Effect of Opening a New Catheterization Laboratory on Myocardial Infarction Patients

Impacto en pacientes con infarto agudo de miocardio de la apertura de un nuevo laboratorio de hemodinámica

To the Editor,

We have read with great interest the overall results of the study of Bosch et al.,1 from the REGICOR group, concerning the impact of opening a new catheterization laboratory in a given geographical area, recently published in the Revista Española de Cardiología.

This work reports relevant findings in a small sample of patients, relating them to those of other similar studies. These previous works present divergent results, as expressed by the authors in the discussion section of the articles,2,3 concerning the benefits of coronary angiography and eventual revascularization (mainly percutaneous) in patients being treated for acute myocardial infarction. Nevertheless, in the study we comment on, the myocardial infarction patients treated after a catheterization laboratory had been opened within the REGICOR framework, in which on-site revascularization procedures were not performed, had a better 30-day survival rate.

In previous reports, as the authors acknowledge, the benefits of a greater availability of catheterization laboratories appears to be explained in terms of the wider use of evidence-based medical therapies,3 such as beta blockers and statins, which are strongly associated with short-term survival. Another important clinical variable that could explain the 30-day mortality rate would be the delay in the administration of fibrinolytic therapy. What was the influence of these variables on the multivariate model shown in Figure 17?

Finally, we would like to congratulate the authors for this highly interesting study which poses the debate as to the importance of increasing the availability of diagnostic procedures such as coronary angiography, which facilitate the optimal treatment of myocardial infarction patients, including coronary revascularization. The reason for these good results may be the utilization of this diagnostic tool, which leads to a greater number of revascularization procedures in patients at higher risk, precisely those who need it most. Previous registries in Spain, like the DESCARTE registry, revealed that these interventions were less frequently employed in the patients that most needed them, those at highest risk,4 and dissociated the efficacy from the effectiveness of certain diagnostic and therapeutic interventions.5 Studies like that of Bosch et al deliver an important message regarding the utility of diagnostic and therapeutic tools in patients with acute myocardial infarction.

FUNDING

Article partially subsidized by a research grant from the Cooperative Cardiovascular Disease Research Network, or RECAVA (Red Temática de Investigación Cooperativa en Enfermedades Cardiovasculares), of the Instituto de Salud Carlos III, Spain.

Manuel F. Jiménez-Navarro,* Antonio J. Muñoz-García,6 Nieves Romero-Rodríguez,6 and Eduardo de Teresa-Galván6

* Área del Corazón, Hospital Clínico Universitario Virgen de la Victoria, Málaga, Investigadores de RECAVA (Red Temática de Investigación Cooperativa en Enfermedades Cardiovasculares del Instituto de Salud Carlos III), Spain

Available online 25 May 2011

REFERENCES


doi: 10.1016/j.rec.2011.04.001

See related article: DOI: 10.1016/j.rec.2011.03.005

Concordance (κ =0.724). In our opinion, the kappa coefficient is not the most appropriate instrument to use for evaluating the changes over time of an ordinal quantitative variable, such as the degree of regurgitation. Probably, a nonparametric test, such as the Wilcoxon test for paired samples, would be a better option.

In a recent analysis performed using the data from our study (92 cases by January 2011), we obtained similar results after 1 month (significant improvement in leaks, $P < .001$), and with no changes after 1 year ($P = .09$), thus eliminating the bias introduced by the reduced number of patients. We insist on the self-expandability of the prosthesis as the probable cause of this decrease, as do other authors, basing our conclusions on the echocardiographic observation of this phenomenon within the first days following the procedure. We have not found more cases of periprosthetic thrombosis than in other series, as we have followed the antithrombotic protocols recommended by the manufacturers.

We have also confirmed an early decrease in ventricular hypertrophy ($P < .05$) using our most recent data, which has also been described recently by other authors,5 and so we reiterate that differences in methodology could be the cause of the differences observed between studies.

In any case, we share the sentiment expressed by Rodríguez-Bailón et al. for the need for larger studies to further elucidate these “discrepancies,” but perhaps our primary objective should be to solidify the criteria used for study methods and for the definition of variables and objectives.
REFERENCES


doi:10.1016/j.rec.2011.03.006

SEE RELATED ARTICLE:
DOI: 10.1016/j.rec.2010.06.011