Efficacy And Safety of Aspirin For Primary Stroke Prevention In Elderly Patients With Vascular Risk Factors: Subanalysis Of Japanese Primary Prevention Project (jppp)

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Background

The effect of aspirin on primary prevention of stroke is conflicting among clinical trials conducted in Western countries, and there is no data available on the effect of aspirin in Asian population at higher risk of intracranial hemorrhage (ICH) than Caucasian population. The objective of this study was to analyze the effect of aspirin on the risk of stroke and ICH for primary prevention in the Japanese Primary Prevention Project (JPPP). JPPP was a multicenter, open-label, randomized, parallel-group trial. A total of 14,464 patients, aged 60-85 years, presenting with hypertension, dyslipidemia and/or diabetes mellitus participated in the study and were followed for up to 6.5 years. Patients were randomized 1:1 to receive 100 mg of aspirin once daily or no aspirin in addition to ongoing medications. Median duration of follow-up was 5.02 years. The cumulative rate of fatal or non-fatal stroke (hemorrhagic or ischemic stroke) was similar with aspirin (2.068%; 95% CI, 1.750-2.443) and no aspirin (2.299%; 95% CI, 1.963-2.692) at 5 years; the estimated hazard ratio (HR) was 0.927 (95% CI 0.741-1.160; P = .509). Aspirin non-significantly reduced the incidence of ischemic stroke (HR 0.783; 95% CI 0.606-1.012; P = .061) compared with no aspirin, while non-significantly increasing the risk of ICH (HR 1.463; 95% CI 0.956-2.237; P = .078). Cox regression to calculate risk score in all patients showed that independent factors for the risk of stroke were age >70 years (HR 2.207; 95% CI, 1.718-2.836), smoking (HR 1.513; 95% CI 1.111-2.061), and diabetes (HR 1.555, 95% CI 1.237-1.954). In conclusions, aspirin did not show any net clinical benefit for primary prevention of stroke in the elderly Japanese patients with vascular risk factors, while age >70 years, smoking and diabetes are risk factors for stroke in these patients regardless treatment with or without aspirin.

Disclosure

S. Uchiyama: Research Grant; Modest; Bayer, Boehringer Ingelheim, Daiichi Sankyo, Otsuka, Sanofi. Honoraria; Modest; Boehringer Ingelheim, Daiichi Sankyo, Daiichi Sankyo. Honoraria; Significant; Bayer, Otsuka. N. Ishizuka: None. K. Shimada: Research Grant; Modest; Waksman Foundation. Honoraria; Modest; Bayer. T. Teramoto: Research Grant; Modest; Bayer. Honoraria; Modest; Bayer. T. Yamazaki: Research Grant; Modest; Astra Zeneca, Daiichi Sankyo, Dainippon Sumitomo, Kowa, MSD, Takeda, Kyowa Hakko Kirin, Mitsubishi Tanabe, Pfizer. Honoraria; Modest; Astra Zeneca, Daiichi Sankyo, Dainippon Sumitomo, Kowa, Mochida, Merck Sharp & Dohme, Novartis, Sanofi, Shionogi, Takeda, Mitsubishi Tanabe, Pfizer. S. Oikawa: None. M. Sugawara: None. K. Ando: Research Grant; Modest; Boehringer Ingelheim, Daiichi Sankyo. Speakers’ Bureau; Modest; Astellas, Boehringer Ingelheim, Daiichi Sankyo, J-milk, Mochida. M. Murata: Research Grant; Modest; Daiichi Sankyo, Sanofi. Honoraria; Modest;
Pfizer. **K. Yokoyama**: Research Grant; Modest; Bristol-Myer Squibb, Chugai Seiyaku, Nihon Shinyaku, Pfizer. Honoraria; Modest; Celgene, Chugai Seiyaku, Janssen, Nippon Shinyaku, Novartis. **K. Minematsu**: Honoraria; Modest; Mitsubishi Tanabe, Kyowa Hakko Kirin, Sanofi, Otsuka, Bayer, Asteras, Daiichi Sankyo, Astra Zeneca, Boehringer Ingelheim, Pfizer, EPS, Stryker, Medicos Hirata, Sawai. **M. Matsumoto**: Honoraria; Modest; Tsumura. Honoraria; Significant; Asteras, Eizai, Otsuka, Takeda, Daiichi Sankyo, Novartis, Bayer, Pfizer, BMS, Sanofi, Boehringer Ingelheim, Mochida, MDA. **Y. Ikeda**: Consultant/Advisory Board; Modest; Astra Zeneca, Bayer, Daiichi Sankyo, Glaxo Smith Kline, Sanofi.