

Metabolic syndrome and localization of white matter hyperintensities in the elderly population.

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APPENDIX

Table A: Factors associated with total WMH volumes categorized in tertiles

| | WMH volumes | | |
|---|----------------------|-----------------------|-------------------|
| | Low levels (<0.7 mL) | High levels (≥0.7 mL) | p-value |
| Median, (25 th -50 th percentile) | 0.30, (0.10-0.40) | 1.75, (0.80-1.75) | |
| Women, % | 53.7 | 52.0 | 0.76 |
| Age, m (SD) | 70.2 (3.7) | 72.1 (4.1) | <10 ⁻⁴ |
| No academic qualification /primary school, % | 17.5 | 19.6 | 0.85 |
| Current smokers, % | 7.5 | 8.8 | 0.92 |
| Use of lipid lowering drugs, % | 22.5 | 25.0 | 0.60 |
| Performances in MMSE, m (SD) | 27.8 (1.4) | 27.5 (1.6) | 0.10 |
| ApoE4 genotype (heterozygote), % | 17.5 | 23.6 | 0.18 |
| Total cranial volume (ml), m (SD) | 1460.6 (127.0) | 1467.7(129.3) | 0.63 |

MMSE: mini mental state examination; ApoE4: ε4 allele of the Apolipoprotein E (having at least one copy), WMH: white matter hyperintensities.
M (SD): means (standard deviation)

Table B: Association between each MetS components and total WMH volumes.

| MetS criteria | Total n, % exposed | Levels of WMH volumes | |
|-------------------------|-----------------------|--|------|
| | | OR (95% CI) of having high levels of WMH volumes (≥ 0.7 mL)* | p |
| Central obesity | 292, 18.1% | 1.57 (0.84;2.94) | 0.16 |
| High Triglycerides | 308, 14.9% | 1.25 (0.65; 2.39) | 0.50 |
| Low HDL-cholesterol | 308, 8.1% | 1.81 (0.77;4.27) | 0.17 |
| Hypertension | 304, 80.6% | 1.87 (1.00; 3.50) | 0.05 |
| High FBG | 324, 9.4% | 1.14 (0.51; 2.56) | 0.75 |
| Number of MetS criteria | 288 | 1.31 (1.01-1.71) | 0.04 |

WMH: White matter hyperintensities, MetS: Metabolic Syndrome, HDL: high density lipoprotein, FBG : Fasting Blood Glucose

OR (95% CI) : odds ratio accompanied with its 95% confidence interval,

* Odds ratio adjusted for age at baseline (by year), sex, educational attainment, smoking, use of lipids lowering drugs MMSE scores, allele $\epsilon 4$ of apolipoprotein E and total cranial volume - Results of logistic regression models -