

Supplementary Material

Determinants of the Presence and Size of Intracranial Aneurysms in the General Population: the Rotterdam Study

Supplementary Table I. Determinants of Volume of Unruptured Intracranial Aneurysms in Males

Supplementary Table II. Determinants of Volume of Unruptured Intracranial Aneurysms in Females

TABLE I. Determinants of Volume of Unruptured Intracranial Aneurysms in Males

	Difference in Aneurysm Volume (mm ³ per unit increase*)	
	Model 1	Model 2
CARDIOVASCULAR		
Female sex	-	-
Age (per 10 years)	-6.66 (-15.4 ; 2.05)	-38.7 (-137.0 ; 59.6)
BMI (per kg/m ²)	-9.44 (-37.7 ; 18.8)	-23.8 (-55.5 ; 7.81)
Hypertension	-156.9 (-379.9 ; 66.1)	-169.7 (-407.3 ; 67.9)
Smoking		
<i>Never smoking</i>	Ref.	Ref.
<i>Previous smoking</i>	88.7 (-218.5 ; 395.6)	-15.9 (-332.2 ; 300.4)
<i>Current smoking</i>	57.6 (-253.3 ; 368.5)	-92.6 (-419.2 ; 234.0)
Hypercholesterolemia	49.3 (-119.9 ; 218.4)	124.7 (-68.6 ; 317.9)
Diabetes Mellitus	211.8 (-60.1 ; 483.7)	345.0 (39.9 ; 650.1)
CVD history	-13.9 (-207.8 ; 179.9)	-110.8 (-338.9 ; 117.25)
LIFESTYLE		
Diet quality score (per point increase)	-27.8 (-71.7 ; 16.0)	-19.6 (-73.1 ; 34.0)
Physical activity (per 10 MET-hours/week)	-5.29 (-18.4 ; 7.83)	-1.7 (-18.3 ; 14.8)
Alcohol (per glass/day)	3.11 (-4.46 ; 10.7)	3.01 (-5.25 ; 11.3)
INFLAMMATORY		
CRP (per mg/L)	-32.2 (-130.6 ; 66.3)	-61.7 (-277.4 ; 154.0)
WBC count (per 1 x 10 ⁹ /L)	16.8 (-25.2 ; 58.6)	11.4 (-34.7 ; 57.4)
HORMONAL		
Estradiol (per 100 pmol/L)	-123.2 (-792.5 ; 546.0)	229.1 (-1169 ; 1628)

Missing values for this analysis were present for diet score (22.5%), physical activity (50%), CRP (60%) and estradiol (60%). CVD indicates history of stroke or coronary heart disease, meaning history of myocardial infarction or percutaneous coronary intervention. CRP indicates C-reactive protein.

Values represent difference in aneurysm volume with 95% CI. 40 participants included in analysis.

Model 1: Adjusted for sex and age

Model 2: Adjusted for sex, age, BMI, hypertension, smoking status, hypercholesterolemia, CVD history, and diabetes mellitus.

*Unless indicated differently

TABLE II. Determinants of Volume of Unruptured Intracranial Aneurysms in Females

	Difference in Aneurysm Volume (mm ³ per unit increase*)	
	Model 1	Model 2
CARDIOVASCULAR		
Female sex	-	-
Age (per 10 years)	51.3 (-3.9 ; 106.4)	32.9 (-36.8 ; 100.7)
BMI (per kg/m ²)	-9.5 (-25.9 ; 6.8)	-11.2 (-28.8 ; 6.5)
Hypertension	42.8 (-117.3 ; 203.0)	67.7 (-105.4 ; 240.8)
Smoking		
<i>Never smoking</i>	Ref.	Ref.
<i>Previous smoking</i>	-77.9 (-251.2 ; 95.3)	-96.3 (-276.0 ; 83.4)
<i>Current smoking</i>	-82.3 (-282.7 ; 118.1)	-116.5 (-328.0 ; 94.9)
Hypercholesterolemia	78.9 (-57.2 ; 215.0)	65.7 (-76.3 ; 207.8)
Diabetes Mellitus	-115.1 (-371.6 ; 141.3)	-108.1 (-387.0 ; 170.7)
CVD history	14.6 (-218.6 ; 247.7)	54.8 (-198.3 ; 307.8)
LIFESTYLE		
Diet quality score (per point increase)	-5.54 (-28.4 ; 17.3)	-6.44 (-30.0 ; 17.2)
Physical activity (per 10 MET-hours/week)	-16.2 (-45.5 ; 13.1)	-21.7 (-52.7 ; 9.3)
Alcohol (per glass/day)	0.6 (-9.5 ; 10.7)	0.83 (-9.7 ; 11.4)
INFLAMMATORY		
CRP (per mg/L)	-4.73 (-25.4 ; 15.9)	-0.89 (-27.4 ; 25.6)
WBC count (per 1 x 10 ⁹ /L)	29.4 (-5.2 ; 64.0)	37.0 (-0.4 ; 74.5)
HORMONAL		
Estradiol (per 100 pmol/L)	0.33 (-24.6 ; 25.2)	0.58 (-28.2 ; 27.1)

Missing values for this analysis were present for diabetes mellitus (2.2%), diet score (23.3%), physical activity (45.6%), alcohol intake (5.6%), CRP (48.9%), WBC count (2.2%) and estradiol (48.9%). CVD indicates history of stroke or coronary heart disease, meaning history of myocardial infarction or percutaneous coronary intervention. CRP indicates C-reactive protein.

Values represent difference in aneurysm volume with 95% CI. 90 participants included in analysis.

Model 1: Adjusted for sex and age

Model 2: Adjusted for sex, age, BMI, hypertension, smoking status, hypercholesterolemia, CVD history, and diabetes mellitus.

*Unless indicated differently