LETTER TO THE EDITOR

Preeclampsia – A risk factor for dementia in women

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Dear Editor, Dementia is a broad term that includes a spectrum of diseases that affect our cognition, thinking ability, and performance of daily activities. According to the World Health Organization, at present, more than 55 million people around the world are suffering from dementia, and over 60% of whom live in countries that have middle to low socioeconomic status. Nearly 10 million new cases of dementia present every year.

The risk factors for developing dementia include age (more common in those 65 or older), high blood pressure, high blood glucose, overweight or obesity, cigarette smoking, too much alcohol consumption, sedentary lifestyle, social isolation, air pollution, head trauma, hearing disorders and having depression or anxiety.[1] According to World Health Organization, women are affected by dementia disproportionately, both directly and indirectly and experience higher disability-adjusted life years and mortality due to dementia, but also provide 70% of care hours for people living with dementia. This disproportionate involvement of women in dementia points towards the possibility of a gender related cause of dementia in women.

A recent systemic review and meta-analysis published in American Journal of Obstetrics and Gynaecology, shows increased future risk of vascular dementia in women whose pregnancies were complicated by Preeclampsia.[2] This corroborates the earlier studies that also show a correlation between dementia and hypertensive disorders of pregnancy. A Systematic Review and Meta-Analysis published in 2021 had also concluded that hypertensive disorders of pregnancy were found to be associated with a 1.2- to 1.4-fold increased risk of Alzheimer's disease and other dementia and a 3-fold increased risk of future vascular dementia.[3] A study published in 2010 shows the existence of striking parallels between the (epi)genetic features of pre-eclampsia and late-onset Alzheimer's disease for the genes that are located on 10q22. Its data indicates that STOX1 gene controls a conserved pathway shared between placenta and brain with overexpression in late-onset Alzheimer's disease.[4] These findings necessitate further high-quality research with sufficiently long follow-up periods for outcome development so that this correlation is better assessed. With better understanding of risk factors for dementia, we can probably control the incidence of dementia by prevention of these risk factors.

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