

Media coverage of scientific presentations

Constantine N Aroney

Chairman, Medical Issues Committee, National Heart Foundation, Department of Cardiology, Prince Charles Hospital, Rode Road, Chermside, QLD 4032. conar@bigpond.net.au

TO THE EDITOR: The front-page article in the *Sydney Morning Herald* on 7 June this year¹ highlights the problem of premature media coverage of a scientific presentation,² potentially causing distress and confusion. Without being subjected to full peer-review and unavailable for analysis in its full published form, such data should not be presented to the public as scientific fact, and should not be sensationalised so as to encourage patients and doctors to change management. A small single-centre observational study is regarded as Level 4 evidence and cannot be used to recommend a change in management. At most, such data might be considered hypothesis-generating and used as the basis for a properly conducted clinical trial.

In a meta-analysis of 70 000 “high risk” patients, antiplatelet therapy, mainly with aspirin, reduced rates of stroke, myocardial infarction and vascular death by 25%.³ Aspirin also reduced by almost half the rate of graft occlusion after coronary bypass surgery.⁴ The press article has confused such patients and may lead to their discontinuing life-saving therapy. It cites Bertouch as stating that 75 mg of aspirin “might be more appropriate”. There are no data, either from the Prince of Wales study or any other, to support the contention that 75 mg of aspirin causes less bleeding than 100 mg or 150 mg. The press release describes the research as a “world-first study”, and Dr Bolin is cited as stating that “we were unaware that really low-dose aspirin had the same risk”. However, as early as 1991, the Swedish Aspirin Low-Dose Trial showed that even 75 mg of aspirin produced more bleeding than placebo ($P = 0.04$).⁵

As a result of the *Sydney Morning Herald* article, patients are asking their doctors to make a judgement on ceasing their aspirin therapy, which might prove fatal, or reducing the dose from 100 or 150 mg to 75 mg, which is not supported by evidence and is not even a dose available in Australia. At a time when it is difficult enough to convince patients to take medication which is of proven benefit, both the press and the research community have a responsibility to the public to avoid recommendations which are not evidence-based and which detract from our efforts to reduce the mortality from Australia’s biggest killer — cardiovascular disease.

5. Swedish Aspirin Low-Dose Trial (SALT) of 75 mg aspirin as secondary prophylaxis after cerebrovascular ischemic events. The SALT Collaborative Group. *Lancet* 1991; 338: 1345-1349. □

Terry D Bolin,* James V Bertouch†

*Associate Professor of Medicine, and Chairman, Gastrointestinal and Liver Unit; †Chairman, Department of Rheumatology; Prince of Wales Hospital, Randwick, NSW 2031. td.bolin@unsw.edu.au

IN REPLY: Aroney’s letter raises a number of important issues. The first of these is the question of whether a scientific fact requires the blessing of peer review to become established as such. The corollary of this is whether or not all peer-reviewed facts are necessarily true. The answer to both questions is probably no.

The second issue is how to control a media report, irrespective of whether it is based on a peer-reviewed study. The issue which concerns Aroney is an abstract presentation of the association of gastrointestinal bleeding with aspirin, non-steroidal anti-inflammatory drugs (NSAIDs) and cyclo-oxygenase II (COX-II) inhibitors, the conclusion of which was that, while the last two might be important in their own right, concurrent use of aspirin, even in a small dose, was more closely associated with bleeding risk, particularly if there was a past history of peptic ulceration.¹

A “meta-analysis” of the media reports, which included both television and radio in addition to the quoted report in the *Sydney Morning Herald*,² would have made it clear that the theme of the interviews reaffirmed the relative safety of aspirin in the vast majority of individuals, and highlighted the risk of aspirin use concurrently with NSAIDs and COX-II inhibitors, particularly when there is a history of past ulceration. The fact that the SMH report focused on one aspect of the study was counterbalanced by the others. We do not know how journalistic reporting is controlled.

A primary question is whether or not aspirin is an effective agent for the prevention of cardiovascular disease beyond the management of acute myocardial infarction. More recent literature than that quoted by Aroney is now questioning the overall cardioprotective value of aspirin.³ This showed that aspirin given as prophylaxis against cardiovascular disease increased the risk of sudden death in every secondary prevention study and left the overall rate of myocardial infarction unchanged.⁴ Aspirin consistently failed to reduce overall mortality in every study of long-term prophylaxis after myocardial infarction, and in all but one after stroke.³ Furthermore, Cleland and colleagues have argued that a series of meta-analyses, which most people have accepted as proof of the efficacy of aspirin, are of doubtful validity.⁴ They questioned whether it is appropriate for the medical community to invest so much time and effort in prescribing aspirin and dealing with the adverse consequences of its long-term ingestion to the neglect of other, better proven and apparently more effective therapies such as angiotensin-converting enzyme inhibitors, β -blockers, and statins. At the very least, it can be said that there is

1. Robotham J. Doctors warn: just one tablet of aspirin a day may be enough to do you serious harm. *Sydney Morning Herald* 2002; 7 June: 1.
2. Bertouch J, Lee L, McNeill HP, Bolin T. The impact of cyclo-oxygenase II (COX-II) inhibitors on gastrointestinal (GIT) bleeding. Poster 30. Presented at the combined meeting of the Australian Rheumatology Association and the New Zealand Rheumatology Association. Christchurch, NZ: 28 May 2002. Sydney: Australian Rheumatology Association, 2002.
3. Collaborative overview of randomised trials of antiplatelet therapy — I: Prevention of death, myocardial infarction, and stroke by prolonged antiplatelet therapy in various categories of patients. Antiplatelet Trialists' Collaboration. *BMJ* 1994; 308: 81-106.
4. Galea J, Manche A, Goiti JJ, et al. Omission of aspirin in patients following coronary artery bypass graft surgery. *J Clin Pharm Ther* 1994; 19: 381-386.