NEW FACTS ABOUT...

# Stroke
## *in older adults*

Stroke is a leading cause of serious long-term disability[1] and the third leading cause of death in the United States.[2] About 72 percent of people who suffer from a stroke in any given year are over age 65, and more than 88 percent of the deaths resulting from stroke occur in this population.[1] It affects between 6 percent and 8 percent of community-dwelling elders over age 65.[3] Moreover, for people over age 55, the incidence of stroke more than doubles with each successive decade.[1] Established risk factors for stroke include prior stroke, hypertension, cigarette smoking, atrial fibrillation (AF), transient ischemic attacks (TIAs) and elevated cholesterol.[4,5] Among those aged 65–74, 57 percent of men and 61 percent of women have high blood pressure.[1] Both active and passive cigarette smoking play a major role in the progression of atherosclerosis.[6,7] The attributable risk of stroke from AF increases strikingly with age from 3 percent among those aged 60–69 years to 24 percent of those aged 80–89 years.[8] A history of TIAs suggests someone is nearly 10 times more at risk for a stroke than someone of the same sex and age without this same history.[4] Cardiac risk factors shown to increase the risk of stroke include valvular heart disease, myocardial infarction, coronary artery disease, heart failure and electrocardiographic evidence of left ventricular hypertrophy.[9] In diabetics, the relative risk of ischemic stroke ranges from 1.5 to 3.0 and probably depends on the severity and type of diabetes.[9]

Given the poor outcomes associated with stroke, methods to prevent stroke have received research priority. The following are some findings in the recent literature related to the prevention and management of stroke:

*There is a 34–35 percent reduction in stroke among hypertensive elders treated with blood pressure lowering medications.*[10,11]

*In patients under 75 years with AF who do not have a history of hypertension, cardioembolus, or heart failure, direct evidence indicates that, compared to a placebo, aspirin reduces the risk of stroke, and, compared to aspirin, warfarin further reduces the risk.*[12–16]

*Direct evidence supports the use of carotid endarterectomy for male patients with symptomatic disease (manifested by transient ischemic attacks [TIAs], small stroke, or stroke with recovery in the side ipsilateral to stenosis) who receive surgery at hospitals with low (<6 percent) 30-day morbidity and mortality rates.*[17,18] *A similar conclusion for women could not be reached since an insufficient number were enrolled in the clinical trials.*

*Direct evidence also supports the use of carotid endarterectomy for male patients with high-grade stenosis who are asymptomatic and have lower surgical risk (<3 percent).*[19,20] *A similar conclusion for women could not be reached since an insufficient number were enrolled in the clinical trials.*

*Admission to specialized stroke units has been shown to improve multiple outcomes, including physical function, quality of life, survival rate, and length of hospitalization.*[21–26]

There are effective ways to help prevent stroke and to improve outcomes for patients who have stroke. However, very few clinical studies have focused directly on the vulnerable elderly, a significant deficiency given that these individuals have such a high incidence of stroke.

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