addition to those variables already entered in the model shown in the original manuscript. Importantly, in that model, the low educational level (illiterate or primary) remained independently associated with higher mortality (hazard ratio = 1.16, 95% confidence interval, 1.02–1.34; \( P = .03 \)). Furthermore, the use of aldosterone antagonists was inversely associated with mortality (hazard ratio = 0.74, 95% confidence interval, 0.57–0.96; \( P = .02 \)).

In conclusion, our study shows that a higher educational level, as a marker of higher socioeconomic status, is associated with a more favorable prognosis for long-term mortality after acute myocardial infarction, even after a carefully adjusted multivariable model. The above-mentioned analyses further support our previously reported findings.

Luciano Consuegra-Sánchez, a,b Leticia Jaulent-Huertas, a Marta Vicente-Gilabert, b and Antonio Melgarejo-Moreno c

aServicio de Cardiología, Hospital Universitario de Santa Lucía, Cartagena, Murcia, Spain
bServicio de Medicina Intensiva, Hospital Universitario Virgen de la Arrixaca, Murcia, Spain
cServicio de Medicina Intensiva, Hospital Universitario de Santa Lucía, Cartagena, Murcia, Spain

*Corresponding author:
E-mail address: Iconseu@gmail.com (L. Consuegra-Sánchez).
Available online 29 September 2015

REFERENCES


SEE RELATED ARTICLE:
http://dx.doi.org/10.1016/j.rec.2015.06.018
http://dx.doi.org/10.1016/j.rec.2015.07.011

Beta-blocker Use After an Acute Coronary Syndrome. Which one, in Whom, and for How Long?

Tras un síndrome coronario agudo, ¿qué bloqueador beta se debería dar, a quién y cuánto tiempo?

To the Editor,

Having read the article by Raposeiras-Roubín et al,1 we feel that it warrants a number of considerations, since beta-blockers (BB) are the only drugs used in optimal medical therapy following acute coronary syndrome (ACS) that are currently being questioned. In their analysis of the long-term effect of BB therapy on ACS patients with an ejection fraction > 50% at discharge, a subgroup of patients without a clear indication for this treatment, the authors found a 36% reduction in 5-year mortality.

At present, 3 points are considered to be central to BB therapy following ACS. Firstly, although the use of BB has increased exponentially over the past decade,2,3 a recent meta-analysis shows that, in the reperfusion era, no benefit is observed with BB therapy after ACS.3 Secondly, the guidelines for secondary prevention issued by the American Heart Association and the American College of Cardiology4 recommend the use of only those BB—carvedilol, metoprolol, and bisoprolol—that have been shown to improve survival after ACS; moreover, they recommend a treatment duration of at least 3 years, and acknowledge that it seems logical to prolong their use indefinitely, although there is no available evidence in this regard. Thirdly, as these agents do not appear to provide any benefit in terms of prognosis or recurrence of major cardiovascular complications in patients with stable chronic ischemic heart disease,5 the appropriate duration of the treatment is unknown.

In the DIOCELES registry,6 81% of the patients received BB at discharge, more than 20% more than in the MASCARA registry (67.8%).7 During the interval between these 2 registries, there was also an increase in the frequency of revascularization, from 63%6 to 85%.2 However, in the study by Raposeiras-Roubín et al,1 the rate of interventional procedures did not exceed 70%, possibly because it includes patients admitted as long ago as 2003, corresponding to a period prior to the MASCARA registry.7 On the other hand, none of the publications mention which BB were administered. For the first time, the 2011 guidelines for secondary prevention of the American Heart Association and the American College of Cardiology included the recommendation that only those agents that have been found to improve survival be administered, given that some of them have not been studied in the post-ACS context or have not even been shown to have any beneficial effect, as is the case of atenolol.5 A Spanish registry of patients with chronic ischemic heart disease revealed that precisely those drugs recommended by the American Heart Association and the American College of Cardiology are associated with good resting heart rate control,8 a finding that has been directly correlated with an improved prognosis.

Thus, we consider that the article provides solid and clinically relevant evidence regarding the use of BB in patients with ACS, although, in our setting, there continues to be an important lack of knowledge as to which BB should be administered to which patients and for how long after ACS.

Alberto Cordero,* Pilar Carrillo, and Ramón López-Palop
Departamento de Cardiología, Hospital Universitario de San Juan, San Juan de Alicante, Alicante, Spain

*Corresponding author:
E-mail address: acorderofort@gmail.com (A. Cordero).
Available online 15 September 2015

REFERENCES


References


See Related Article:

http://dx.doi.org/10.1016/j.rec.2015.07.005

http://dx.doi.org/10.1016/j.rec.2014.07.028

http://dx.doi.org/10.1016/j.rec.2015.07.017

http://dx.doi.org/10.1016/j.rec.2015.07.005