

Atrial Fibrillation in Nursing Home Residents: Prevalence, Comorbidity, Treatment and Outcomes

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The prevalence of atrial fibrillation (AF) is especially high in nursing homes (NH) residents. Most NH residents with AF would be at high risk for embolic stroke. However, they carry a high risk of bleeding and anticoagulation is underused. AF in NH residents in Israel was not investigated.

Objective: To identify the prevalence, comorbidity, treatment and outcomes among NH residents with AF. Methods: Prospective study. All residents (318), between March to July 2007, of 2 public NH, were included. Primary endpoint: death or stroke and secondary endpoint: physical or cognitive decline at 1-year. Results:

	AF patients, n=50 (15.7%)	Non-AF patients, n=268 (84.3%)	p value
Baseline characteristics:			
Age	81.54+/-8.3	79.08+/-12.22	0.173
Female	70%	70.9%	0.891
Hypertension	76%	63.8%	0.428
Ischemic heart disease	64%	22%	<0.0001
Heart failure	50%	12.3%	<0.0001
Prior stroke	50%	31.8%	0.021
Comorbidities	7.24+/-2.24	4.99+/-2.08	<0.0001
Bartel index*	46.34+/-36.06	37.96+/-37.61	0.146
MMSE score**	14.08+/-12.28	10.66+/-11.72	0.061
Treatment:			
Medications	6.64+/-2.44	5.36+/-2.56	0.001
Aspirin	48%	22%	0.032
Warfarin	20%	1.1%	<0.0001
Warfarin and aspirin	6%	0	<0.0001
1-year outcomes:			
Mortality or stroke	36%	24.6%	0.094
Physical or cognitive decline	4%	4.1%	0.973

* Index for functional evaluation, 0-100 (100= independent subjects) ** Mini Mental State Examination, 0-30 (30=normal cognitive function). In multivariable model, AF was not associated with increased risk of the death or stroke (adjusted HR 0.67, 95% CI 0.29-1.66, p=0.418) and physical or cognitive decline (adjusted HR 0.91, 95% CI 0.19-4.23, p=0.906). Predictors of death or stroke were age (p=0.005) and low Bartel functional index (p=0.004). Conclusion: The high prevalence of AF among NH residents is associated with high rates of comorbidity and polypharmacy. Undercoagulation of this population was not associated with increased risk of death or stroke. Thus, guidelines should be adjusted for this unique group of patients with AF.