

## AHA and ASA Release Guideline for Prevention of Future Stroke in Patients with Stroke or TIA

### Key Points for Practice

- Blood pressure therapy should be initiated or resumed in patients with blood pressure greater than 140 mm Hg systolic, or greater than 90 mm Hg diastolic within the first few days following a stroke or TIA.
- Statin therapy is recommended in patients with ischemic stroke or TIA who have a low-density lipoprotein cholesterol level of 100 mg per dL or greater with or without evidence of other arteriosclerotic cardiovascular disease, and a low-density lipoprotein cholesterol level of less than 100 mg per dL even with no evidence of other arteriosclerotic cardiovascular disease.
- Starting aspirin and clopidogrel might be considered within 24 hours of a stroke or TIA and continued for 90 days.
- Obesity screening, increased physical activity, reduced sodium intake, and a Mediterranean diet are reasonable for patients willing to participate.

*From the AFP Editors*

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This series is coordinated by Sumi Sexton, MD, Associate Medical Editor.

A collection of Practice Guidelines published in AFP is available at <http://www.aafp.org/afp/practguide>.

The American Heart Association (AHA) and American Stroke Association (ASA) have updated their guideline on prevention of future stroke in patients with a history of stroke or transient ischemic attack (TIA). Currently, the average annual rate of future stroke in these patients is at a historic low. This is a result of new approaches and improvement of existing approaches to treating these patients. The following recommendations are new or substantially revised from the previous AHA/ASA guideline.

### Recommendations

#### HYPERTENSION

Blood pressure therapy should be initiated in previously untreated patients with stroke or TIA if, after the first few days, blood pressure is 140 mm Hg systolic or greater, or 90 mm Hg diastolic or greater. Resumption of treatment is recommended for previously treated patients with known hypertension in the first several days after stroke or TIA. The target blood pressure is unclear and should be individualized. However, it is reasonable to keep blood pressure below 140 mm Hg systolic and 90 mm Hg diastolic. In patients

with a recent lacunar stroke, a target of less than 130 mm Hg may be reasonable.

#### DYSLIPIDEMIA

Statin therapy with intensive lipid-lowering effects is recommended in patients with ischemic stroke or TIA thought to be of atherosclerotic origin who have a low-density lipoprotein cholesterol level of 100 mg per dL (2.59 mmol per L) or greater with or without evidence of other arteriosclerotic cardiovascular disease. Statin therapy is also recommended in those who have a low-density lipoprotein cholesterol level of less than 100 mg per dL and no evidence of other arteriosclerotic cardiovascular disease.

#### GLUCOSE DISORDERS

All patients should probably be screened for diabetes mellitus after stroke or TIA using fasting plasma glucose, A1C, or oral glucose tolerance testing. Decisions about the type and timing of testing should be based on clinical judgment. Acute illness may temporarily affect plasma glucose measurements. In general, an A1C measurement may be more accurate than other screening tests immediately after the event.

#### OBESITY

Patients should receive obesity screening and body mass index measurement after a stroke or TIA. Despite the beneficial effects of weight loss on cardiovascular risk factors, the usefulness of weight loss after stroke or TIA in patients who are obese is unclear.

#### PHYSICAL INACTIVITY

Referral to a comprehensive, behavior-oriented program to increase physical activity is probably recommended for patients who are willing and able to participate in increased activity.

## NUTRITION

A nutritional assessment for signs of over- or undernutrition is reasonable in patients with a history of stroke or TIA. Those with undernutrition should be referred for individualized nutritional counseling. Routine vitamin supplementation is not recommended. It is reasonable to counsel patients with stroke or TIA to reduce their sodium intake to less than 2.4 g per day (less than 1.5 g per day is even more effective at reducing blood pressure) and to follow a Mediterranean-style diet (emphasizes vegetables, fruits, and whole grains and includes low-fat dairy products, poultry, fish, legumes, olive oil, and nuts) as opposed to a low-fat diet.

## SLEEP APNEA

Because the prevalence of sleep apnea is high in patients with ischemic stroke or TIA and treatment of sleep apnea improves outcomes in the general population, a sleep assessment may be considered after stroke or TIA. If sleep apnea is present, treatment with continuous positive airway pressure may be considered.

## ANTIPLATELET THERAPY

Aspirin plus clopidogrel (Plavix) may be initiated within 24 hours of a minor stroke or TIA, and continued for 90 days. In patients with stroke or TIA, atrial fibrillation, and coronary artery disease, the benefit of adding antiplatelet therapy to vitamin K antagonist therapy to reduce the risk of ischemic cardiovascular and cerebrovascular events is unclear; however, it may be warranted in cases of coronary artery stenting.

## OTHER

Other topics that were added or revised include carotid disease, intracranial atherosclerosis, atrial fibrillation, myocardial infarction and thrombus, cardiomyopathy, valvular heart disease, prosthetic heart valves, aortic arch atheroma, patent foramen ovale, homocysteinemia, hypercoagulation, antiphospholipid antibodies, sickle cell disease, pregnancy, and breastfeeding.

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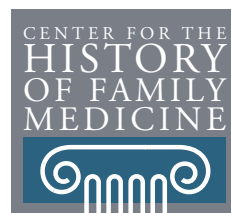


Mead Johnson "Doctor's Office A Century Ago" Exhibit at AAFP Headquarters, 1975-1984, from CHFM photo collections.

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