



ORIGINAL ARTICLE

Portuguese Registry of Acute Coronary Syndromes (ProACS): 15 years of a continuous and prospective registry[☆]



Ana Teresa Timóteo^{*}, Jorge Mimoso, on behalf of the investigators of the Portuguese Registry of Acute Coronary Syndromes (ProACS)

Centro Nacional de Coleção de Dados em Cardiologia (CNCDC), Sociedade Portuguesa de Cardiologia, Coimbra, Portugal

Received 16 April 2017; accepted 13 July 2017

Available online 3 July 2018

KEYWORDS

Acute coronary syndromes;
Registries;
Quality

Abstract The Portuguese Registry of Acute Coronary Syndromes (ProACS) has completed 15 years of continuous and prospective activity. We present an overall picture of the data from this powerful tool. Up to 2016, 45 141 records were included, mostly male (71%), and with a mean age of 66 years. Baseline characteristics remained stable over the years. Of the overall population, 44% of cases were ST-elevation myocardial infarction (STEMI). Over the years there was a significant improvement in compliance with international guidelines, in terms of both diagnostic and therapeutic procedures, as well as for medication. In particular, the rate of reperfusion in STEMI increased to 84%, mainly by primary percutaneous coronary intervention (only 5.2% were treated with thrombolysis in 2016). By contrast, timings in STEMI did not change significantly. Improvements in treatment were accompanied by a reduction in in-hospital mortality from 6.7% in 2002 to 2.5% in 2016 in the overall population. This registry enables analysis of the management and results of acute coronary syndromes over time in Portugal, and hence assessment of improvements in quality of care.

© 2018 Sociedade Portuguesa de Cardiologia. Published by Elsevier España, S.L.U. All rights reserved.

PALAVRAS-CHAVE

Síndromes coronárias agudas;
Registos;
Qualidade

Registo Nacional de Síndromes Coronárias Agudas: 15 anos de um registo prospetivo contínuo

Resumo O Registo Nacional de Síndromes Coronárias Agudas (SCA) completa agora 15 anos de atividade contínua prospetiva. Descrevemos no presente trabalho os dados gerais obtidos a partir dessa poderosa ferramenta. Incluíram-se até ao momento 45.141 registos, a maioria do sexo masculino (71%), com idade média de 66 anos, com características basais que se têm mantido

[☆] Please cite this article as: Timóteo AT, Mimoso J. Registo Nacional de Síndromes Coronárias Agudas: 15 anos de um registo prospetivo contínuo. Rev Port Cardiol. 2018;37:563–573.

^{*} Corresponding author.

E-mail address: ana_timoteo@yahoo.com (A.T. Timóteo).

estáveis. Da população total, 44% são enfartes com elevação do segmento ST (EMCST). Ao longo dos anos verificou-se uma melhoria muito significativa no cumprimento das recomendações internacionais, quer no que diz respeito aos procedimentos de diagnóstico e terapêutica quer na medicação efetuada. Em particular, no que diz respeito ao EMCST, as taxas de reperfusão aumentaram progressivamente, são hoje de 84% e preferencialmente com recurso a angioplastia primária (fibrinólise atualmente em apenas 5,2% dos casos). Pelo contrário, os intervalos temporais no enfarte não se têm modificado significativamente. As melhorias no tratamento têm-se acompanhado por melhoria sustentada da mortalidade intra-hospitalar, que era 6,7% em 2002 e hoje 2,5% na população global. Este registo tem permitido uma análise temporal da abordagem e resultados do tratamento das SCA em Portugal e permite aferir a qualidade dos cuidados.

© 2018 Sociedade Portuguesa de Cardiologia. Publicado por Elsevier España, S.L.U. Todos os direitos reservados.

Introduction

Despite a progressive decline in recent years, diseases of the circulatory system are still the leading cause of death in Portugal (29.5% in 2013).¹ Of these diseases, stroke is the most common cause of death, while acute coronary syndromes (ACS) caused 37% of deaths in 2013, with a rate of 22.2/100 000 individuals.¹ In Europe as a whole, coronary artery disease accounts for about 20% of all deaths.² The observed reduction in mortality is directly related to improvements in medical care, especially through the introduction of new drugs, as well as a more interventional approach. However, clinical practice continues to vary significantly.

International guidelines issued by various medical societies recommend the establishment of registries in order to evaluate whether the recommended measures are in accordance with current evidence.³ Better compliance with the guidelines is associated with reductions in adverse events, although in clinical practice, measures recommended in the guidelines are usually implemented later than recommended.⁴ Clinical trials designed to determine whether a specific diagnostic or therapeutic approach is beneficial are carried out in highly controlled populations selected according to strict inclusion and exclusion criteria. The consequence is that the results of such trials cannot always be transferred to real patients in highly variable environments who do not fulfill these selection criteria. Registries are closer to the reality of patient populations and enable a more accurate assessment of therapeutic strategies.

The first Portuguese cardiology registries were established in the 1990s, under the aegis of the Portuguese Society of Cardiology (SPC), a pioneer in this field, particularly with its short-term 1999 national registry on in-hospital management of myocardial infarction (MI).⁵ In 2002, recognizing the need to improve knowledge of how ACS were managed nationwide, the Board of the SPC established the National Center for Data Collection in Cardiology (CNCDC) to centralize the relevant data and to support its

analysis. This resulted in the simultaneous creation of the CNCDC's first registries, the Portuguese Registry of Acute Coronary Syndromes (ProACS) and the National Registry of Interventional Cardiology (RNCI). ProACS, in which several cardiology departments in Portuguese hospitals participate, aims to characterize patients and diagnostic and therapeutic approaches to ACS in Portugal, to monitor compliance with clinical guidelines and recommended timings, and to assess the impact of implementing specific recommendations.⁶ The guidelines themselves have also undergone changes over the years, and ProACS allows their impact to be analyzed at a national level.

In 2009, data from the registry's first seven years were published. These showed that despite marked improvements in some parameters, application of the guidelines for ACS treatment in clinical practice remained suboptimal, similarly to what had been seen in 2002^{6,7} and to data from registries in other countries. In 2010, it was considered necessary to include more variables in the data collection, particularly on percutaneous coronary intervention (PCI), and the data collection sheet was accordingly reformulated, although the previous operating model remained unchanged. This marked the second phase of the ProACS registry.

The present document summarizes the information collected over the 15 years of continuous activity of the ProACS registry.

Methods

The ProACS is a continuous prospective observational registry, under the aegis of the SPC and coordinated by the CNCDC. All cardiology departments at Portuguese hospitals were invited to participate. Inclusion of patients began on January 1, 2002 and has continued uninterrupted to the present. The inclusion and exclusion criteria, as well as the data collection sheet, have been described in previous publications.^{6,7} Briefly, each center is asked to consecutively include patients hospitalized with a diagnosis of ACS (ST-elevation myocardial infarction [STEMI], non-ST-elevation

Download English Version:

<https://daneshyari.com/en/article/8677910>

Download Persian Version:

<https://daneshyari.com/article/8677910>

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