

P103: Middle Cerebral Artery Stenosis is Associated with Severity of Depression in Elderly Patients: Magnetic Resonance Angiography (MRA) Findings

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Objective: Vascular abnormalities have been frequently reported in elderly adults as a potential risk factor of late-life depression. However, it is still unclear whether stenosis of cerebral arteries may increase risk of depression in the elderly.

Methods: Study participants were 365 patients 65 years or older with depressive disorder who had undergone brain MRI and angiography (MRA) which were assessed by trained radiologists, and the 15-item Geriatric Depression Scale (GDS-15) and the Mini Mental State Examination (MMSE), and blood glucose and lipid profiles.

Results: Of the 365 subjects, 108 had at least one location of cerebral artery stenosis (29.59%). Stenosis was associated with age, marital status, infarction, and atherosclerosis. In multivariable linear regression analysis of different locations of stenosis among the whole sample, only bilateral middle cerebral artery (MCA) stenosis was found to have a significant association with higher GDS-15 score ($p=0.0138$), and more than 8 scores in the GDS-15 ($p=0.0045$), but no significant associations with ACA (anterior cerebral artery), PCA (posterior cerebral artery) or ICA (internal carotid artery). In multivariable linear logistic analysis of different locations among patients with at least one cerebral artery stenosis, left MCA was found to be significantly related to higher GDS-15 scores but not with right MCA ($p=0.0202$).

Conclusion: MCA stenosis is significantly associated with severity of depression in elderly adults with cerebral artery stenosis, especially in those with left MCA stenosis.

Key points

- Patients with cerebral artery stenosis found with brain magnetic resonance angiography (MRA) were associated with higher depression severity.
- Stenosis of both left and right middle cerebral artery (MCA) was associated with greater depression severity, with left MCA stenosis having a greater influence on depression severity than right MCA stenosis.
- Higher depression severity in patients with MCA stenosis suggests that depression in elderly patients is mediated at least in part by vascular pathology of MCA supplied regions and careful investigation and management of cerebral artery stenosis and their risk factors may help reduce the severity of depression in elderly patients who visit psychiatrists.

P107: Paranoid Ideation Without Psychosis Is Associated With Depression, Anxiety, and Suicide Attempts in General Population

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This study aimed to characterize the association between paranoid ideation without psychosis (PIP) and suicide attempts in a general population. A total of 12,532 adults were randomly selected as the study sample through one-person-per-household method. Subjects completed a face-to-face interview. Among 12,532 subjects, 471 (3.76%) met criteria for the PIP group. The PIP group was younger with more divorced/widowed/separated and lower income than the non-PIP group. The PIP group showed more than fivefold higher lifetime suicide attempt (LSA) rates and ninefold multiple attempt rates than the non-PIP group. Among PIP symptoms, "spouse was being unfaithful" showed the strongest association with LSA (adjusted odds ratio [AOR], 4.49; 95% confidence interval, 2.95-6.85). Major depressive disorder (MDD) in combination with PIP was associated with a higher risk of LSA (AOR, 15.39; 95% confidence interval, 9.63-24.59) compared with subjects without MDD or PIP. In conclusion, PIP, especially "doubting spouse," was significantly associated with LSA. PIP in combination with comorbid MDD showed higher risk of LSA than subjects without PIP or MDD.

P113: Psychosocial interventions for dementia grief- a systematic review

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