



American Medical Women's Association

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Position Paper on Principals of Cerebrovascular Disease in Women

Stroke is the third leading cause of death in the United States, a major source of disability, and possibly the single most common factor in age-related dementia. Because of their longer life expectancy, women represent over one-half of the 3 million stroke survivors in the United States (1,2). Groups at greatest risk are African American women and those over 75 years of age. Most women tend to suffer their stroke after age 70 at a time when social and family support systems are dwindling and comorbidity darkens the outlook for recovery of functional independence. Women are also affected by stroke in family members in their role as principal care giver of their family.

AMWA supports widespread efforts to prevent stroke through risk factor modification, patient and general public education, and urges its members to encourage their patients to participate in primary and secondary prevention trials. AMWA strongly supports efforts to define and alleviate the causes of increased incidence of cerebrovascular disease among African American women.

The implications of gender-specific risk factors, such as multiparity (3), current and remote use of oral contraceptives (4), and the increased susceptibility of women to the cerebrovascular complications of diabetes (5) need to be addressed so that safer contraceptive agents can be devised, and subgroups of women are clearly defined.

AMWA urges that gender-specific considerations in the primary and secondary stroke prevention efforts be always in mind. In contrast to men, atherosclerotic cerebrovascular disease in women tends to be intracranial. This may explain why women with appropriate internal carotid artery stenosis have not benefited from prophylactic carotid endarterectomy (6,7). Therefore, while prophylactic carotid artery endarterectomy may be beneficial for men, alternate methods of prevention need to be devised for women.

Conversely, there are strong indications but no double blind controlled studies suggesting that postmenopausal estrogen replacement with or without progestin decreases the risk of stroke in women (8). The cost of widespread prescription of estrogen for the prevention of cerebrovascular disease is considerable and such a practice may confer other risks. Therefore, in our cost-sensitive environment, it is important that such long-term studies are carried out, and the necessary duration or therapy and target groups of women be defined as clearly as possible.

Aspirin has been shown to reduce the risk of recurrent stroke in women and to prevent strokes in women after transient ischemic attacks, as reported by the Aspirin Strategy Group. The U.S. Food and Drug Administration has approved labeling of aspirin for these purposes.

Antiplatelet therapy is one of the mainstays of secondary stroke prevention. In a study of a small number of subjects, ticlopidine was shown to be superior to aspirin in patients with intracranial atherosclerosis, with diabetes, and possibly in women. The intracranial preponderance of atherosclerosis in women and their greater susceptibility to the cerebrovascular complications of diabetes makes these observations of particular importance to women. These findings, however, need to be replicated in a large number of subjects. At present, the high cost of Ticlopidine and its potential side effects (9) do not justify its routine use in women in preference to aspirin.

The economic burden of stroke to society is great (1) as is the burden to the victim and their families. The ever decreasing length of hospital stay makes it necessary for stroke patients to be discharged before achieving adequate recovery and taxes community and family resources. The development of stroke clinical pathways tend to decrease the cost of hospitalization and improve patient outcome. Patients treated in specialized stroke units tend to achieve a better functional outcome at the time of discharge from the hospital (10). The role of such units will become even more significant if the use of thrombolytic agents, and neuroprotective agents now under intensive investigation become the standard of practice.

AMWA believes that it is imperative that an adequate number of women be included in all primary and secondary prevention trials. The lower incidence of stroke in women and lower recurrence rate might require a greater number of women in order for the effectiveness of an intervention to become apparent. Stroke therapy trials should also include adequate numbers of women. Special consideration needs to be given to women over 75 years old who are the group most at risk and who may not derive the same benefit or suffer an unacceptable complication rate from an intervention beneficial for younger women.

AMWA supports intensive community education efforts with regard to stroke symptom recognition, immediate response and public awareness of potential acute stroke therapies and urges its members to actively participate in these. AMWA is also cognizant of the burden of stroke on caretakers, the greatest majority of who is women and advocates the development of specialized stroke units or at least stroke clinical pathway in all general hospitals as well as adequately funded rehabilitative and respite community services and home care.

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