



ORIGINAL ARTICLE

Mortality in isolated coronary artery bypass surgery in elderly patients. A retrospective analysis over 14 years[☆]



P. Carmona García^{a,*}, E. Mateo^b, F. Hornero^c, M. López Cantero^a, I. Zarragoikoetxea^a

^a Departamento de Anestesiología y Reanimación, Hospital Universitario y Politécnico La Fe, Valencia, Spain

^b Departamento de Anestesiología y Reanimación, Consorcio Hospital General de Valencia, Valencia, Spain

^c Departamento de Cirugía Cardiovascular, Consorcio Hospital General de Valencia, Valencia, Spain

Received 18 April 2016; accepted 13 December 2016

Available online 13 April 2017

KEYWORDS

Coronary revascularization;
Elderly patients;
Cardiac surgery;
Outcomes;
Morbimortality

Abstract

Introduction: We aim to describe our experience in coronary artery bypass graft in elderly patients older than 80 years and assess the associated risk and predictors of mortality in this subgroup.

Material and method: From January 1999 to June 2013, 3097 patients underwent consecutive coronary artery bypass graft surgery. Patients aged over 80 years were identified. Multivariate survival analysis using Cox's regression model was performed.

Results: We identified 99 patients older than 80 years (80-group; mean age 82 ± 3.5 years) and 2957 younger than 80 years (control group) (mean age 64.2 ± 9.7 years). Additive EuroSCORE was 8.4 ± 4.8 and 4.6 ± 4.6 ($p < 0.001$) in the 80-group vs. control group, respectively. Off-pump coronary artery bypass graft was performed in 79.6 vs. 41.6% ($p < 0.001$) in the 80-group vs. the control group, respectively. There was significantly higher 30 day-mortality in the 80-group, 11.2 vs. 3.3%, respectively ($p < 0.001$). Patients in the 80-group underwent reintervention for bleeding more frequently (9.2 vs. 2.9%; $p = 0.001$) and had a higher incidence of major cardiovascular complications than the control group (6.1 vs. 2.1%; $p = 0.001$). Independent predictors of mortality for the 80-group were: reoperation for bleeding (HR 5.7; 95% CI 1.6–19.5) and cardiovascular complications (HR 3.7; 95% CI 1.1–12.2). The mean follow-up was 6.3 ± 4.2 years for the octogenarian group. The cumulative survival of these patients was 65.7% during the study period.

[☆] Please cite this article as: Carmona García P, Mateo E, Hornero F, López Cantero M, Zarragoikoetxea I. Mortalidad de nla cirugía coronaria aislada en octogenarios. Análisis restrospectivo de 14 años. Rev Esp Anesthesiol Reanim. 2017;64:262–272.

* Corresponding author.

E-mail address: paulac.g@hotmail.com (P. Carmona García).

Conclusion: Coronary artery bypass graft is performed preferably in patients over 80 years old under the off-pump procedure. Mortality is higher in this group of patients probably related to a higher incidence of cardiovascular complications and reintervention for bleeding in the immediate postoperative period.

© 2017 Sociedad Española de Anestesiología, Reanimación y Terapéutica del Dolor. Published by Elsevier España, S.L.U. All rights reserved.

PALABRAS CLAVE

Revascularización coronaria;
Paciente anciano;
Cirugía cardíaca;
Morbimortalidad

Mortalidad de nla cirugía coronaria aislada en octogenarios. Análisis restrospectivo de 14 años

Resumen

Introducción: El objetivo de este estudio es describir nuestra experiencia en la cirugía de revascularización coronaria aislada en pacientes mayores de 80 años e identificar los riesgos específicos y predictores de mortalidad precoz.

Material y métodos: Entre enero de 1999 y junio de 2013, 3.097 pacientes fueron sometidos a cirugía de revascularización coronaria aislada. Se analizaron los pacientes mayores de 80 años de edad. Se realizó una regresión mutivariante de Cox para predictores de mortalidad.

Resultados: Se identificaron 99 pacientes mayores de 80 años (grupo-80; edad media $82 \pm 3,5$ años) y 2.957 menores de 80 años (grupo control; edad media $64,2 \pm 9,7$ años). El EuroSCORE aditivo fue $8,4 \pm 4,8$ y $4,6 \pm 4,6$ ($p < 0,001$) en los > 80 años vs. < 80 años, respectivamente. La cirugía sin CEC se realizó en el 79,6% en el grupo-80 años. La mortalidad a los 30 días en el grupo-80 fue significativamente superior, del 11,2 vs. 3,3% ($p < 0,001$). El grupo-80 se reintervino por sangrado más frecuentemente (9,2 vs. 2,9%; $p = 0,001$) y tuvieron con mayor frecuencia complicaciones cardiovasculares mayores (6,1 vs. 2,1%; $p = 0,001$). Los predictores independientes de mortalidad a 30 días fueron: la reintervención por sangrado (HR 5,7; IC 95% 1,6-19,5) y las complicaciones cardiovasculares mayores (HR 3,7; IC 95% 1,1-12,2). El seguimiento medio del grupo-80 fue de $6,3 \pm 4,2$ años, con una supervivencia acumulada de estos pacientes del 65,7% durante el periodo de estudio.

Conclusión: La cirugía de revascularización coronaria aislada se realiza preferentemente en pacientes mayores de 80 años sin CEC. Presentan una mayor incidencia de complicaciones cardiovasculares, reintervenciones por sangrado en el postoperatorio inmediato y una mortalidad más elevada.

© 2017 Sociedad Española de Anestesiología, Reanimación y Terapéutica del Dolor. Publicado por Elsevier España, S.L.U. Todos los derechos reservados.

Introduction

Cardiovascular disease is the leading cause of morbidity and mortality in the elderly. Because coronary heart disease is more severe in this subgroup of patients and the benefit of revascularization is greater, elderly patients are often referred for coronary revascularization.¹ The choice of the best revascularization method (surgical or percutaneous [PTCA]) is more complicated in the elderly than in their younger counterparts. Although coronary artery bypass grafting (CABG) carries a higher risk in elderly patient, mortality among this group in recent decades has decreased from 12% to 2.6%, according to some published series.¹⁻⁴ Advances and improvements in perioperative and postoperative techniques (internal mammary artery grafts, better myocardial protection, better postoperative management^{5,6}) could explain this trend.

Randomized trials have shown the benefits of coronary surgery in high-risk patients, with greater long-term survival, and a 2- to 4-fold greater likelihood of recurrent

angina and need for repeat revascularization in the subgroup of patients undergoing PTCA.⁷⁻¹¹ Meta-analyses of these studies have confirmed these results.¹²⁻¹⁴ There is evidence that CABG has a greater impact on long-term survival in elderly patients, at the expense of a higher incidence of strokes and greater perioperative morbidity compared with PTCA, which is a far less invasive technique.¹

Since individuals over 80 are high-risk patients with considerable postoperative morbidity and mortality, we need to identify both the factors related to morbidity and mortality and the results obtained by each hospital this subgroup of patients. A good preoperative assessment, administration of the best therapy based on existing guidelines and individual risk factors, and early detection of immediate complications are essential if we are to improve the level of care given to this high-risk group.

The aim of this study is to analyze perioperative outcomes, long-term survival and predictors of early mortality in a cohort of patients aged over 80 years undergoing CABG surgery.

Download English Version:

<https://daneshyari.com/en/article/8622798>

Download Persian Version:

<https://daneshyari.com/article/8622798>

[Daneshyari.com](https://daneshyari.com)