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**The use of drugs affecting the glymphatic system in the therapy of patients with Alzheimer's disease**

**Viacheslav Viktorovich Sushko**

National University Odessa Law Academy, Ukraine

**Background:** The glymphatic system is a functional pathway for filtering cerebrospinal fluid through the brain parenchyma and removing products of cell metabolism from the central nervous system. One of the causes of Alzheimer's disease is now considered to be a malfunction of the glymphatic system.

**Method:** We followed 4 women aged 65-70 years with a diagnosis of Alzheimer's disease. They were treated in the department according to Alzheimer's disease treatment standards. During periodic examination by an ophthalmologist, they were diagnosed with stage I (initial) glaucoma - a blind spot interfering with normal peripheral vision was detected, as well as a deepening of the optic disc in the central zone. For a glaucoma treatment, they have prescribed Acetazolamide - 125 mg once a day in the morning for 7 days with weekly monitoring of intraocular pressure. They also received Asparkam 1 tablet 3 times a day during Acetazolamide administration to prevent deficiency of potassium ions in the body. After 11-14 days, intraocular pressure normalized and, they discontinued Acetazolamide. To monitor the dynamics of cognitive impairment, patients on the unit took the Trail Making Test Parts A & B paper-and-pencil version every month.

**Results:** Before glaucoma treatment, patients' speed of Trail Making Test task A was 84, 87, 90, and 92 seconds. The speed of Trail Making Test task B was 270, 293, 300, and 305 seconds. After two weeks of glaucoma treatment, patients again completed the Trail Making Test Parts A & B paper-pencil version. The patients' speeds for task A were 60, 63, 68, and 70 seconds. The speed of task B was 180, 190, 194, and 217 seconds.

**Conclusion:** Acetazolamide can be recommended for inclusion in the treatment of patients with Alzheimer's disease.

**References**

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[viacheslavsushko@yahoo.com](mailto:viacheslavsushko@yahoo.com)