

The authors reply

I very much appreciate the comments of Dr Martin J. Garcia Gonzalez on our paper entitled 'Factors associated with C-reactive protein at the early stage of acute myocardial infarction in men'. It is true that there are several factors which may have an impact on the individual inflammatory status.

All the patients in our study group experienced an ST-segment elevation myocardial infarction due to the atherosclerotic plaques in coronary arteries. But the duration of prior angina was longer in the groups with higher levels of C-reactive protein (CRP). This might be explained, as Dr Garcia Gonzalez says, by the longer time of plaque vulnerability and impaired coronary perfusion. However, there was no significant difference among the study groups (distinguished according to the quartile of CRP levels) in terms of the presence of multivessel disease.

As blood sampling for CRP was performed within six hours of the onset of symptoms, CRP levels were likely to reflect baseline inflammatory state and vulnerability of the atherosclerotic plaque at pre-infarction period [1, 2]. Further serial measurements of CRP in the course of myocardial infarction would rather in fact reflect an acute phase reaction related to myocardial necrosis and an inflammatory response after recanalisation of the infarct-related artery. Thus, measurements

performed as late as at 10 week follow-up might give prognostic information on the recurrent cardiovascular events [3]. However, this was not the aim of our study. Nor have we measured CRP kinetics, although the anterior localization of infarction and ejection fraction reflecting the extent of infarction did not differ significantly among the study groups.

Unfortunately, like most other authors, we have not considered the time of day or any other environmental factors in our study. We imagine that there are even more factors, some not yet revealed, that should have been included in our analysis. Further, on the best multifactor studies, a large number of patients would minimize the bias that we have certainly not managed to avoid.

References

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