

Drugs targeting blood vessels may be candidates for treating Alzheimer's

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(Medical Xpress)—University of British Columbia researchers have successfully normalized the production of blood vessels in the brain of mice with Alzheimer's disease (AD) by immunizing them with amyloid beta, a protein widely associated with the disease.

While AD is typically characterized by a build-up of plaques in the brain, [recent research](#) by the UBC team showed a near doubling of blood vessels in the brain of mice and humans with AD.

The new study, published online last week in *Scientific Reports*, a *Nature* journal, shows a reduction of brain [capillaries](#) in mice immunized with amyloid beta – a phenomenon subsequently corroborated by human clinical data – as well as a reduction of plaque build-up.

"The discovery provides further evidence of the role that an overabundance of [brain blood vessels](#) plays in AD, as well as the potential efficacy of amyloid beta as basis for an AD vaccine," says lead investigator Wilfred Jefferies, a professor in UBC's Michael Smith Laboratories.

"Now that we know [blood vessel growth](#) is a factor in AD, it follows that drugs targeting blood vessels may be good candidates as an AD treatment."

AD accounts for two-thirds of all cases of [dementia](#). The number of Canadians living with dementia is expected to reach 1.4 million by 2013,

according to the Alzheimer's Society of Canada.

More information: [www.nature.com/srep/2013/13022 ...
/full/srep01354.html](http://www.nature.com/srep/2013/13022.../full/srep01354.html)

Provided by University of British Columbia

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