

Angiotensin receptor blockers associated with lower risk of Alzheimer's disease

January 13 2010

Researchers from Boston University School of Medicine (BUSM) have found that angiotensin receptor blockers (ARBs) -- a particular class of anti-hypertensive medicines -- are associated with a striking decrease in the occurrence and progression of dementia. These findings appear in the January issue of the *British Medical Journal*.

Using data from the Decision Support System Database of the U.S. Department of Health System Veterans Affairs (with information on more than 5 million people), the BUSM researchers looked at records from patients who used ARBs, and compared them with subjects who had a similar health status, but were taking different medications. They found patients taking ARBs had up to a 50 percent lower chance of getting Alzheimer's disease or [dementia](#). Patients taking two forms of medications targeting the angiotensin system, ARBs and Angiotensin Converting Enzyme (ACE) inhibitors, had a 55 percent lower risk of dementia.

The researchers also examined patients who were already suffering from Alzheimer's disease or dementia, and found those subjects had up to a 67 percent lower chance of being admitted to nursing homes or dying if they were taking both ARBs and ACE inhibitors. Patients who appeared to benefit particularly well from use of ARBs were those who had experienced strokes before or during the course of their illness.

According to the BUSM researchers these results suggest that ARBs might protect against developing Alzheimer's disease and dementia. "For

those who already have dementia, use of ARBs might delay deterioration of [brain function](#) and help keep patients out of [nursing homes](#)," said senior author Benjamin Wolozin, MD, PhD, a professor of pharmacology at BUSM. "The study is particularly interesting because we compared the effects of ARBs to other medications used for treating blood pressure or [cardiovascular disease](#). This suggests that ARBs are more effective than other blood pressure and cardiovascular medications for preventing Alzheimer's disease or dementia," he added.

Although the researchers are unsure why ARBs might be so beneficial, they believe one possibility suggested by prior studies on animal models is that ARBs help prevent nerve cell injury from blood vessel damage or help promote nerve cell recovery after blood vessel damage. The authors also speculate that ARBs might help protect the blood vessels in the brain against damage related to cardiovascular disease. Damage to blood vessels is thought to reduce brain capacity and promote dementia, so reducing this damage might prevent the occurrence or progression of dementia.

Provided by Boston University Medical Center

Citation: Angiotensin receptor blockers associated with lower risk of Alzheimer's disease (2010, January 13) retrieved 28 April 2024 from <https://medicalxpress.com/news/2010-01-angiotensin-receptor-blockers-alzheimer-disease.html>

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