

## About Rapid Aspirin Desensitization in Coronary Artery Disease Patients



### *A propósito de la desensibilización rápida al ácido acetilsalicílico de pacientes con cardiopatía isquémica*

#### To the Editor:

We have read with great interest the article by Vega Hernández et al.,<sup>1</sup> who describe the rapid aspirin desensitization in patients with a history of reactions to this drug who are indicated treatment after acute coronary syndrome. In this respect, we would like to be several remarks.

As indicated by the authors, it is not clear whether a hypersensitivity reaction really occurred or whether some other type of adverse reaction was reported in some of the 12 patients studied. This is particularly pertinent in the 7 patients who either did not recall why they were considered hypersensitive to aspirin or had hives of unknown origin as part of their history of hypersensitivity. The fact that no patients were included with a serious reaction (edema of glottis, anaphylactic shock) means that the patients studied belong to a group with either doubtful manifestations or low risk ones. We should therefore perhaps ask whether desensitization really did occur in all patients studied and whether the findings can be extrapolated.

The use of lysine acetylsalicylate (C<sub>15</sub>H<sub>12</sub>N<sub>2</sub>O<sub>6</sub>) as a precursor for aspirin (C<sub>9</sub>H<sub>8</sub>O<sub>4</sub>) may confer advantages in the antiplatelet profile in a clinical trial setting, as recently demonstrated by the ECCLIPSE study,<sup>2</sup> but it has at least 2 drawbacks in the setting described by the authors. First, it triples the rate of absorption of aspirin, which could be dangerous if an allergic reaction occurs during exposure. Second, the stock solution is stable for approximately 2 hours at room temperature, and this may limit its use in practice.

On another level, exposure of an individual in an acute phase of myocardial infarction to a potential allergic reaction is something we believe should be assessed on a case-by-case basis.<sup>3</sup> It may be that it is more appropriate in patients with the profile presented by the authors rather than in other cases.

An alternative for acute-phase patients could be the use of glycoprotein IIb/IIIa inhibitors from the outset as part of a dual antiplatelet strategy. However, such an approach is currently not supported by scientific evidence.

Finally, we believe a broad registry is necessary to gather data to enable decisions based on stronger evidence.

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## About Rapid Aspirin Desensitization in Coronary Artery Disease Patients. Response



### *A propósito de la desensibilización rápida al ácido acetilsalicílico de pacientes con cardiopatía isquémica. Respuesta*

#### To the Editor,

We appreciate the interest shown by Morales Martínez de Tejada et al., and we would like to offer some further comments on the points they raised. Regarding the uncertainty as to whether patients had aspirin hypersensitivity, it is true that this cannot be confirmed. Yet this is also the case for most other drug hypersensitivity reactions, for which the history is the main, or even the only, diagnostic tool. However, the protocol developed in collaboration with the allergy service allowed patients to be selected using a carefully taken history. In fact, several patients were excluded due to a low probability of hypersensitivity. It is also true that our study did not include patients with severe reactions to aspirin, but, according to the references consulted, there have been no convincing cases identified of immunoglobulin E-mediated anaphylaxis.<sup>1</sup> The desensitization protocol, which used lysine

acetylsalicylate, was performed in the acute care unit, with hemodynamic monitoring and with medical personnel present who were trained to treat the possible complications, given that the effects and pharmacokinetics of lysine acetylsalicylate are not identical to those of aspirin, and that many of the patients had acute coronary syndrome. Our view is that unstable patients are precisely those who could benefit most from aspirin desensitization, as delays in coronary angioplasty could have adverse consequences in such patients. In fact, other hospitals with protocols similar to ours have shown the procedure to be safe, and different published studies have included increasingly greater numbers of patients with acute coronary syndrome.<sup>2</sup> The risks of aspirin desensitization are minimized by a careful history, close collaboration with the allergy service, and monitoring the patients in acute cardiac care units. In addition, since it is impossible to confirm whether patients have true aspirin hypersensitivity, many of those included will have a low level of risk. Thus, early angioplasty can be performed for patients with limited treatment options. Nonetheless, we share Morales Martínez de Tejada's et al. opinion that more studies on aspirin desensitization are needed if this technique is to be incorporated into everyday clinical practice.

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