



RECURRENT STROKE IN PATIENTS WITH PATENT FORAMEN OVALE AND ATRIAL SEPTAL ANEURYSM

This is a summary of the American Academy of Neurology's (AAN) guideline addressing the risk of subsequent stroke or death in patients with a cryptogenic stroke and a patent foramen ovale (PFO), atrial septal aneurysm (ASA), or both, and the optimal method of stroke prevention in this population of patients.

This summary is based on a careful and complete look at the current data. It is designed to provide a strategy to make decisions in patient care.

The guideline concludes that:

- PFO is not associated with increased risk of subsequent stroke or death among medically treated patients with cryptogenic stroke. However, having both PFO and atrial septal abnormalities possibly increases the risk of subsequent stroke (but not death) in medically treated patients younger than 55 years.
- In patients with a cryptogenic stroke and an atrial septal abnormality, the evidence is insufficient to determine if warfarin or aspirin is superior in preventing recurrent stroke or death, but minor bleeding is more frequent with warfarin. There is insufficient evidence to evaluate the efficacy of surgical or endovascular closure.

Please refer to the full guideline for more information at www.aan.com/professionals/practice/index.cfm

SUMMARY OF PROGNOSIS: EVIDENCE-BASED RECOMMENDATIONS FOR THE INCREASE IN RISK OF RECURRENT STROKE AND DEATH IN PATIENTS WITH PFO AND/OR ASA AND PRIOR CRYPTOGENIC STROKE

Strong evidence supports

For patients who have had a cryptogenic stroke and have a PFO, the evidence indicates that the risk of subsequent stroke or death is no different from other cryptogenic stroke patients without PFO when treated medically with antiplatelet agents or anticoagulants. Therefore, in persons with a cryptogenic stroke receiving such therapy, neurologists should communicate to patients and their families that presence of PFO does not confer an increased risk for subsequent stroke compared to other cryptogenic stroke patients without atrial abnormalities (**Level A***).

Weak evidence supports

However, it is possible that the combination of PFO and atrial septal aneurysm confers an increased risk of subsequent stroke in medically treated patients who are less than 55 years of age. Therefore, in younger stroke patients, studies which can identify PFO or atrial septal aneurysm may be considered for prognostic purposes (**Level C**).

SUMMARY OF THERAPY: EVIDENCE-BASED RECOMMENDATIONS FOR THE USE OF WARFARIN OR ASPIRIN IN THE PREVENTION OF RECURRENT STROKE OR DEATH FOR PATIENTS WITH CRYPTOGENIC STROKE AND ATRIAL SEPTAL ABNORMALITIES AND PFO CLOSURE

Evidence is insufficient to support or refute

Among patients with a cryptogenic stroke and atrial septal abnormalities, there is insufficient evidence to determine the superiority of aspirin or warfarin for prevention of recurrent stroke or death (**Level U**).

There is insufficient evidence regarding the effectiveness of either surgical or percutaneous closure of PFO (**Level U**).

Weak evidence supports

The risks of minor bleeding are possibly greater with warfarin (**Level C**).

View the following additional AAN Stroke and Vascular Neurology guidelines at www.aan.com/professionals/practice/index.cfm

Date	Title
July 2002	Anticoagulants and Antiplatelet Agents in Acute Ischemic Stroke
September 1998	Stroke Prevention in Patients with Nonvalvular Atrial Fibrillation
September 1996	Thrombolytic Therapy for Acute Ischemic Stroke Practice Advisory

This guideline summary is evidence-based. The AAN uses the following definitions for the level of recommendation and classification of evidence. ***Recommendation Level:** "Level" refers to the strength of the practice recommendation based on the reviewed literature. **Level A:** Established as effective, ineffective or harmful or as useful/predictive or not useful/predictive; **Level B:** Probably effective, ineffective or harmful or useful/predictive or not useful/predictive; **Level C:** Possibly effective, ineffective or harmful or useful/predictive or not useful/predictive; **Level U:** Data inadequate or conflicting; treatment, test or predictor unproven.

This is an educational service of the American Academy of Neurology. It is designed to provide members with evidence-based guideline recommendations to assist with decision-making in patient care. It is based on an assessment of current scientific and clinical information, and is not intended to exclude any reasonable alternative methodologies. The AAN recognizes that specific patient care decisions are the prerogative of the patient and the physician caring for the patient, based on the circumstances involved. Physicians are encouraged to carefully review the full AAN guidelines so they understand all recommendations associated with care of these patients.

Copies of this summary and companion tools are available at www.aan.com/professionals/practice/index.cfm or through Member Services at (800) 879-1960.



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