

The Benefits of Aspirin in the Primary Prevention of CV Event: Expanding the Clinical Spectrum.

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Both primary and secondary prevention of coronary heart disease (CHD) have indisputable public health importance. Given the prevalence of CHD, preventing even a small proportion of events would save thousands of lives, avoid inestimable suffering, and save billions of health care dollars. Weighing the benefits of given interventions against their risks and costs has led to the establishment of guidelines for health providers and the general public. Implementing these guidelines, however, remains a difficult task. Lack of time is certainly one hurdle. ASA clearly plays a role in primary and secondary prevention.

The benefits of aspirin in the secondary prevention of cardiovascular disease (CVD) have been conclusively demonstrated. Unless contraindicated, aspirin should be used by those with known CVD at a dose of at least 75 mg per day. The risk/benefit analysis is more complicated for those at risk of an initial cardiovascular event. Six large-scale trials have assessed the benefits of low-dose aspirin in the prevention of cardiovascular disease. Two of the trials were limited to men and one was limited to women. The recently published data from the Women's Health Study, the only trial specifically involving women and the only primary prevention trial using a dose (100 mg every other day) under 75 mg of aspirin daily, demonstrated that aspirin lowered the risk of stroke with less clear results for MI or death from cardiovascular causes. The exception was among women 65 or older; those who took aspirin saw significant reductions in major CVD events, MI and stroke compared to those who took placebo. Further, smoking seemed to reduce the benefits of aspirin at this dose. Taken together, these studies suggest a benefit of prophylactic aspirin in primary prevention of MI among men and ischemic stroke among women.

In summary, those with documented CVD should be on aspirin at a dose of at least 75 mg per day unless clearly contraindicated. In primary prevention, the use of aspirin for prevention must take into account the individual's long-term risk of subsequent cardiovascular disease. In 2002, both the U.S. Preventive Services Task Force and the American Heart Association (AHA) have concluded that aspirin decreases the incidence of CHD in adults at increased risk for heart disease. Among individuals with a 10-year risk of CHD of 6 percent or greater, the Task Force determined that the benefits of taking aspirin outweighed the increased risk of gastrointestinal bleeding or hemorrhagic stroke. In 2004, the AHA offered more specific guidelines for women, recommending aspirin for women whose 10-year risk of a first coronary

event exceeds 20% and a consideration of using it in those women whose 10-year risk is between 10% and 20%. The ESC recommends low-dose aspirin (75mg) in primary prevention only for men at particularly high risk of CHD.

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