Letters to the Editor

Disparity Between Best Scientific Evidence and Cardiovascular Events

To the Editor,

We read with great interest the article recently published in your journal about the impact of the type of hospital in the management of patients with non-ST segment elevation acute coronary syndrome (NSTE-ACS)1 and your detailed discussion in an accompanying editorial.2 The register is simple and elegant, well designed, and reports that NSTE-ACS patients admitted to hospitals with available hemodynamics are best served according to clinical practice guidelines, both in the use of diagnostic procedures (coronary angiography) as well as treatment (coronary revascularization and the use of drugs). However a reduction in cardiovascular mortality is not achieved.

We believe that it addresses one of the cornerstones of our health care system: equity in access to health care as defined in the General Health Law. It also analyzes a controversial issue in the literature, which is the barriers to translating efficiency into effectiveness.3

We agree with the reasons given in the editorial2 that explain this, but we would like to emphasize two aspects that are not discussed: one of a methodological nature about the gold standard of clinical practice guidelines and a circumstantial aspect regarding available scientific evidence.

The gold standard of good clinical practice described in various studies such as this is defined as the percentage of use of the diagnostic procedures or therapies considered in the clinical practice guidelines as grade I recommendations or, at most, grade IIa. Perhaps the difficulty in translating the differences in management of patients with NSTE-ACS to cardiovascular events is that we use the wrong gold standard. Although the conduct of clinical practice guidelines follows strict methodological control, not all scientific questions of our daily practice are determined in clinical trials. In many cases the degree of recommendation is based on the opinions of experts on the guidelines and may not always correspond to the best available evidence, due to the difficulties found in the methodology of the clinical trials. The majority of these seek to demonstrate the benefit of drugs since a high percentage are sponsored by the industry that obviously hopes to achieve benefits from their own research. For example, the benefit of the use of IIb/IIIa receptor antagonists and of early coronary revascularisation overlap in many clinical trials (this is done on an average of 4 days in many of these) and it is not known if the benefit in high risk patients is due to
drug therapy or revascularisation, or how early it should be done – 24 hours? 48 hours? Or perhaps the use of glycoprotein IIb/IIIa inhibitors has no benefits if revascularization is performed in 24/48 hours. Another example would be the indications I/IIa for therapeutic approaches that do not translate into clinical events but mainly into angiographic events (permeability of the responsible artery). This is the case with clopidogrel as adjunct therapy to coronary syndrome with ST elevation. Obviously the analysis of this therapeutic approach does not necessarily result in clinical events although it is a class I indication.

Among the latter reasons that could explain this “alleged” disparity between the use of the best evidence and the translation of this knowledge into results for cardiovascular events is the apparent publication bias found in major biomedical journals, which are the knowledge base for subsequent implementation of guidelines. It is much easier to publish a substudy, even one not planned a priori, of a great clinical trial in a leading journal than studies analysing clinical practice or studies with negative results4,5 that to try to explain this disparity.

In summary, translating our best scientific understanding to the patients should be the focus of our daily work under the premise of equity, and studies such as Ruiz Nodar’s one help to do this.

**References**

Letters to the Editor

REFERENCES