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LETTER TO THE EDITOR

WHAT IS THE IDEAL MAINTENANCE DOSE OF ASPIRIN FOR STROKE PREVENTION IN AN ASIAN POPULATION?

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DEAR EDITOR,

Atherothrombotic occlusion of the cerebral arteries causes 50% of acute ischemic strokes, which are the leading cause of death and major disability worldwide. All current stroke guidelines endorse aspirin as the preferred antiplatelet for secondary stroke prevention. Although the available evidence (predominantly from secondary-prevention observational studies) supports dosages of 75 to 81 mg/day as a maintenance dose, the acceptable dose of aspirin is a range (at a dose of 50 to 325 mg per day), and it remains the choice of the treating physician whether to choose high- or low-dose aspirin (Campbell, 2007; Johnston, 2018).^(1,2) Typically, many treating physicians opt for comparatively higher doses (150 mg/day) due to the theoretical influence of a higher dose on the interaction between endothelium and platelets, which leads to a decrease in thrombus formation and

is considered to be more effective. However, practically, the higher dose does not significantly improve efficacy; rather, it is associated with an increased incidence of bleeding events, mostly from the gastrointestinal tract.^[1] In fact, Asians are more likely to experience bleeding complications while taking antiplatelet drugs than people of other ethnicities. This may be due to a number of factors: Firstly, Asians have a higher prevalence of genetic variants that can affect drug metabolism and increase the risk of hypercoagulability. Secondly, this group of people tends to have lower body weights, which can affect the dose of antiplatelet drugs.

Third, Asians have different vascular disease patterns than people of other ethnicities. Finally, they have a higher prevalence of *Helicobacter pylori* infection, which can increase the risk of bleeding (Jung, 2021).⁽³⁾ Stroke is commoner in the elderly population, and a significant number of them have other comorbidities like renal, hepatic, gastrointestinal, and hematological disorders. So, administering a high aspirin dose on a daily basis will expose them to a higher risk of bleeding and organ dysfunction. There is also a group of patients who unknowingly inherit genetic platelet disorders, such as "Bengal Thrombocytopenia," which is not a completely innocuous condition (may be associated with mild to moderate bleeding).⁽⁴⁾ Therefore, when prescribing aspirin, doctors should consider all of these variables, think about doing a platelet function test before choosing antiplatelets, and figure out the right dosage while taking into account all comorbidities, especially when working with the Asian community.

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