

Trends of case-fatality rate by acute coronary syndrome in Portugal: Impact of a fast track to the coronary unit

JRSM Cardiovascular Disease, 2019 May

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Abstract

Introduction:

Efforts were made to improve management of coronary disease as the fast-track system to the Coronary Unit. We aim to analyse case-fatality rates by acute coronary syndrome in Portugal from 2000 to 2016, mainly the impact of the fast-track system and the proportion of patients that activate the fast-track system.

Methods:

We analysed monthly acute coronary syndrome case-fatality before and after the implementation of the fast-track system in 2007. Impact of the system was assessed through regression models for interrupted time-series. We calculated annual proportion of fast-track system admissions.

Results:

After 2007 case-fatality by acute coronary syndrome decreased (OR 1.27, p-value<0.01). The estimates obtained for ST Elevation Myocardial Infarction suggest a reduction of nearly 86 monthly deaths prevented after 2007. The highest percentage of patients admitted through the fast-track system was 35%.

Conclusions:

Our results suggest fast-track system may have contributed to a decline in acute coronary syndrome case-fatality. However, more than half of patients were not admitted through the system. This should encourage health authorities to make efforts to ensure compliance.

Keywords

Acute coronary syndrome, cardiovascular disease, epidemiology, fast-track system