

ANTIPLATELET THERAPY AND STROKE PRIMARY PREVENTION FOR EVERY DIABETIC PATIENT?

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Abstract

To date, the benefit of aspirin therapy in the prevention of cardiovascular events, including stroke in patients with diabetes, remains unclear; in fact, there is little evidence to support the effectiveness of aspirin therapy in studies conducted only on diabetics. The review of the most recent studies in this field shows that aspirin is no longer recommended for those with a low risk of CVD (women under age 60 and men under age 50 without major CVD risk factors, cardiovascular risk of less than 5 years less than 5%) as the low benefit is likely to be exceeded by bleeding risks. Clinical judgment should be used for those at intermediate risk (younger patients with one or more risk factors, or elderly patients without risk factors, those with a 10-year CVD risk of 5-10%) until they are further research is available.

Keywords: *antiplatelet therapy, diabetes, stroke, primary prevention*

Introduction

The benefit of aspirin therapy in prevention of cardiovascular events, including stroke in patients with diabetes, remains unclear (1). Evidence supporting the efficacy of aspirin therapy in trials of only people with diabetes is scant (2). Several large primary prevention trials have included subgroup analyses of patients with diabetes. The Antithrombotic Trialists' Collaboration meta-analysis of 287 randomized trials reported effects of antiplatelet therapy (mainly aspirin) versus control in 135 000 patients. 191 There was a non significant 7% reduction in serious vascular events, including stroke, in the subgroup of 5126 patients with diabetes (3). Also, no significant reduction in the risk of major cardiovascular events with low dose aspirin compared with placebo was found in two additional trials published after that meta-analysis, raising further questions about the efficacy of aspirin for primary prevention in people with diabetes (4,5).

Consistent with this uncertainty, antiplatelet therapy with aspirin in adults at a low CVD risk is not recommended by the Fifth Joint Task Force of the European Society of Cardiology and Other Societies on CVD Prevention in Clinical Practice.(6) Although the studies do not provide evidence the effectiveness of therapy with aspirin patients with diabetes, as confirmed in recent editorials (7), almost all guidelines strongly support such treatment (8,9,10).

Currently, in diabetic patients over the age of 30 years with an additional risk factor, is indicated the use of the aspirin prevention, as confirmed a Position Statement of the American Diabetes Association(ADA)(8).

The ADA, in fact, indicated the use of aspirin in the following conditions:

-Consider aspirin therapy (75–162 mg/day) as a primary prevention strategy in those with type 1 or type 2 diabetes at increased cardiovascular risk (10-year risk >10%). This includes most men >50 years of age or women > 60 years of age who have at least one additional major risk factor (family history of CVD, hypertension, smoking, dyslipidemia, or albuminuria). (C)

-Aspirin should not be recommended for CVD prevention for adults with diabetes at low CVD risk (10-year CVD risk < 5%, such as in men <50 years and women < 60 years of age with no major additional CVD risk factors), since the potential adverse effects from bleeding likely offset the potential benefits. (C)

- In patients in these age-groups with multiple other risk factors (e.g., 10-year risk 5–10%), clinical judgment is required.(E)

- Use aspirin therapy (75–162 mg/day) as a secondary prevention strategy in those with diabetes with a history of CVD. (A)

Therefore aspirin is no longer recommended for those at low CVD risk (women under age 60 years and men under age 50 years with no major CVD risk factors; 10-year CVD risk under 5%) as the low benefit is likely to be outweighed by the risks of significant bleeding. Clinical judgment should be used for those at intermediate risk (younger patients with one or more risk factors, or older patients with no risk factors; those with 10-year CVD risk of 5–10%) until further research is available(8).

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