Aspirin for Primary Prevention of Cardiovascular Disease in Japan

Takeshi Morimoto¹ and Kunihiko Matsui²

Key words: aspirin, coronary heart disease, primary prevention

(DOI: 10.2169/internalmedicine.46.0212)

To the Editor We read the economic evaluation article of aspirin for the primary prevention of cardiovascular disease in Japan by Tsutani et al with interest (1). They estimated the potential benefit and costs from a hypothetical simulation model based on published data and assumptions. They concluded that aspirin therapy should be recommended in the primary prevention of cardiovascular disease in all individuals who have at least a moderately increased risk of coronary heart disease and who do not have an increased risk of gastrointestinal bleeding events. Their conclusion was derived from an assumed 1.5% annual risk of coronary heart disease based on guidelines from other countries. We question whether such guidelines are valid in Japan. Who was at increased risk of gastrointestinal bleeding?

The absence of well-designed cohort studies, such as Framingham study to estimate the risk of cardiovascular disease and clinical trial of aspirin for primary prevention is an apparently critical issue in Japan (2, 3). We, however, analyzed the potential effects of aspirin as a primary prevention strategy against coronary heart disease in the same manner as the US Preventive Service Task Force (4, 5). We compiled published data on incidence of coronary heart disease, strokes, and gastrointestinal bleeding, and applied the risk ratios of aspirin from the US studies to the Japanese population. We concluded that aspirin should be considered for those with a 5-year coronary heart disease risk of 6 to 14% based on the individual risk factors. The 1.5% threshold of annual risk for coronary heart disease (5-year risk, 7.5%) indicated by Tsutani et al was consistent with our threshold for middle-aged men, but such thresholds should be carefully adjusted by other risk factors like the US guidelines and our analyses (4, 5).

We do not intend to imply that the analyses of Tsutani et al (1) are incorrect, but we argue the process from which their recommendation was derived and the target population should be explicitly clarified. Because the risks of cardiovascular disease in Japan are different from those in Western countries, the risk calculation methods used in such countries should not be applied (5). Although they conducted simple one-way sensitivity analyses and commented that they used data from other countries, their results are weak and their conclusion is likely to overemphasize implications to Japanese healthcare providers and patients. These issues in particular should be carefully scrutinized by authors and reviewers when the authors have a relationship with manufacturers of products which they deal with in the manuscript.

References


¹ Center for Medical Education, Kyoto University Graduate School of Medicine, Kyoto and ² Comprehensive Clinical Education, Training, and Development Center, Kumamoto University Hospital, Kumamoto

Received for publication April 6, 2007; Accepted for publication April 30, 2007
Correspondence to Dr. Takeshi Morimoto, morimoto@kuhp.kyoto-u.ac.jp

© 2007 The Japanese Society of Internal Medicine
http://www.naika.or.jp/imindex.html