

National Institute of Neurological Disorders and Stroke:

Warfarin Aspirin Symptomatic Intracranial Disease Trial

Aspirin was shown to be equally as effective as warfarin at preventing stroke in patients with partial blockage of arteries in the brain and more effective at preventing other major adverse events including hemorrhage and death.

Lead Agency:

National Institute of Neurological Disorders and Stroke (NINDS)/National Institutes of Health (NIH)

Agency Mission:

The mission of the NINDS is to reduce the burden of neurological disease through research.

Principal Investigator:

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General Description:

Warfarin Aspirin Symptomatic Intracranial Disease Trial

Intracranial stenosis, or partial blockage of arteries in the brain resulting in restricted blood flow, has long been considered a risk factor for stroke, causing about 10 percent of stroke cases annually (between 70K and 90K). Reducing stenosis has historically been achieved by treatment with agents that decrease the function of clot forming cells in the blood (e.g. aspirin) or those that inhibit the clotting process (e.g. warfarin); however, until recently, physicians were lacking the evidence necessary to make an informed decision about which treatment was best.

In the Warfarin Aspirin Symptomatic Intracranial Disease (WASID) trial, a double-blind, randomized, multi-center clinical trial sponsored by the NINDS, investigators compared warfarin to aspirin in a total of 569 patients for an average of 1.8 years. All of the participants had a greater than 50 percent blockage of a major artery in the brain, and all had experienced a non-disabling stroke within the 90 days prior to their enrollment in the trial. This trial demonstrated that patients treated with aspirin were equally protected from a secondary stroke compared to those treated with warfarin, but were significantly less likely to experience a major hemorrhage or death, further contributing to the ability of physicians to make informed decisions regarding patient care.

Excellence: What makes this project exceptional?

This study provides new insights and clarity to the ability of clinicians to effectively manage patient care in stroke prevention.

Significance: How is this research relevant to older persons, populations and/or an aging society?

Although ischemic stroke can affect individuals of all ages, the chance of having a stroke nearly doubles every decade after the age of 55, making the identification of safe and effective measures for reducing patient risk an imperative.

Effectiveness: What is the impact and/or application of this research to older persons?

This study suggests clear therapeutic benefits of utilizing aspirin over warfarin as a measure for preventative stroke care. While this treatment strategy may not apply to all patients at risk for stroke, it is clearly advantageous in a subpopulation of patients with a high degree of risk.

Innovativeness: Why is this research exciting or newsworthy?

This study provides unequivocal evidence that a low-cost, relatively safe therapeutic regimen is a preferred measure in stroke prevention. It has been estimated that in addition to reducing the risk of death and the occurrence of other major adverse events in patients with arterial blockage in the brain, that preventative therapy with aspirin could save \$20 million dollars annually in health care costs in the United States.