

Hypertension may predict dementia in older adults

FEBRUARY 18, 2010 | Emma Hitt, PhD

London, ON - Hypertension appears to predict progression to dementia in older adults with a specific form of cognitive deficiency—in executive function—but not in those with memory dysfunction, according to a report in the February 2010 issue of the *Archives of Neurology* [1].

Drs Shahram Oveisgharan and **Vladimir Hachinski**, (University of Western Ontario, London) report that hypertension predicted progression to dementia in a subgroup of about one-third of those with cognitive impairment, but no dementia.

"Control of hypertension in this population could decrease by one-half the projected 50% five-year rate of progression to dementia," they conclude.

Midlife hypertension is considered a risk factor for the development of dementia in late life, the authors write. However, in the case of mild cognitive impairment vs dementia, distinct domains may be affected, such as memory function or executive function (the ability to plan and initiate/inhibit complex behaviors).

This analysis used data from the **Canadian Study of Health and Aging**, a community-based cohort study. Included were 990 adults, average age 83, who had cognitive impairment but no dementia.

Over the course of the five-year follow-up period, the presence of hypertension had no effect on the occurrence of dementia; 59.5% of individuals with high blood pressure vs 64.2% of those without developed dementia. Likewise, no difference in the incidence of dementia was present in participants with memory dysfunction alone or with both memory and executive dysfunction.

In contrast, among participants with only executive dysfunction, the presence of hypertension was associated with an increased risk of developing dementia. In all, 57.7% of those with high blood pressure and executive dysfunction progressed to dementia, vs. 28% of those with executive dysfunction but without hypertension.

"We were not surprised by the findings because the brunt of vascular damage [from hypertension] is in the parts of the brain that regulate executive function," Hachinski said in an interview.



According to Hachinski, treating hypertension using psychological, sociological, and pharmacological means may help prevent or delay progression to dementia in individuals with executive dysfunction.

"We must shift our thinking about cognitive impairment from late to early, from dogma-dictated exclusionary diagnoses to data-derived pragmatic categories and from effects to causes," he said

Source – Heartwire

1. Oveisgharan S, Hachinski V. Hypertension, executive dysfunction, and progression to dementia: the Canadian study of health and aging. *Arch Neurol* 2010; 67:187-192.

