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LETTER TO THE EDITOR

The fall in acute coronary syndrome admissions during the COVID-19 Portuguese lockdown



A queda das admissões por síndrome coronária aguda durante o estado de emergência português pela COVID-19

To the Editor:

Acute coronary syndromes (ACS), and in particular acute ST-segment elevation myocardial infarction, have a high rate of complications and associated mortality.^{1,2} Early access to percutaneous coronary intervention (PCI) has significant prognostic implications and is currently recommended in society guidelines worldwide.

In response to the SARS-CoV-2/COVID-19 pandemic, healthcare institutions have organized their facilities to guarantee timely access to coronary angiography and PCI for ACS patients. However, the number of reported ACS admissions during the lockdown decreased.³ This is of particular interest, given the positive association between ACS and viral disease seasonality,⁴ and also due to recent evidence showing increased thrombogenicity in COVID-19 patients.⁵

A recent report from 71 Spanish centers showed reductions in interventional cardiology activity, including a 40% reduction in PCI in ST elevation myocardial infarction. Importantly, Portuguese nationwide data analysis has systematically shown relative excess in mortality given the number of positive COVID-19 cases. A possible explanation could be related to an increase in the number of untreated ACS patients who did not seek medical care or call the emergency hotline during the lockdown.

We performed descriptive ACS-related data analysis at Hospital Professor Doutor Fernando Fonseca, which has an area of influence including approximately 600 000 patients. In the first 30 days after the lockdown in Portugal, the number of ACS admitted to our hospital, and who underwent a coronary angiography (n=30), was reduced by 49.7% compared with the mean between 2016-2018 over the same time period (n=60.3).

Given the global nature of the current situation, we hypothesize that similar findings will be found at

other Portuguese centers. Going forward, the Portuguese Society of Cardiology, the Portuguese Association of Cardiovascular Interventions and the Stent - Save a Life Initiative, alongside health authorities and media should publicly promote that patients with ACS-compatible symptoms should avoid confinement and seek urgent medical attention.

Conflicts of interest

The authors have no conflicts of interest to declare.

References

- Kristensen SD, Laut KG, Fajadet J, et al. Reperfusion therapy for ST elevation acute myocardial infarction 2010/2011: current status in 37 ESC countries. Eur Heart J. 2014;35: 1957-70.
- Pedersen F, Butrymovich V, Kelbæk H, et al. Short- and long-term cause of death in patients treated with primary PCI for STEMI. J Am Coll Cardiol. 2014;64:2101–8.
- Tam C-CF, Cheung K-S, Lam S, et al. Impact of coronavirus disease 2019 (COVID-19) outbreak on ST-segment

 elevation myocardial infarction care in Hong Kong,
 China. Circ Cardiovasc Qual Outcomes. 2020; (March),
 http://dx.doi.org/10.1161/circoutcomes.120.006631.
- Thom T, Haase N, Rosamond W, et al. Heart disease and stroke statistics—2006 update. Circulation. 2006;113, http://dx.doi.org/10.1161/CIRCULATIONAHA.105.171600.
- Magro C, Mulvey JJ, Berlin D, et al. Complement associated microvascular injury and thrombosis in the pathogenesis of severe COVID-19 infection: a report of five cases. Transl Res. 2020; (April), http://dx.doi.org/10.1016/j.trsl.2020.04.007.
- Rodríguez-Leor O, Cid-Álvarez B, Ojeda S, et al. Impacto de la pandemia de COVID-19 sobre la actividad asistencial en cardiología intervencionista en España. REC Interv Cardiol. 2020; (April), http://dx.doi.org/10.24875/recic.m20000120.

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