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Exploring the Risk Factors of Eye Health and Dementia: Insights and Implications

Riffat Mehboob^{1,2}

¹National Heart, Lung and Blood Institute, National Institute of Health, Bethesda, United States of America ²Lahore Medical Research Center^{LLP}, Lahore, Pakistan

riffat.pathol@gmail.com

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Maintaining good eye health is important for overall well-being because taking care of your eyes is not only crucial for vision but may also play a role in preserving cognitive functions. Recent research shows that poor vision itself can contribute to cognitive decline by limiting the mental stimulating activities. Dementia is not a natural part of ageing it develop when brain is damaged by some disease. The decline in the cognitive functioning like thinking, reasoning and remembering which disrupts the daily life activities. To stop the progression of dementia no effective treatment was available yet so the growing prevalence of dementia has prompted researchers to identify the risk factors to control and prevent dementia. Evidence suggests that various conditions affecting whole body are also modified risk factors for dementia. Numerous studies suggest that systemic conditions like obesity, hypertension, depression and diabetes increase the risk of dementia [1]. When these conditions combine with vision impairment, the risk of dementia is notably higher. Eye conditions such as cataracts, glaucoma, age related macular degeneration (AMD) and diabetes retinopathy are most prevalent in increasing the risk of developing dementia. Several studies have been proposed the relationship between eye health and dementia. Microvascular damage in diabetic retinopathy can increase the risk of dementia. Vision loss due to contracts or any other condition has been link to an increased link of cognitive decline. Regular eye checkup could serve as a valuable tool for early detection of dementia risk. Furthermore, the loss of sensory input may exacerbate brain changes and are associated with dementia [2]. According to recent research it was concluded that age related muscular degeneration and diabetes related eye diseases are associated with an increased likelihood of developing dementia [3]. The association between dementia and eye health underscore the complex connection between the brain and different body systems. By recognizing these conditions healthcare providers can adopt more holistic approaches to patient care. In the era of increasing dementia researchers are ongoing to develop an eye test that helps to detect the early signs of dementia. However, ongoing studies in this era aim to detect the early stages of cognitive decline associated with dementia.

REFERENCES

- [1] Livingston G, Huntley J, Sommerlad A, Ames D, Ballard C, Banerjee S et al. Dementia prevention, intervention, and care: 2020 report of the Lancet Commission. The Lancet. 2020 Aug; 396(10248): 413-46. doi: 10.1016/S0140-6736(20)30367-6.
- [2] Shang X, Zhu Z, Huang Y, Zhang X, Wang W, Shi D *et al.* Associations of ophthalmic and systemic conditions with incident dementia in the UK Biobank. British Journal of Ophthalmology. 2023 Feb; 107(2): 275-82. doi: 10.1136/bjophthalmol-20 21-319508.
- [3] Saunier V, Merle BM, Delyfer MN, Cougnard-Grégoire A, Rougier MB, Amouyel P et al. Incidence of and risk factors associated with age-related macular degeneration: four-year follow-up from the ALIENOR study. JAMA Ophthalmology. 2018 May; 136(5): 473-81. doi: 10.1001/jamaophthalmol.2018.0504.