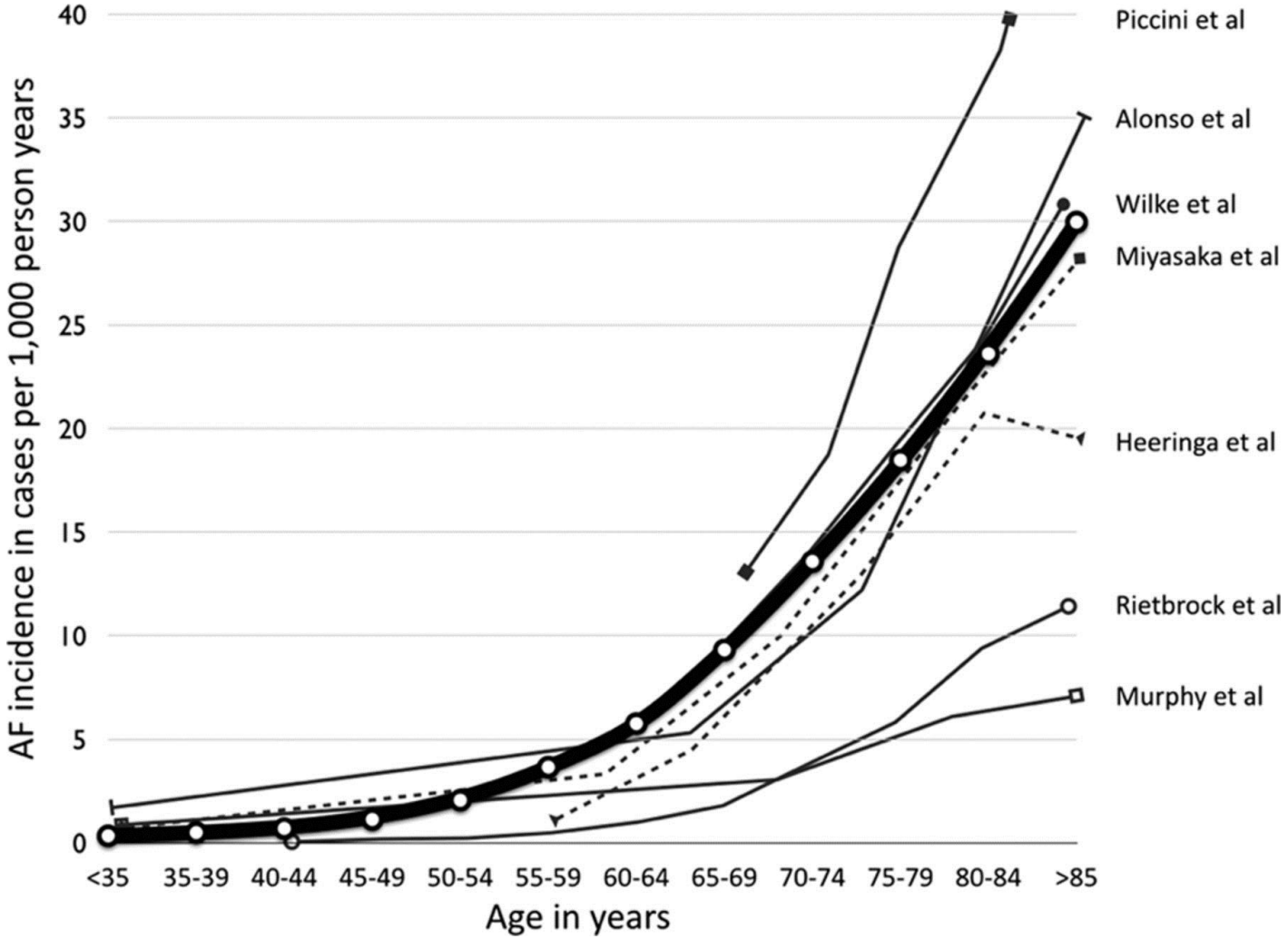
Prevalans

80 yaş üstündekilerde

% 5-15

Furberg CD, Psaty BM, Manolio TA, et al.
Prevalence of atrial fibrillation in elderly subjects
(the Cardiovascular Health Study).
***Am J Cardiol* 1994;74:236–41.**

AF İnsidansı Artan Yaşla Birlikte Artmaktadır



Andrade J et al. Circulation Research. 2014;114:1453-1468

AF İnsidansı

Yıllık AF insidansı

< 40 yaşındakilerde

< % 0.1

Psaty BM, Manolio TA, Kuller LH, et al. Incidence of and risk factors for atrial fibrillation in older adults. *Circulation* 1997;96:2455– 61.

AF İnsidansı

> 80 yaşındakilerde

Erkeklerde % 2

Kadınlarda % 1.5

Psaty BM, Manolio TA, Kuller LH, et al.
Incidence of and risk factors for atrial fibrillation in older adults.
***Circulation* 1997;96:2455– 61.**

Circulation
JOURNAL OF THE AMERICAN HEART ASSOCIATION

American Heart Association.

Incident Atrial Fibrillation Among Asians, Hispanics, Blacks, and Whites
Thomas A. Dewland, Jeffrey E. Olgin, Eric Vittinghoff and Gregory M. Marcus

Circulation. 2013;128:2470-2477; originally published online October 8, 2013;
doi: 10.1161/CIRCULATIONAHA.113.002449
Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231

Print ISSN: 0009-7322. Online ISSN: 1524-4539

Incident Atrial Fibrillation Among Asians, Hispanics, Blacks, and Whites

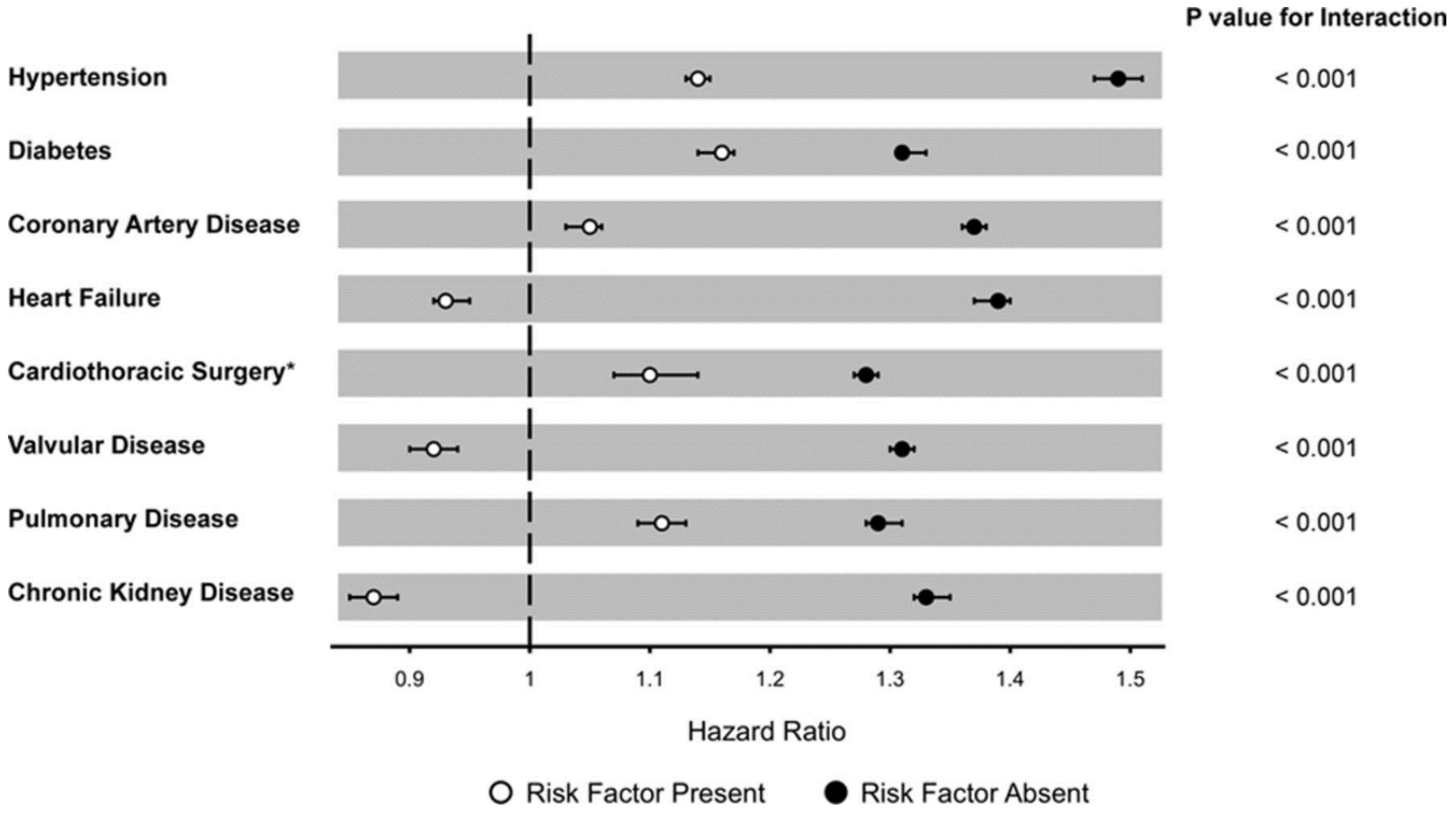
Thomas A. Dewland, MD; Jeffrey E. Olgin, MD; Eric Vittinghoff, PhD, MPH;
Gregory M. Marcus, MD, MAS

Background—Because the association between atrial fibrillation (AF) and race has only been rigorously compared in population-based studies that dichotomized participants as white or black, it is unclear whether white race confers elevated AF risk or black race affords AF protection.

Methods and Results—The Healthcare Cost and Utilization Project was used to identify patients receiving hospital-based care in California between January 1, 2005 and December 31, 2009. The association between race and incident AF was examined using Cox proportional hazards models. Interaction analyses were performed to elucidate the mechanism underlying the race-AF association. Among 13 967 949 patients, 375 318 incident AF episodes were observed over a median 3.2 (interquartile range 1.8–4.3) years. In multivariable Cox models adjusting for patient demographics and established AF risk factors, blacks (hazard ratio, 0.84; 95% confidence interval, 0.82–0.85; $P<0.001$), Hispanics (hazard ratio, 0.78; 95% confidence interval, 0.77–0.79; $P<0.001$), and Asians (hazard ratio, 0.78; 95% confidence interval, 0.77–0.79; $P<0.001$) each exhibited a lower AF risk compared with whites. AF risk among whites was disproportionately higher in the absence of acquired cardiovascular risk factors and diminished or reversed in the presence of comorbid diseases. Although Hispanics and Asians also had a lower adjusted risk of incident atrial flutter compared with whites, the risk of flutter was significantly higher among blacks.

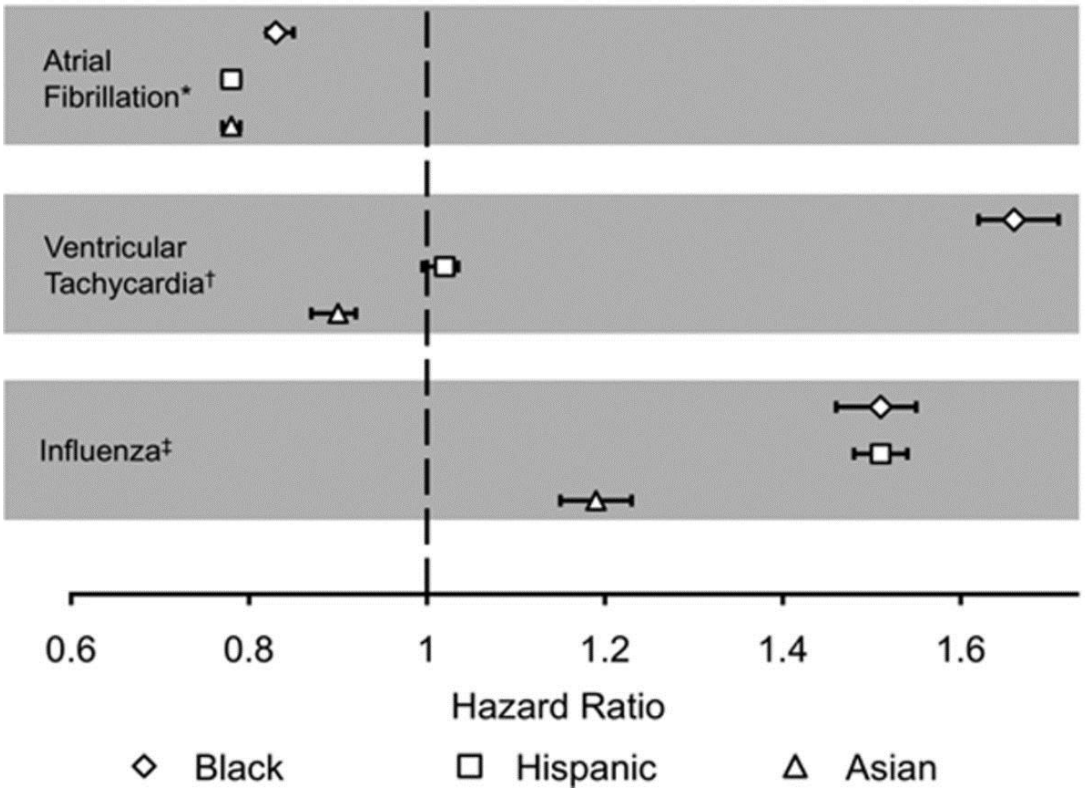
Conclusions—In a large hospital-based cohort, whites have an increased risk of AF whether compared with blacks, Asians, or Hispanics. The heightened AF risk among whites is most pronounced in the absence of cardiovascular comorbidities. **(*Circulation*. 2013;128:2470-2477.)**

Kardiyovasküler Komorbidite Varlığına Göre Irk ve AF Etkileşimi



Dewland T A et al. Circulation. 2013;128:2470-2477

Irk ve Medikal Tanı Arasındaki İlişki



	Adjusted HR	95% CI	P value
Atrial Fibrillation*	0.84	0.82 to 0.85	< 0.001
	0.78	0.77 to 0.79	< 0.001
	0.78	0.77 to 0.79	< 0.001
Ventricular Tachycardia†	1.67	1.62 to 1.71	< 0.001
	1.02	1.00 to 1.04	0.12
	0.90	0.87 to 0.92	< 0.001
Influenza‡	1.51	1.46 to 1.55	< 0.001
	1.51	1.48 to 1.54	< 0.001
	1.19	1.15 to 1.23	< 0.001

Düzenleme: Yaş, cinsiyet, sigorta ödemesi, gelir, baypas, HT, KKY, KAH, kapak hst, akciğer hst., KBY, DM.

Dewland T A et al. Circulation. 2013;128:2470-2477

Circulation
JOURNAL OF THE AMERICAN HEART ASSOCIATION

American Heart Association.

Lifetime Risk for Development of Atrial Fibrillation: The Framingham Heart Study

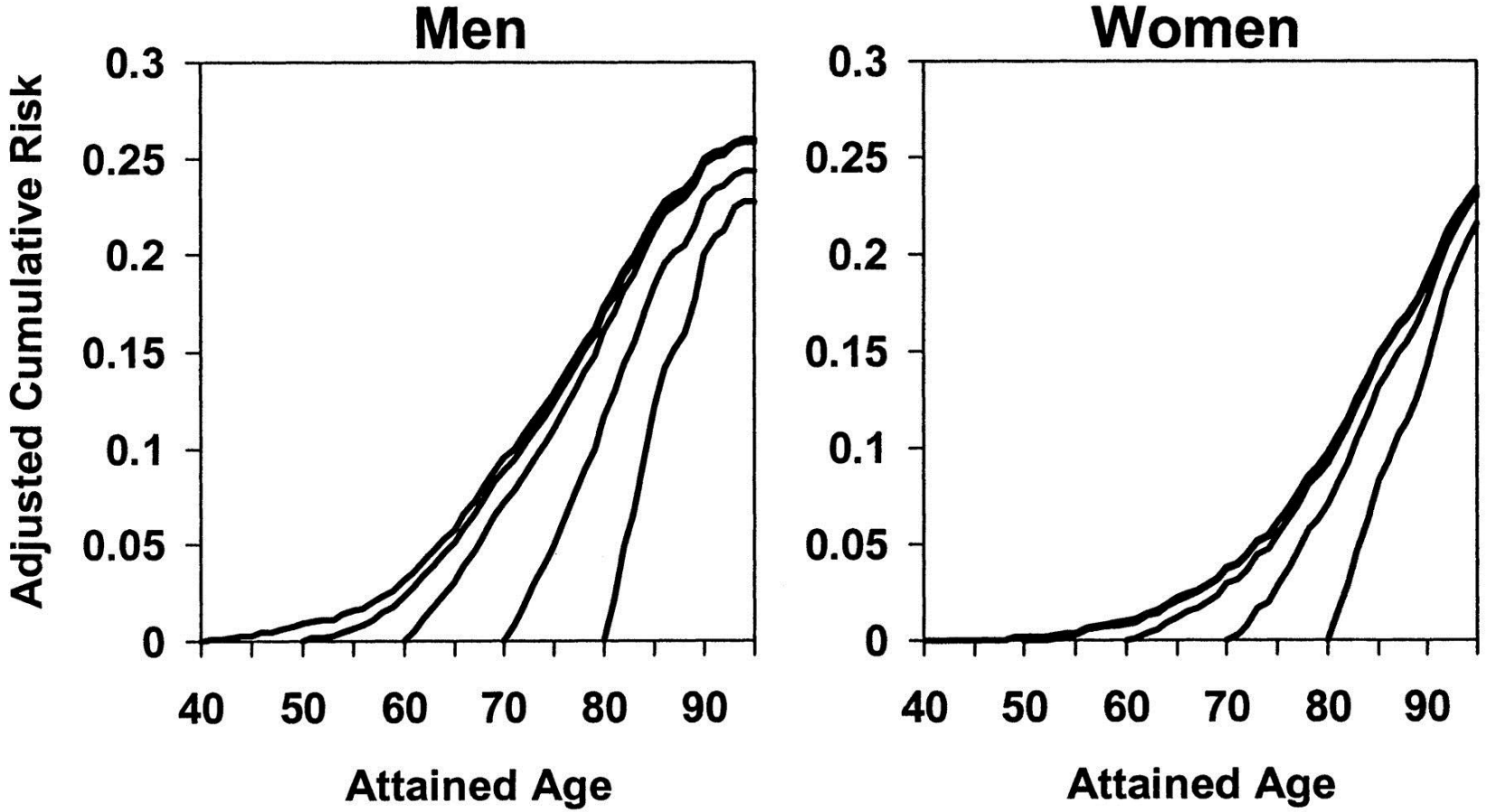
Donald M. Lloyd-Jones, Thomas J. Wang, Eric P. Leip, Martin G. Larson, Daniel Levy, Ramachandran S. Vasan, Ralph B. D'Agostino, Joseph M. Massaro, Alexa Beiser, Philip A. Wolf and Emelia J. Benjamin

Circulation. 2004;110:1042-1046; originally published online August 16, 2004;
doi: 10.1161/01.CIR.0000140263.20897.42
Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231

Print ISSN: 0009-7322. Online ISSN: 1524-4539

- Framingham Kalp Çalışması
- 8725 kişi 1968-1999 arasında takip edildi
- Toplam 936 AF gelişti.

Yaşam Boyu AF Gelişme Riski



40 yaşından 95 yaşına kadar AF gelişme riski erkeklerde % 26 ve kadınlarda % 23.

80 yaşından 95 yaşına kadar AF gelişme riski erkeklerde % 23 ve kadınlarda % 22.

Circulation 2004;110:1042-1046

AF Prevalansındaki Uzun Dönem Değişim

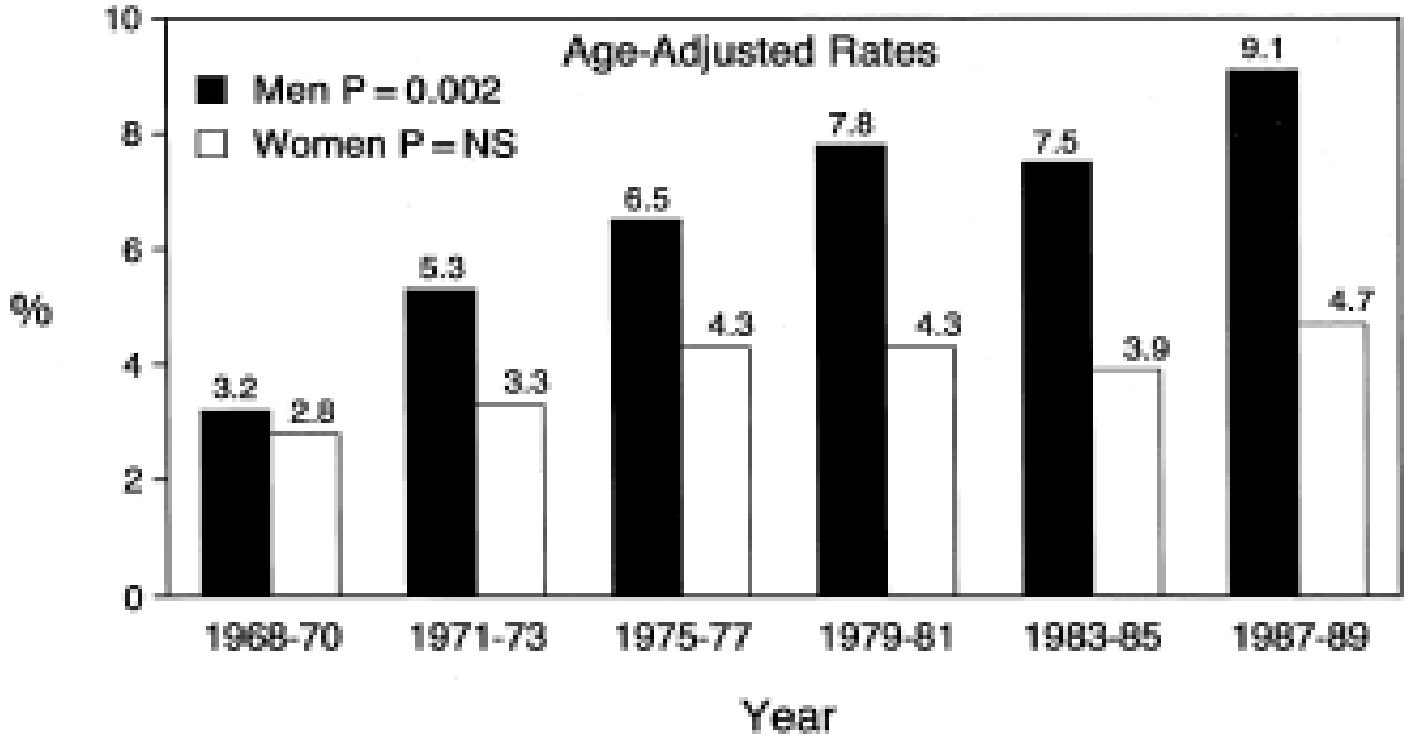


Figure 2. Secular trends in the prevalence (percentage) of atrial fibrillation in subjects 65 to 84 years old in the Framingham study. (Data from Wolf et al. [13]).

Secular Trends in Incidence of Atrial Fibrillation in Olmsted County, Minnesota, 1980 to 2000, and Implications on the Projections for Future Prevalence

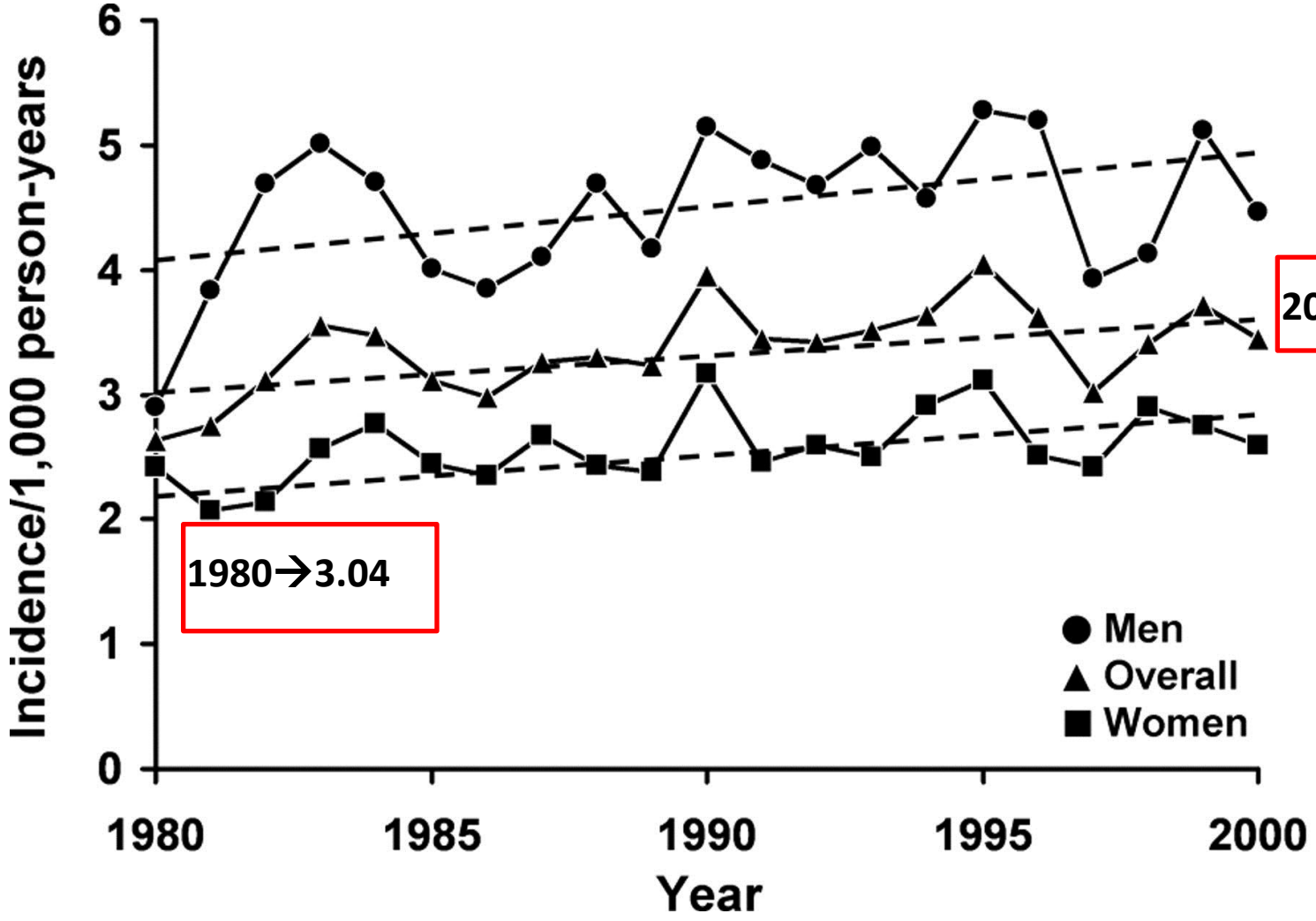
Yoko Miyasaka, MD, PhD; Marion E. Barnes, MSc; Bernard J. Gersh, MB, ChB, DPhil; Stephen S. Cha, MS; Kent R. Bailey, PhD; Walter P. Abhayaratna, MBBS; James B. Seward, MD; Teresa S.M. Tsang, MD

Background—Limited data exist on trends in incidence of atrial fibrillation (AF). We assessed the community-based trends in AF incidence for 1980 to 2000 and provided prevalence projections to 2050.

Methods and Results—The adult residents of Olmsted County, Minnesota, who had ECG-confirmed first AF in the period 1980 to 2000 (n=4618) were identified. Trends in age-adjusted incidence were determined and used to construct model-based prevalence estimates. The age- and sex-adjusted incidence of AF per 1000 person-years was 3.04 (95% CI, 2.78 to 3.31) in 1980 and 3.68 (95% CI, 3.42 to 3.95) in 2000. According to Poisson regression with adjustment for age and sex, incidence of AF increased significantly (P=0.014), with a relative increase of 12.6% (95% CI, 2.1 to 23.1) over 21 years. The increase in age-adjusted AF incidence did not differ between men and women (P=0.84). According to the US population projections by the US Census Bureau, the number of persons with AF is projected to be 12.1 million by 2050, assuming no further increase in age-adjusted incidence of AF, but 15.9 million if the increase in incidence continues.

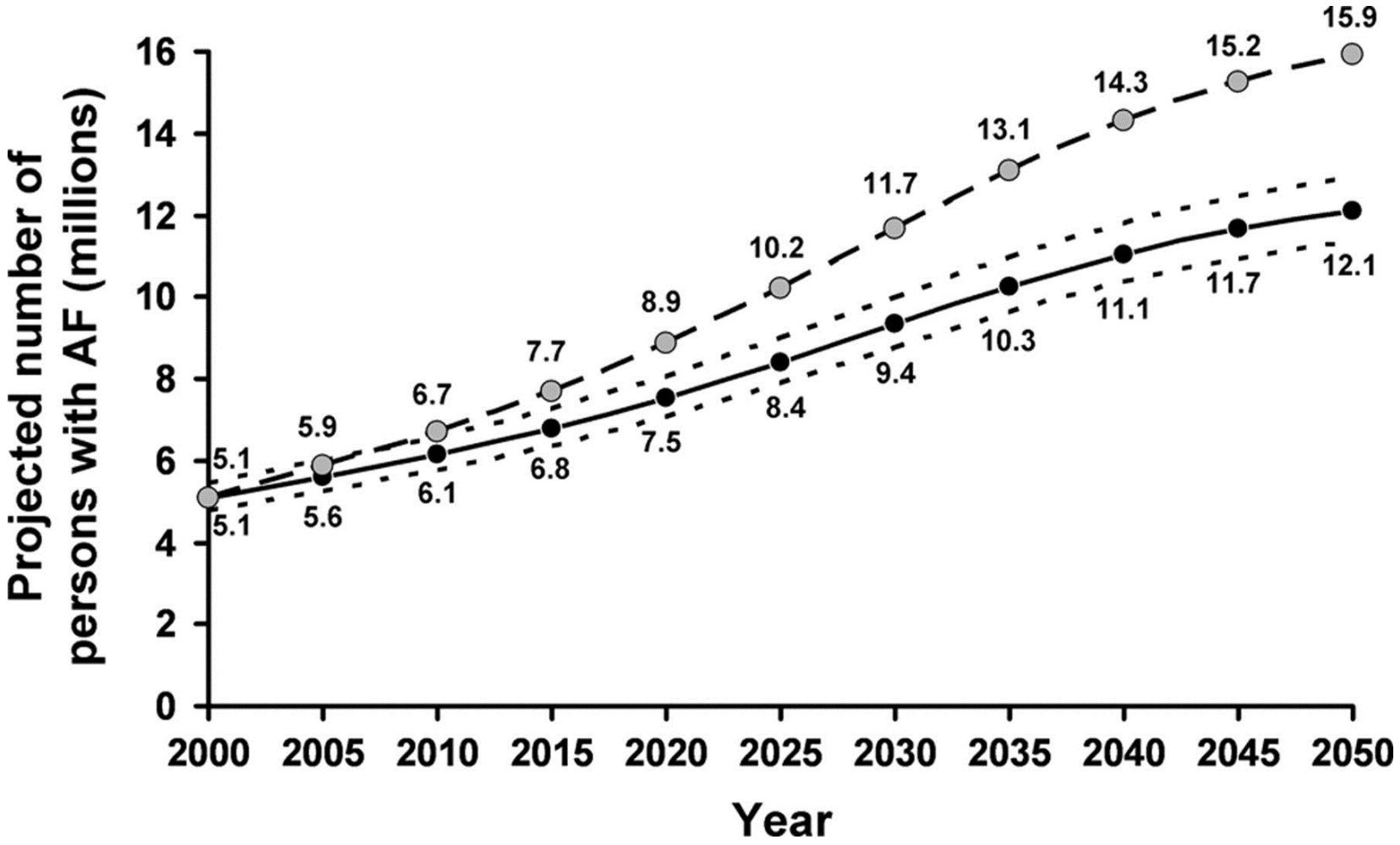
Conclusions—The age-adjusted incidence of AF increased significantly in Olmsted County during 1980 to 2000. Whether or not this rate of increase continues, the projected number of persons with AF for the United States will exceed 10 million by 2050, underscoring the urgent need for primary prevention strategies against AF development. (***Circulation.*** **2006;114:119-125.**)

1980-2000 Arasında AF'nin Yaşa Uyarlanmış İnsidansındaki Değişim



Miyasaka Y et al. Circulation. 2006;114:119-125

AF: Büyüyen Bir Epidemi



Miyasaka Y et al. Circulation. 2006;114:119-125

AF Epidemisinin Nedenleri

- EKG kullanımının artışı?
  - 30 yılda EKG kullanımı % 9-12 artmış
  - AF prevalansı 2-3 kat artmış
    - Tsang TSM. JACC 2003;42:93-100
- Komorbiditelerdeki Artışın Rolü?
  - “Daha hasta” yaşlı populasyon
  - Primer ve sekonder koruma
- Obezite, tip 2 diyabet ve metabolik sendrom prevalansındaki dramatik artış?
- Atriyal Fibrilasyonun Yeni Risk Faktörleri?

Piccini JP. Cir Cardiovasc Qual Outcomes 2012;5:85-93.

Atriyal Fibrilasyonun Risk Faktörleri

Atriyal Fibrilasyonun Klasik Risk Faktörleri

Risk Faktörü	Artmış Risk Tahmini	Yorum
Yaş	≈ 2	Dekad başına
Erkek cinsiyet	1.5	Yaş ve predispozan faktörler düzenlendikten sonra
HT	1.2-1.5	> 140/90 mmHg
Kapak hst.	1.8-3.4	Darlık derecesi ve kompeks lezyonlarla prevalans değişir
Sistolik disfonk.	4.5-5.9	
Obezite	1.39-2.35	
Alkol	1.34-1.46	Ağır alkol tüketimi (≥ 36 g/gün)
DM	1.4-1.6	Süre ve glisemik kontrol
Tiroid disfonksiyonu	3-6	TSH düzeyiyle ters orantı

Andrade J. Circ Res 2014;114:1453-1468

Atriyal Fibrilasyonun Yeni Risk Faktörleri

Risk Faktörü	Artmış Risk Tahmini	Yorum
Prehipertansiyon	1.28	SKB 130-139 mmHg'ya karşı < 120 mmHg
Artmış nabız basıncı	1.26	Her 20 mmHg.lık artış
Obstrüktif uyku apnesi	2.8-5.6	
Aşırı fiziksel aktivite	2.87	Kümülatif yaşam boyu pratik > 1500 saat
Diyastolik disfonk.	3.33-5.26	
Ailesel ve genetik	1.85	≥ 1 ebeveynde AF
Hipertrofik KMP	4-6	AF prevalansı % 10-28
Konjenital kalp hast.	N/A	

Andrade J. Circ Res 2014;114:1453-1468.

Current Cardiology Reviews, 2012, *8*, 265-272

Sleep Apnea and Atrial Fibrillation; 2012 Update

Genevieve C Digby and Adrian Baranchuk*

Department of Cardiology, Kingston General Hospital, Queen's University, Kingston, Ontario, Canada

Abstract: Atrial fibrillation (AF) and obstructive sleep apnea (OSA) are very prevalent diseases in modern society. Recent years have seen the emergence of a wide body of literature suggesting an important association between these two diseases. This review will provide a summary of this evidence as it currently exists. First, it will review the literature suggesting an association between AF and OSA by highlighting the prevalence of AF in OSA, the correlation of AF prevalence with OSA severity and the trend towards increased AF recurrence in patients with OSA after treatment for AF. Second, it will identify the possible pathophysiologic mechanisms for this association. In doing so, it will discuss the investigated effects of intrathoracic pressure changes, autonomic instability and atrial remodeling. Finally, it will review the evidence of the effect of treatment of OSA on AF, highlighting the role of continuous positive airway pressure (CPAP) in the treatment of OSA and its impact on AF prevalence and recurrence.

Keywords: Atrial fibrillation, sleep apnea, obstructive sleep apnea.

OSAS'lılarda AF prevalansı % 4,9.

AF'lilerde OSAS prevalansı % 32-49.

OSAS şiddetiyle AF prevalansı arasında doğrusal bir ilişki mevcut.

Circulation
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American Heart Association.

Obstructive Sleep Apnea and the Recurrence of Atrial Fibrillation

Ravi Kanagala, Narayana S. Murali, Paul A. Friedman, Naser M. Ammash, Bernard J. Gersh, Karla V. Ballman, Abu S. M. Shamsuzzaman and Virend K. Somers

Circulation. 2003;107:2589-2594; originally published online May 12, 2003;
doi: 10.1161/01.CIR.0000068337.25994.21
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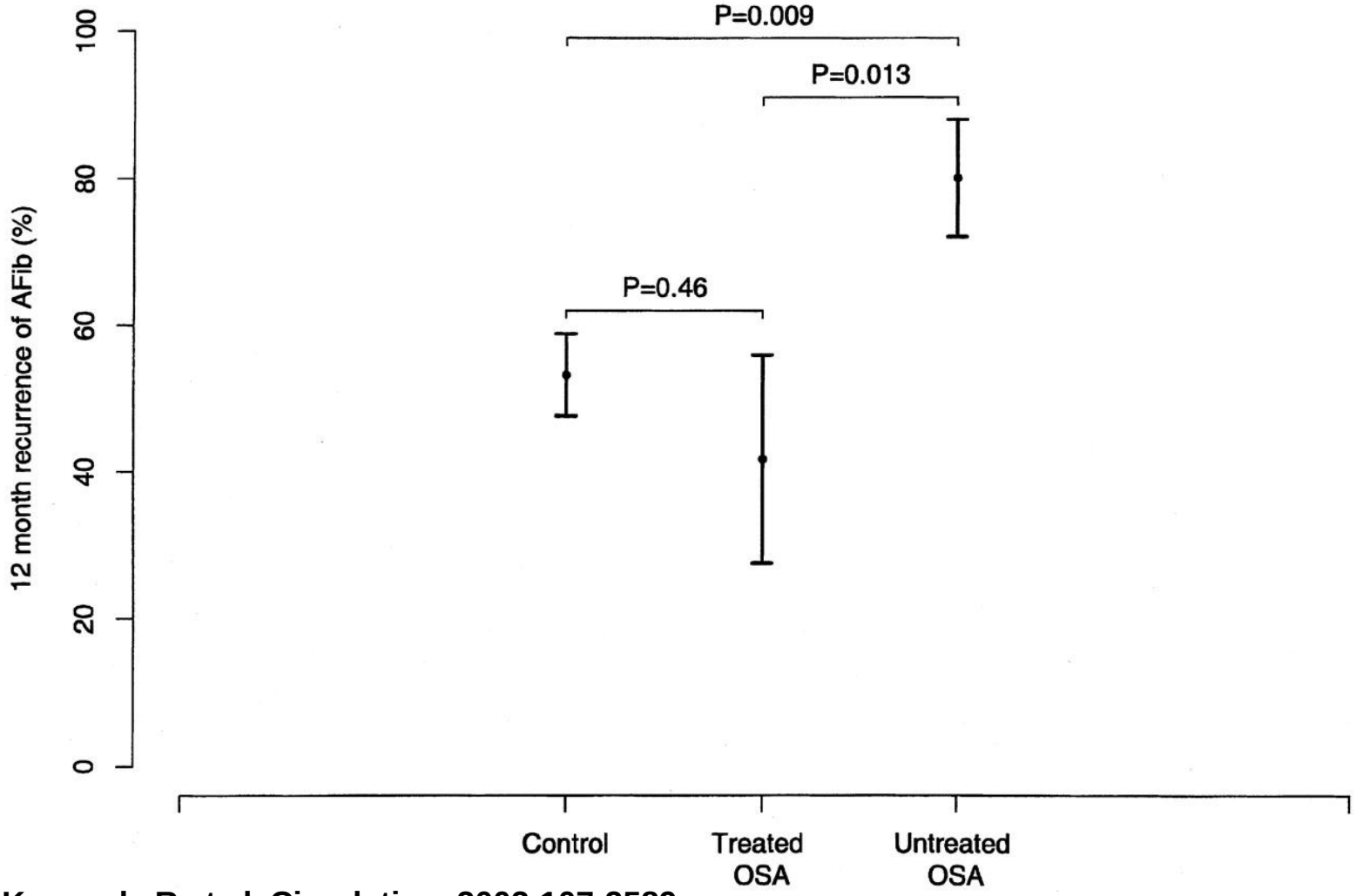
Print ISSN: 0009-7322. Online ISSN: 1524-4539

AF Rekürrensi-OSAS İlişkisi



Kanagala R et al. Circulation. 2003;107:2589-2594

Atriyal Fibrilasyonun Yeni Risk Faktörleri

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Aşırı fiziksel aktivite	2.87	Kümülatif yaşam boyu pratik > 1500 saat
Diyastolik disfonk.	3.33-5.26	
Ailesel ve genetik	1.85	≥ 1 ebeveynde AF
Hipertrofik KMP	4-6	AF prevalansı % 10-28
Konjenital kalp hast.	N/A	

Andrade J. Circ Res 2014;114:1453-1468.

Diyastolik Disfonksiyon Derecesiyle AF Arasındaki İlişki

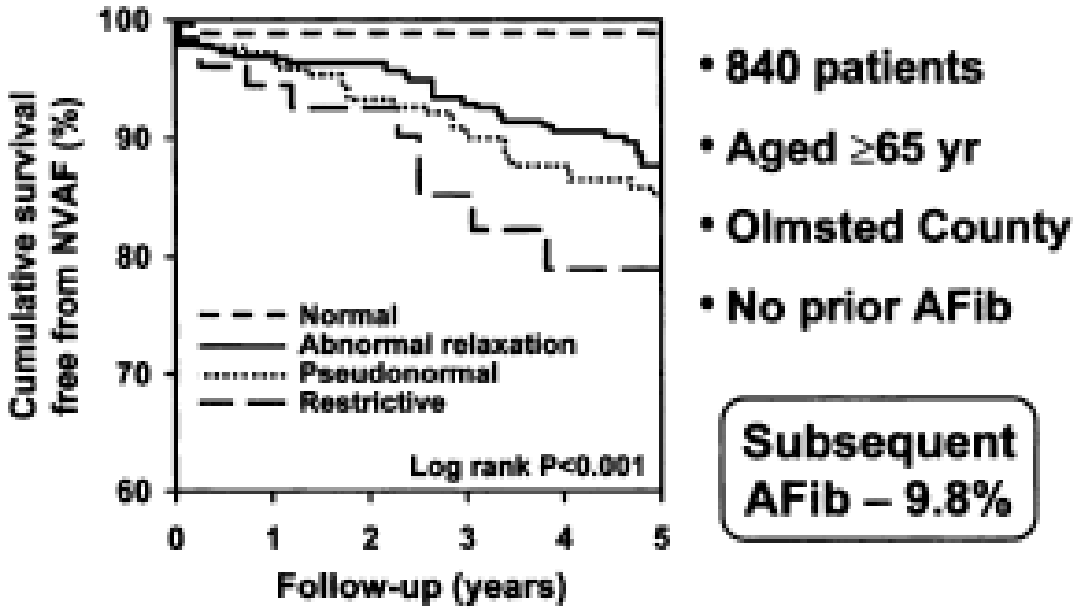

FIG. 2. Age-adjusted cumulative survival without nonvalvular atrial fibrillation (NVAF) by diastolic function profile in 960 Olmsted County patients age 65 years and older who were in sinus rhythm at the time of the echocardiographic examination. Subsequent development of atrial fibrillation was 9.8%. From: Tsang TSM, et al: Left ventricular diastolic dysfunction as predictor of a first diagnosed nonvalvular atrial fibrillation in 840 elderly men and women. JACC 2002;40:1636–1644, Reference 37.

Atriyal Fibrilasyonun Yeni Risk Faktörleri

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Hipertrofik KMP	4-6	AF prevalansı % 10-28
Konjenital kalp hast.	N/A	

Andrade J. Circ Res 2014;114:1453-1468.

Atriyal Fibrilasyonun Potansiyel Risk Faktörleri

Risk Faktörü	Artmış Risk Tahmini	Yorum
Koroner arter hastalığı	N/A	Veri yetersiz
Kronik böbrek hastalığı	1.3-3.2	Kademeli risk artışı
Enflamasyon	1.47-1.77	Bağımsız prediktif değeri belirsiz
Perikardiyal yağ	1.28-5.30	Risk perikardiyal yağın kalınlığına ve hacmine bağlı
Tütün kullanımı	1.51-2.05	Doz-cevap ilişkisi

Andrade J. Circ Res 2014;114:1453-1468.

AF'lilerdeki Risk Faktörleri

- Populasyona atfedilen AF riskinin % 56'sı ≥ 1 yaygın risk faktörüyle açıklanabileceği hesaplanmıştır.

- İleri yaş
- HT
- DM
- MI
- Kapak hst
- KKY
- Obezite
- Obstrüktif uyku apnesi
- Kardiyotorasik cerrahi
- Sigara
- Egzersiz
- Alkol
- Hipertiroidizm
- Artmış nabız basıncı
- Aile öyküsü
- Genetik varyantlar

Huxley RR et al. ARIC Study. Circulation 2011;123:1501-8

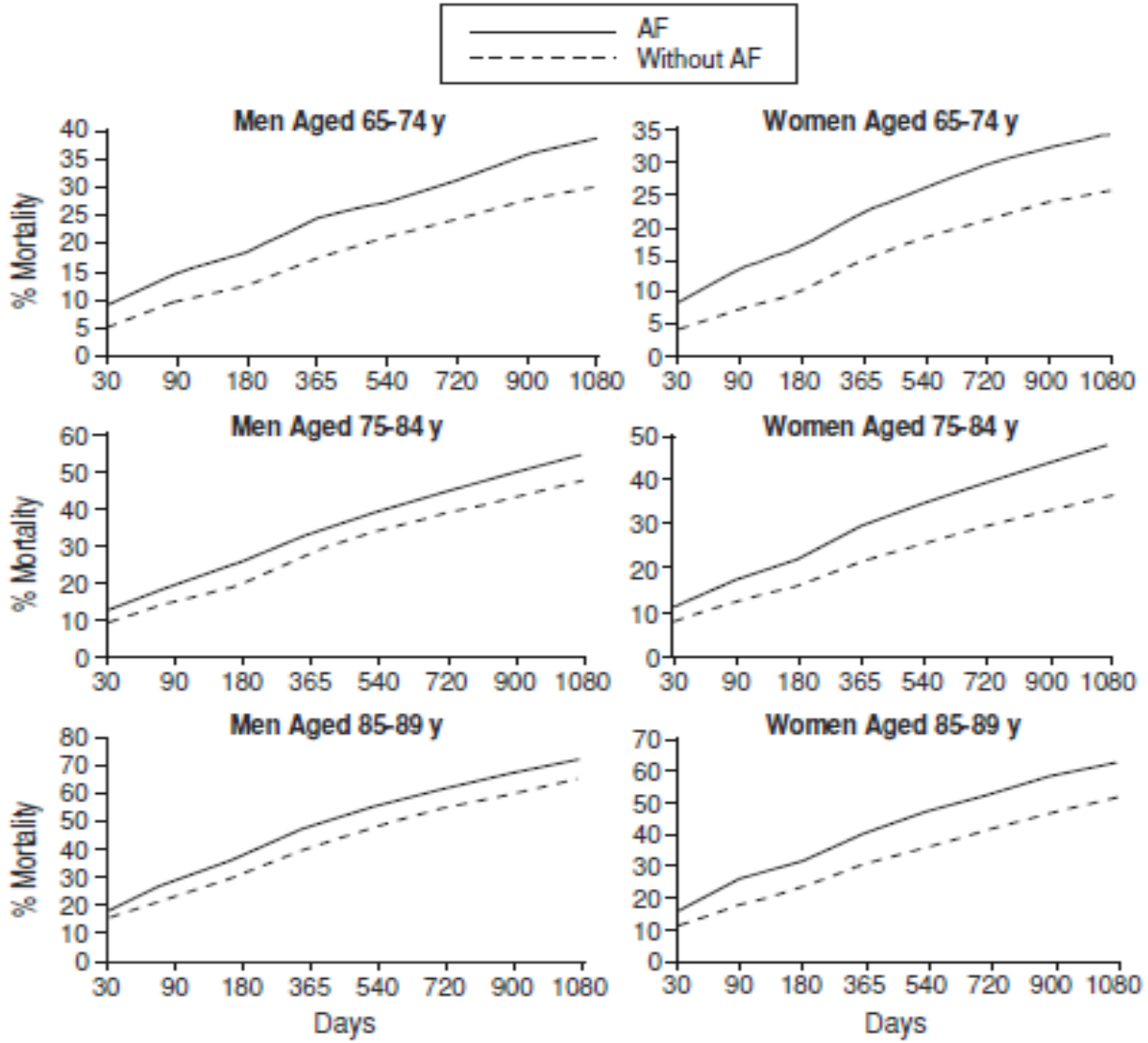
AF'li Hastalardaki En Yaygın 10 Komorbid Kronik Durum

- ≥ 65 yaş
  - HT: % 83
  - KAH: % 63,8
  - Hiperlipidemi: % 62,1
  - KKY: % 51,4
  - Anemi: % 42,3
  - Artrit: % 39,8
  - DM: % 36,5
  - KBY: % 32,3
  - KOAH: % 23,2
  - Katarakt: % 22,5
- < 65 yaş
  - HT: % 81,1
  - KAH: % 64,5
  - Hiperlipidemi: % 60,6
  - KKY: % 59,3
  - DM: % 53,1
  - Anemi: % 45,6
  - KBY: % 40,3
  - Artrit: % 33
  - Depresyon: % 33
  - KOAH: % 31,4

January, CT et al.
2014 AHA/ACC/HRS Atrial Fibrillation Guideline

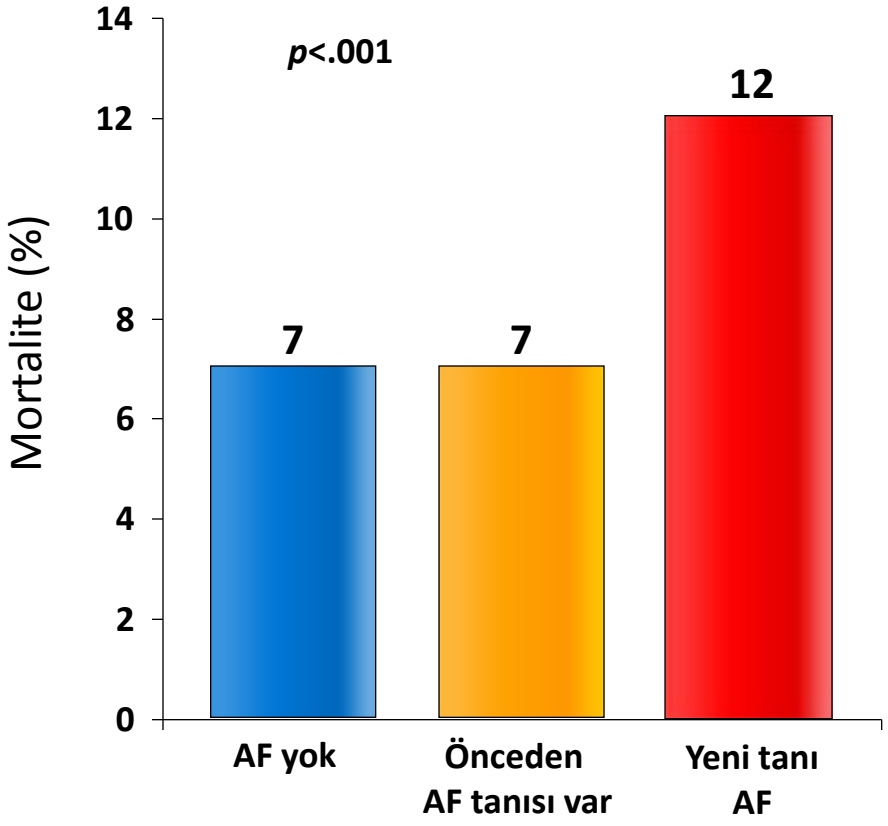
Atriyal Fibrilasyonun Sonuçları

AF'nin Mortalite Üzerine Etkisi



Wolf PA. Archives of Internal Medicine 1998;158:229-34.

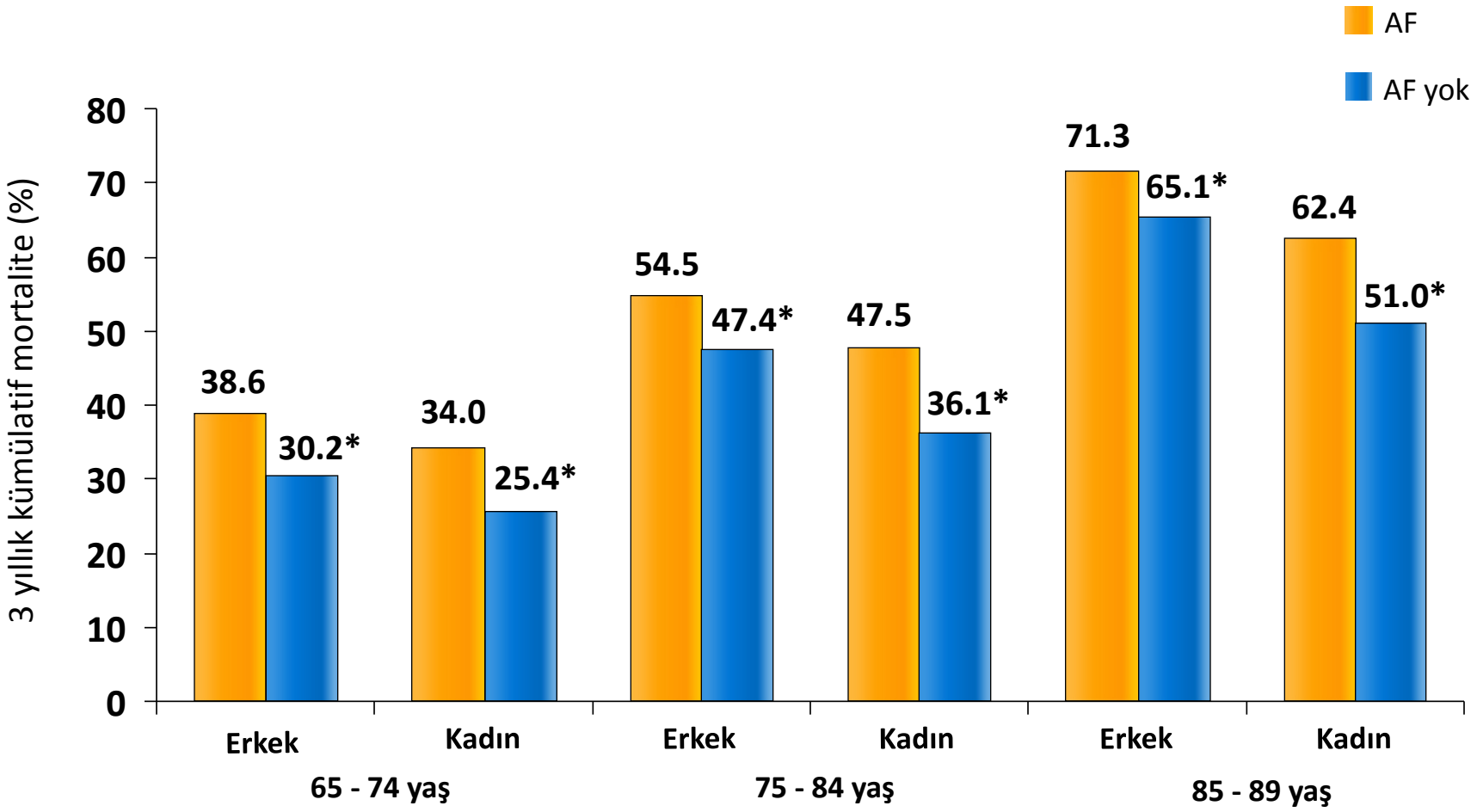
AF - Mortalite



- EuroHeart Failure Survey çalışmasında yeni tanı AF hastane içi mortaliteyi arttıran bir faktördür
- Bu hastalar yoğun bakım ünitelerinde daha uzun kalmaktadır

Rivero-Ayerza M, et al. *Eur Heart J* 2008;29:1618-1624.

AF - Mortalite

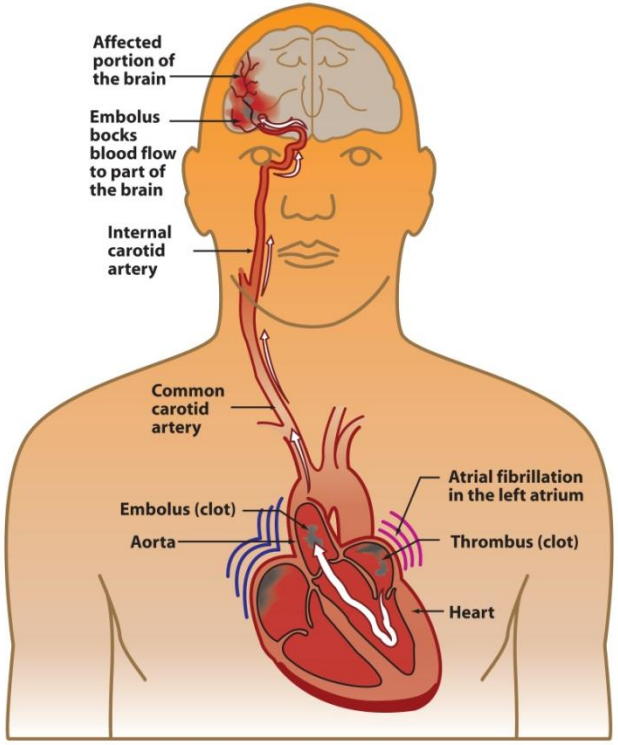


*(p<.05).

Wolf PA, et al. *Arch Intern Med* 1998;158:229-234.

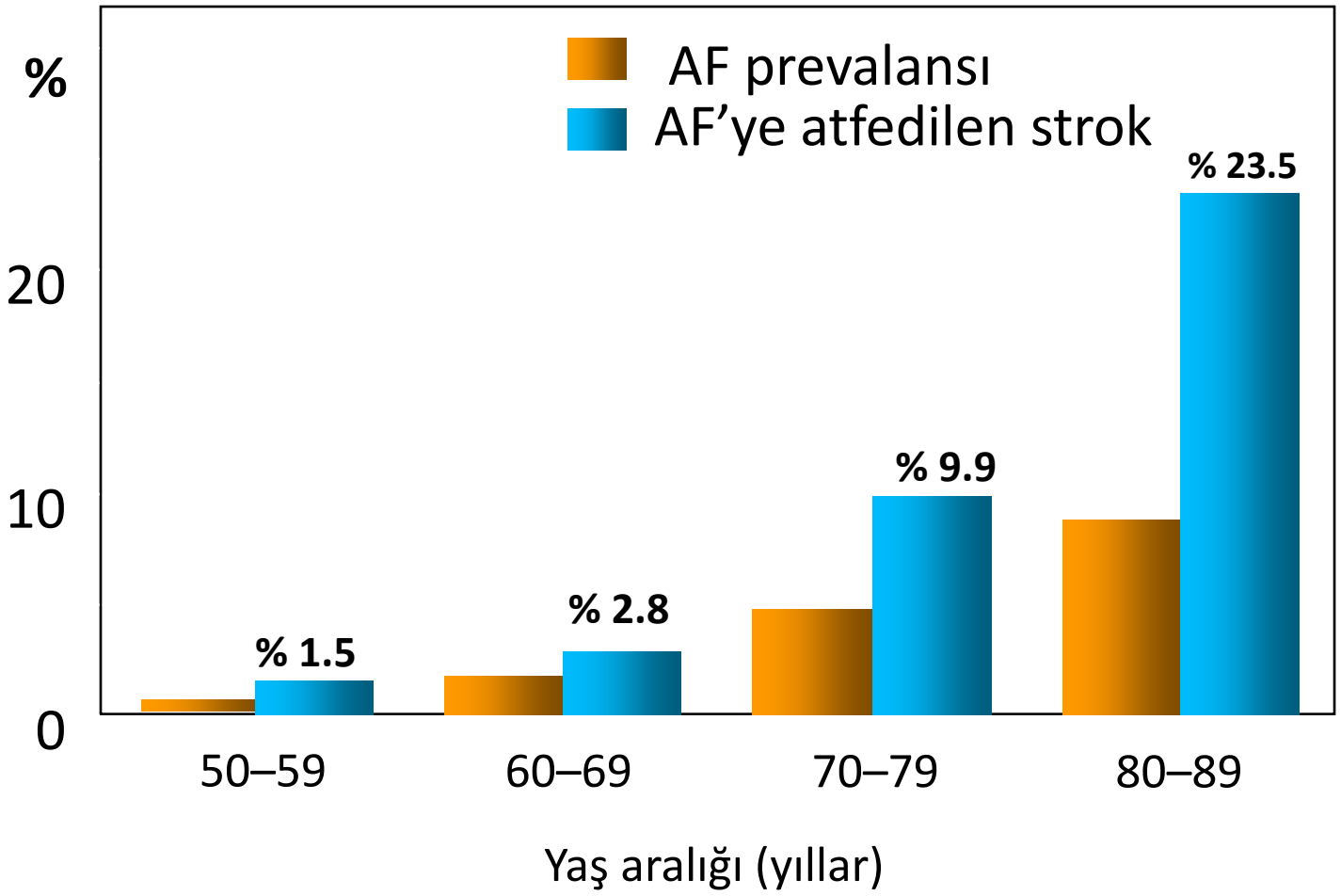
AF - Strok

- İnme AF'nin en korkulan ve en yıkıcı komplikasyondur[1,2]
  - Tüm strokların % 20'si AF'ye bağlıdır
  - AF'ye bağlı inme daha fatal ve şiddetlidir[2]
  - AF'li hastalarda inme riski 5 kat artmıştır[2]



1. Fuster V, et al. Circulation 2006;114:e257-e354;
2. Benjamin EJ, et al. Circulation 1998;98:946-952

AF'ye Atfedilen Strok Riski



Wolf et al. Stroke 1991;22:983-988.

AF'lilerde İskemik Strok ve Periferik Emboliye Cinsiyetin Etkisi

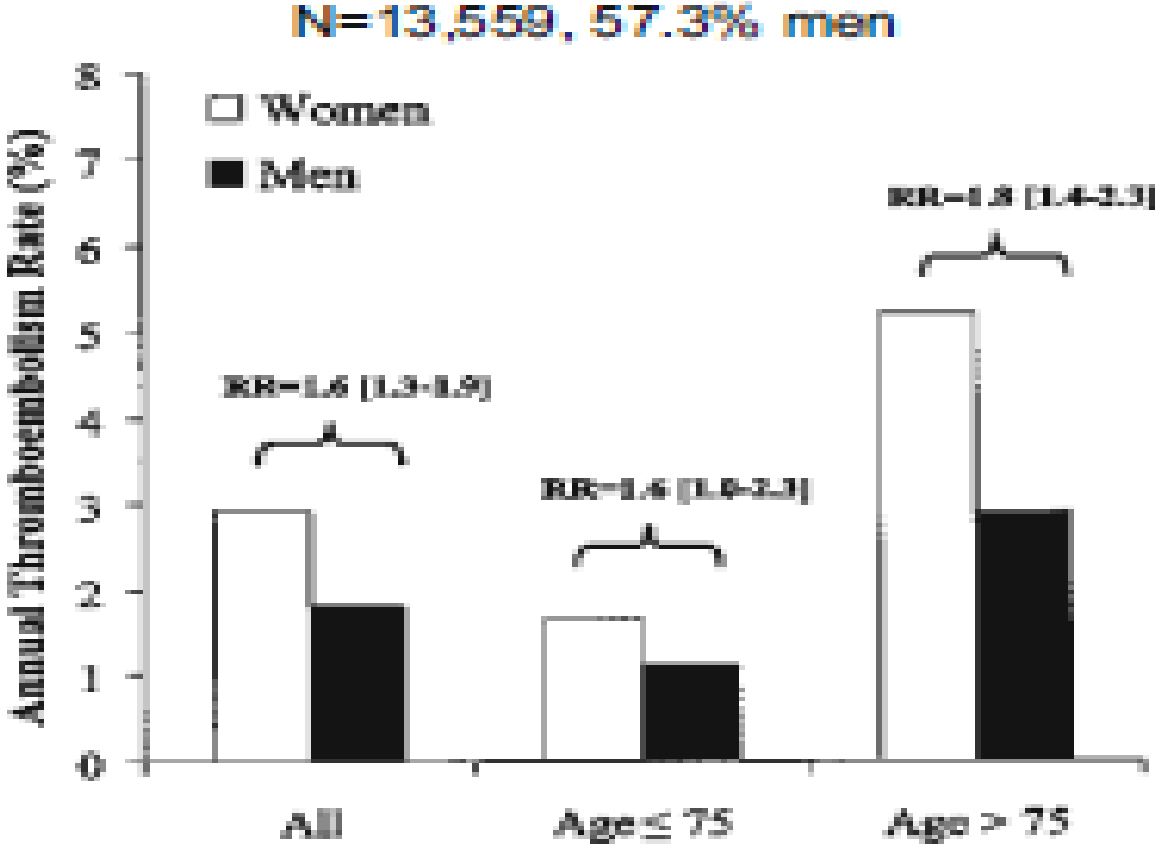


Fig. 7 Effect of gender on risk of ischemic stroke and peripheral embolization in patients with atrial fibrillation. Reproduced from Circulation 2005;112:1687–91. (with permission)

Q J Med 2013; **106**:795–802
doi:10.1093/qjmed/hct129 Advance Access Publication 3 June 2013

Review

QJM

Atrial fibrillation as a risk factor for cognitive impairment: a semi-systematic review

S. UDOMPANICH[1], G.Y.H. LIP[2,*], S. APOSTOLAKIS[2] and D.A. LANE[2,*]

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**These authors contributed equally to this work*

Summary

It is unclear if atrial fibrillation (AF) is an independent risk factor for cognitive impairment. This review evaluates the available evidence and provides an overview of the association between AF and cognitive function. Electronic database searches, January 1990 to December 2012, identified 271 studies comparing the incidence of cognitive impairment and/or dementia in patients with/without AF. Cognitive function was diagnosed by a physician using the mini-mental state examination (MMSE) or other established diagnostic criteria. Studies with <20 participants and without direct comparison to controls in sinus rhythm were excluded. There were no restrictions on the basis of age, language or study design. Full texts of 11 studies were obtained. Eight studies (three cross-sectional, two case-control and three prospective cohorts) reported an association between cognitive decline and AF. Among cross-sectional studies, patients with AF had a 1.7 (95% CI 1.2–2.5) to 3.3 (95% CI 1.6–6.5) greater risk of cognitive impairment, and a 2.3-fold (95% CI 1.4–3.7) increased risk of dementia, compared to patients in sinus rhythm. There was marked heterogeneity in the design, size and quality of studies and reporting of the data which precluded formal meta-analysis. Eight studies reported an association between AF and cognitive impairment and/or dementia, but the magnitude of risk varied. Further large-scale prospective studies are needed to establish whether AF is a risk factor for cognitive decline, utilizing objective measures of cognitive function and neuropsychological testing, and to investigate the potential benefit of anticoagulation on reducing cognitive impairment and development of dementia.

Q J Med 2013; **106**:795–802
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Atrial fibrillation as a risk factor for cognitive impairment: a semi-systematic review

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**These authors contributed equally to this work*

- AF, stroktan bağımsız olarak kognitif fonksiyonların bozulmasını 1.7-3.3 kat artırır
- Demans riskini 2.3 kat artırır

AF- Kalp Yetmezliği

TABLE 2. Prevalence of AF in Patients With Heart Failure as Reflected in Several Heart Failure Trials

Predominant NYHA Class	Prevalence of AF (%)	Study
I	4	SOLVD–Prevention (1992)[14a]
II-III	10 to 26	SOLVD–Treatment (1991)[14b]
		CHF-STAT (1995)[14c]
		MERIT-HF (1999)[14d]
		DIAMOND-CHF (1999)[501]
II-IV	12 to 27	CHARM (2003) Val-HeFT (2003)[848]
III-IV	20 to 29	Middlekauff (1991)[14e]
		Stevenson (1996) GESICA (1994)[14f]
IV	50	CONSENSUS (1987)[14g]

Wattignet WA. Circulation 2003;108:711-6.

AF- Kalp Yetmezliği

Atriyal fibrilasyon,

büyük kalp yetmezliği çalışmalarında

(COMET, Val-HeFT, SOLVD)

mortalite ve morbidite için güçlü ve bağımsız bir risk

faktörü

Poole-Wilson PA, et al. (COMET): randomised controlled trial. *Lancet* 2003;362:7–13.
Maggioni AP, et al. (Val-HeFT). *Am Heart J* 2005;149: 548–57.
Dries DL, et al. The SOLVDtrials. J Am Coll Cardiol 1998;32:695-703.

Circulation
JOURNAL OF THE AMERICAN HEART ASSOCIATION

Increasing Trends in Hospitalization for Atrial Fibrillation in the United States, 1985 Through 1999: Implications for Primary Prevention

Wendy A. Wattigney, George A. Mensah and Janet B. Croft

Circulation. 2003;108:711-716; originally published online July 28, 2003;
doi: 10.1161/01.CIR.0000083722.42033.0A
Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231

Print ISSN: 0009-7322. Online ISSN: 1524-4539

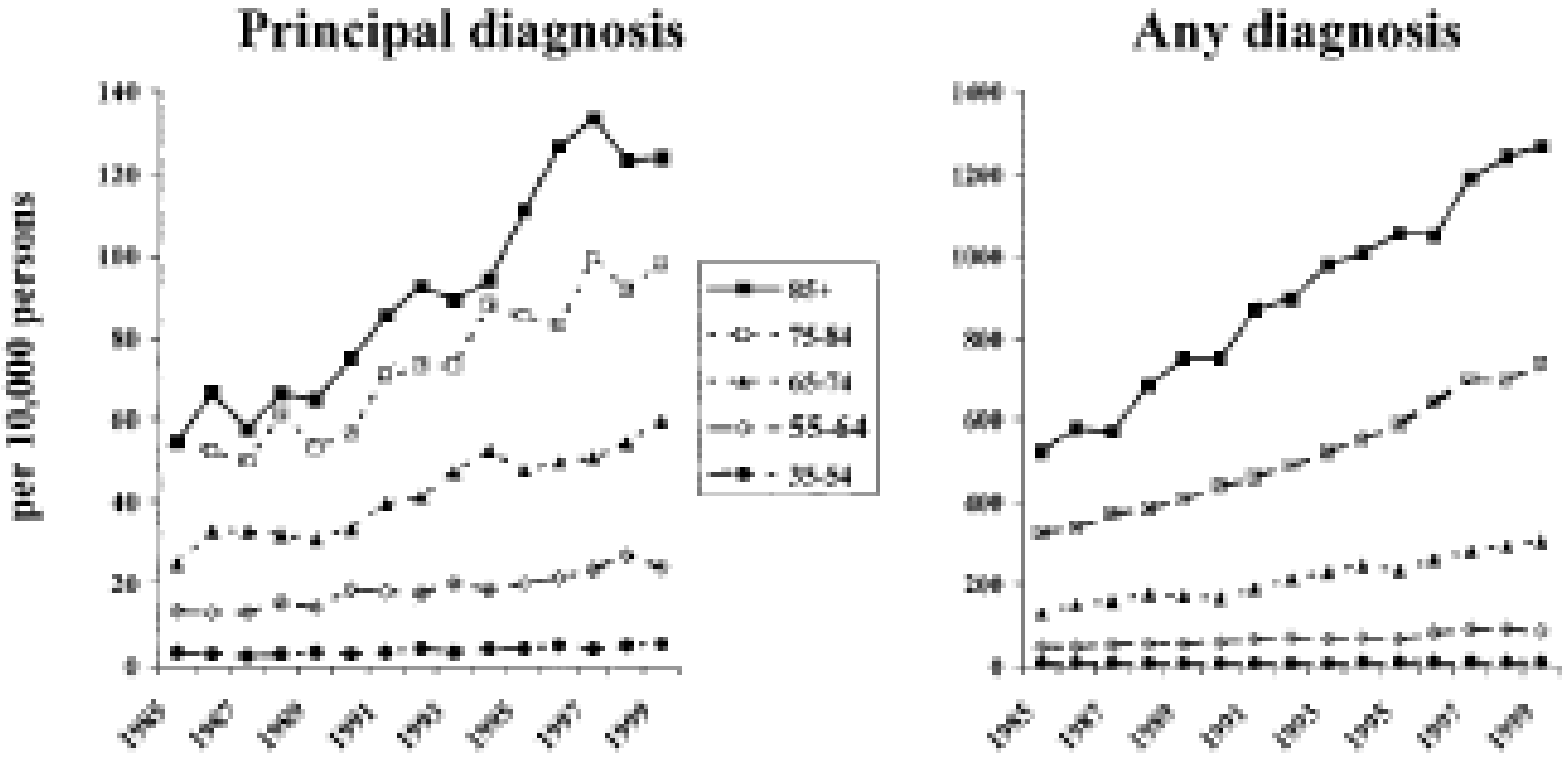
AF-Hastaneye Yatış

TABLE 1. Atrial Fibrillation Hospitalizations and Prevalence (per 10 000 Population) Among Adults ≥35 Years of Age: National Hospital Discharge Survey, 1985 to 1999

	Principal Diagnosis		Any Diagnosis	
Year	Men, No. (per 10 000)	Women, No. (per 10 000)	Men, No. (per 10 000)	Women, No. (per 10 000)
1985	68 608 (14.3)	85 478 (15.1)	364 156 (75.9)	423 594 (75.1)
1986	71 736 (14.7)	92 587 (16.1)	394 380 (80.6)	479 224 (83.5)
1987	76 774 (15.4)	86 310 (14.8)	445 593 (89.2)	494 336 (84.6)
1988	81 412 (16.0)	104 762 (17.6)	495 725 (97.3)	543 986 (91.4)
1989	78 048 (15.0)	98 924 (16.3)	509 661 (97.9)	586 367 (96.8)
1990	97 940 (18.3)	99 090 (16.1)	557 041 (104.2)	583 450 (94.8)
1991	105 541 (19.3)	124 739 (19.9)	603 447 (110.4)	688 688 (109.6)
1992	118 148 (21.1)	128 970 (20.1)	665 293 (118.7)	740 085 (115.3)
1993	117 957 (20.5)	142 637 (21.8)	702 294 (122.3)	811 125 (123.8)
1994	141 824 (24.2)	153 345 (23.0)	780 298 (133.0)	861 625 (129.0)
1995	139 545 (23.3)	156 172 (23.0)	813 026 (135.6)	884 393 (130.1)
1996	147 997 (24.1)	169 469 (24.5)	910 050 (148.1)	977 617 (141.1)
1997	156 677 (25.0)	187 480 (26.6)	960 190 (153.1)	1 118 123 (158.5)
1998	170 811 (26.7)	186 710 (26.0)	1 027 143 (160.5)	1 145 327 (159.2)
1999	167 364 (24.8)	209 123 (27.8)	1 036 422 (153.9)	1 247 251 (165.7)
Relative Increase,* %	143.9 (73.8)	144.6 (83.3)	184.6 (102.8)	194.4 (120.6)

*1999 value minus 1985 value divided by 1985 value multiplied by 100.

AF İçin Hastaneye Yatışların Yaş Spesifik Prevalansı

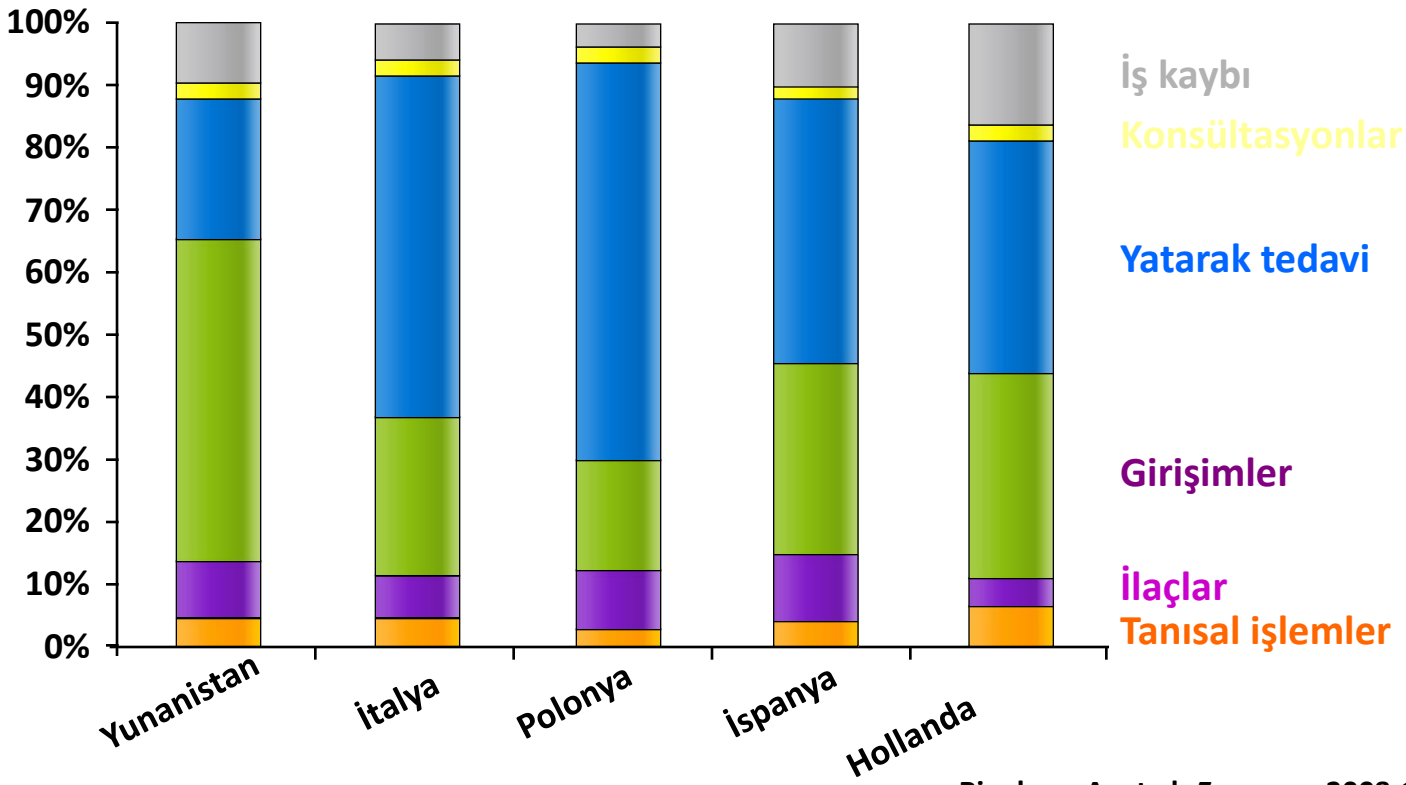


Wattigney WA. Circulation 2003;108:711-716

AF- Maliyet

- Harcamaların %70'i girişimler ve hastane yatışlarıdır

EuroHeart Survey (2004–2005)



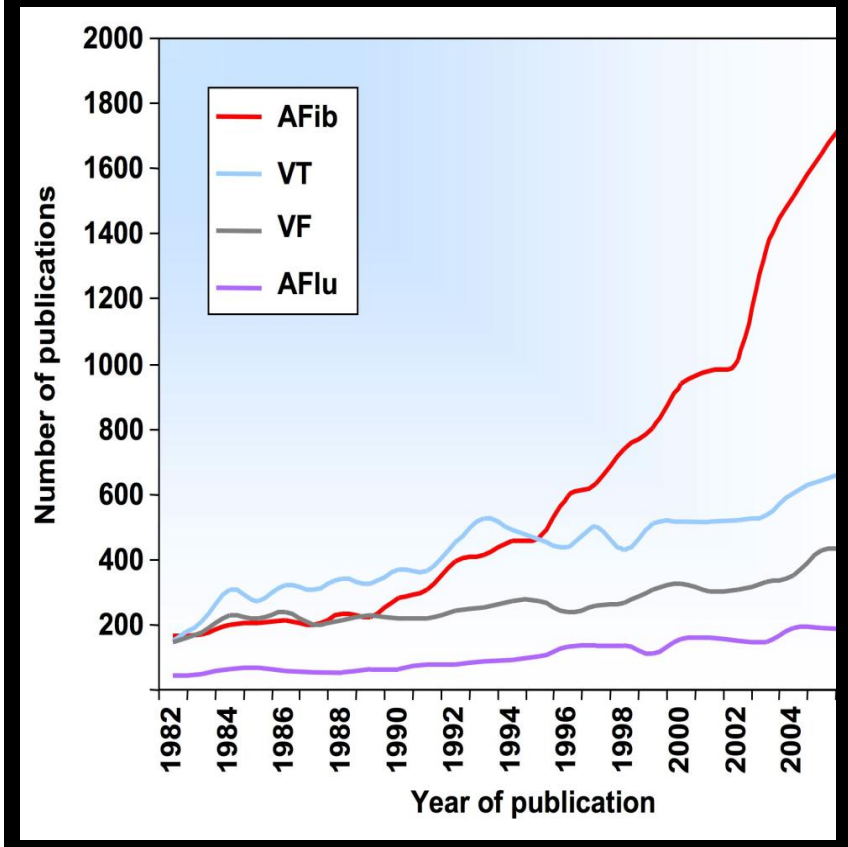
Ringborg A, et al. *Europace* 2008;10:403-411.

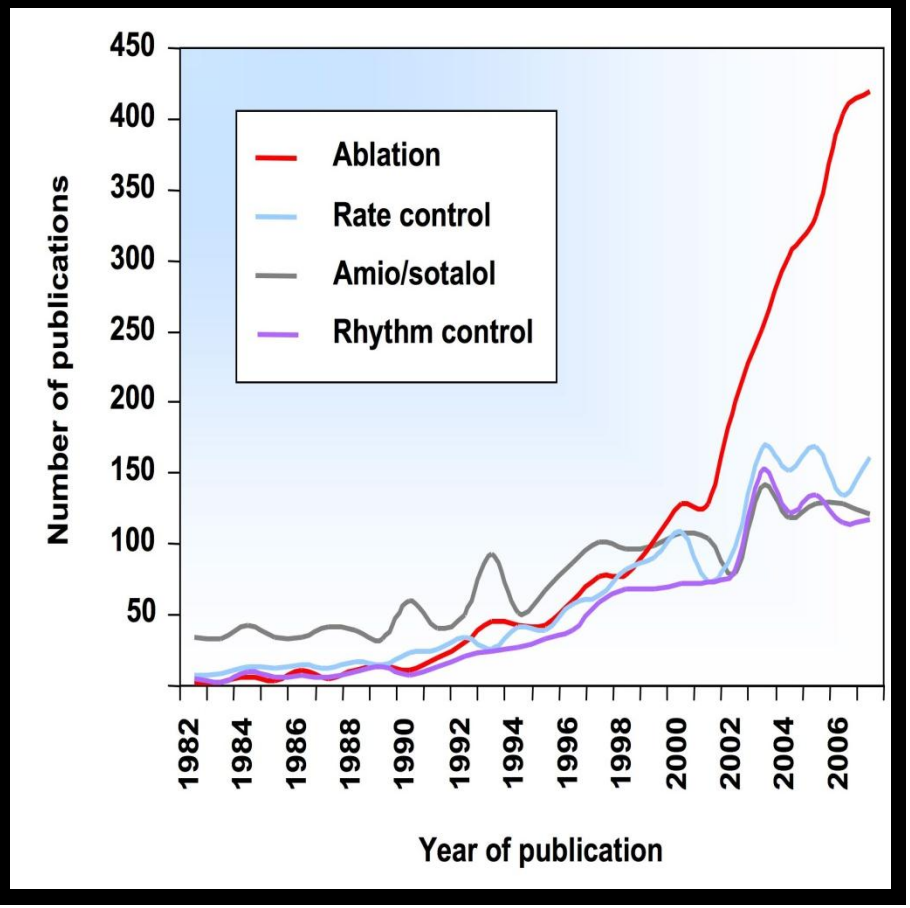
Yaş Gruplarına Göre AF Maliyeti

Yaş	Populasyon yüzdesi	AF Maliyetinin Yüzdesi
< 45	% 63	% 3
45-64	% 24	% 20
65-74	% 6,5	% 24
≥ 75	% 6,2	% 53

Coyne KS. Value in Health 2006;9:348-56.

AF’nin Literatürdeki Yeri





Son Söz

- AF hızla büyümekte olan bir epidemidir.
  - 60 yaş üzeri her 25 kişiden birinde, 80 yaş üzeri her 10 kişiden birinde
- Hem insidans hem de prevalans artan yaşla birlikte artar.
- Gelişmiş ülkelerde AF'li hastalarda en sık altta yatan hastalıklar hipertansiyon ve koroner arter hastalığıdır.
- Gelişmemiş ve gelişmekte olan ülkelerde romatizmal kalp hastalığı hala önemli bir sorundur ve yüksek AF insidansıyla birliktedir.
- Obezite, metabolik sendrom, DM ve OSAS'daki artış AF epidemisine katkıda bulunmaktadır.
- AF özellikle kadınlarda strok ve mortalite artışının bağımsız bir belirleyicisidir.
- AF, sadece sağ kalımı azaltmaz, aynı zamanda yaşam kalitesini de bozar.
- AF, sağlık bakım maliyetini ve hastaneye yatışları artırır.
- Özellikle yaşlılarda AF'nin temel mekanizmalarının ve patofizyolojisinin anlaşılması ve primer koruma stratejilerinin geliştirilmesi zorunlu görünmektedir.