

ONLINE SUPPLEMENT

Atrial fibrillation is associated with reduced brain volume and cognitive function independent of cerebral infarcts

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Supplemental table 1 (S1): Association between atrial fibrillation (AF) and MRI measured brain volumes: the AGES-Reykjavik Study

	No AF	AF
Total brain volume		
Unadjusted	1082.8 (1079.6-1086.0)	1080.5 (1069.5-1091.5)
Model 1 ^a	1092.4 (1089.6-1095.2)	1076.0 (1066.9-1085.2) ‡
Model 2 ^b	1059.0 (1045.8-1072.3)	1043.7 (1029.1-1058.3) †
Gray matter volume		
Unadjusted	677.3 (675.3-679.3)	669.3 (662.5-676.0) *
Model 1 ^a	682.2 (680.5-684.0)	669.0 (663.2-674.7) ‡
Model 2 ^b	657.6 (649.3-665.8)	645.2 (636.1-654.4) ‡
White matter volume		
Unadjusted	386.0 (384.5-387.5)	386.2 (381.0-391.3)
Model 1 ^a	390.3 (388.9-391.6)	383.9 (379.6-388.3) †
Model 2 ^b	381.4 (375.0-387.7)	376.5 (369.5-383.5) *
WMH volume		
Unadjusted	19.5 (18.8-20.1)	25.1 (22.9-27.3) ‡
Model 1 ^a	19.9 (19.2-20.5)	23.2 (21.0-25.3) †
Model 2 ^b	20.1 (17.0-23.2)	22.0 (18.6-25.4)

Data are mean volume in ml (95% confidence interval). Comparison to no AF: * $P < 0.05$, † $P < 0.01$, ‡ $P < 0.001$

^a Model 1: adjusted for age, sex and education level

^b Model 2: adjusted for age, sex, education level, body mass index, height, smoking, alcohol consumption, hypercholesterolemia, hypertension, diabetes, myocardial infarction and heart failure and cerebral infarcts on MRI

WMH = white matter hyperintensities