Impact on mortality of a cardiogenic shock programme in a non-transplant hospital

J. Pascual1, J. Aboal1, P. Loma-Osorio1, M. Nunez1, E. Badosa1, C. Martin1, M. Ferrero1, S. Moral1, E. Ballesteros1, J. Pedraza1, R. Brugada1
1University Hospital de Girona Dr. Josep Trueta, Girona, Spain

Funding Acknowledgements: None.

Introduction: Cardiogenic shock is associated with high in-hospital morbidity and mortality. Every hospital should take all possible measures to reduce it.

Methods: Quasi-experimental study in patients with cardiogenic shock comparing two periods: A period of a cardiogenic shock programme including the establishment of a multidisciplinary team (shock team), early alert to the transplant hospital, initiation of a VA ECMO programme and extension of continuous care by acute cardiovascular care specialist, and a previous period without the mentioned measures. The primary objective was whether there were differences in in-hospital mortality and mortality at follow-up. Predictors of in-hospital mortality were examined as a secondary objective.

Results: A total of 139 patients were enrolled, including 69 in the previous period and 70 in the cardiogenic shock programme period. There was a significant reduction in-hospital mortality (55.1% vs. 37.1%, p=0.03) and in the follow-up (62.7% vs. 44.6%, p=0.03) in the second period. Diabetes mellitus, ejection fraction, out-of-hospital cardiac arrest and implementation of the cardiogenic shock programme were independent predictors of in-hospital mortality.

Conclusions: Implementing a comprehensive cardiogenic shock programme in a non-transplanting hospital improved in-hospital and follow-up mortality of patients in cardiogenic shock.
Probability of survival

Days

Previous period
At risk 67 23 19 7 1
Events 1 40 41 42 42

CS programme period
At risk 65 38 20 5 1
Events 2 27 28 29 29

Log-rank 0.048