

have advantages. It is safe and feasible, it shortens the duration of the procedure compared with 2 deferred procedures, and it lowers the risks associated with a new vascular access, another hospital stay, and repeat general anesthesia in patients already at high risk. Randomized studies would be ideal, but definitive conclusions might not be reached, given the heterogeneity of the condition. In the interim, our decisions should be guided by the clinical judgment and resources of the interventional cardiology team.

Rodrigo Estévez-Loureiro,* Berenice Caneiro-Queija,
José Antonio Baz, and Andrés Íñiguez-Romo

Servicio de Cardiología, Hospital Universitario Álvaro Cunqueiro, Vigo,
Pontevedra, Spain

* Corresponding author:

E-mail address: roiestevez@hotmail.com (R. Estévez-Loureiro).

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Prothrombosis in times of COVID-19



Protrombosis en tiempos de la COVID-19

To the Editor,

We read with special interest the recent article in *Revista Española de Cardiología* by Rey et al.¹ on a patient with acute coronary syndrome (ACS) and simultaneous thromboses in 2 coronary arteries in the context of coronavirus disease 2019 (COVID-19). We would like to report a case with similar characteristics, in which the patient was a 55-year-old man with a history of hypertension, type 2 diabetes mellitus, former smoker (30 pack-years), chronic obstructive pulmonary disease defined as Global Initiative for Chronic Obstructive Lung Disease (GOLD) stage 2 A, and no known history of heart disease. Our patient presented to the Emergency Department with a history lasting several days of orthopnea and dry cough, describing dyspnea and squeezing chest pain that had lasted some days but had completely disappeared by the time he arrived.

Electrocardiography revealed newly appeared left bundle-branch block (LBBB) that did not meet the Sgarbossa criteria. However, myocardial injury markers were elevated (high-sensitivity troponin T of 220 ng/L followed by 333 ng/L at 3 h, with dynamics consistent with ACS). Point-of-care echocardiography showed severe left ventricular dysfunction with akinesia of the anterior, lateral, and posterior segments, inferior hypokinesia, and asynchronous contractility due to LBBB. Chest radiography revealed interstitial pattern and bilateral alveolar infiltrates, consistent with COVID-19 infection (figure 1). Two PCR tests for COVID-19 were negative.

The patient was admitted to the intensive care unit, and medical treatment was started for ACS along with diuretic, vasodilator, and inotropic therapy. Coronary angiography showed a severe lesion in the obtuse marginal artery, which was revascularized with a drug-eluting stent.

Once in the ward, the patient underwent comprehensive echocardiography showing severe systolic dysfunction due to general hypokinesia with considerable asynchrony (left ventricular ejection fraction by biplane Simpson's method, 29%), with no other findings of interest. Subsequent cardiac magnetic resonance imaging showed 2 foci of late transmural enhancement in the sequences: 1 in the short axis view, in the mid anterolateral and lower medial segments, and 1 in the 2-chamber long axis view, in the anterior basal and lower medial segments, which would be consistent with simultaneous acute infarctions, given that the edema sequences showed infarction in these regions (figure 2).

After the patient was stabilized, a decision was made to discharge him to home with medical treatment for ACS and heart failure with reduced left ventricular ejection fraction.

Outpatient follow-up with the heart failure unit of our hospital showed that the patient currently has no cardiovascular symptoms and has partially recovered left ventricular ejection fraction (40%) after the disappearance of LBBB. Because the admission radiograph was consistent with COVID-19 and there were transmural infarctions in several territories, a decision was made to perform a new PCR test for COVID-19 and serology testing by enzyme-linked immunosorbent assay (ELISA), which was positive for immunoglobulin G (IgG).

Coronaviruses and the remaining microorganisms causing acute respiratory infections are known to be key triggers for the development of ACS.² The most common complications related to this virus are acute respiratory distress syndrome, secondary infections, and shock,² but a number of case reports have been published on arterial thromboses secondary to the virus, including the article mentioned,¹ possibly due to the virus-induced hypercoagulable state secondary, among other factors, to the cytokine storm or blood stasis caused by immobilization.³

The case we describe is similar to that reported in King et al.,¹ except for the difference that coronary angiogram showed a severe lesion in only 1 epicardial blood vessel, but subsequent cardiac

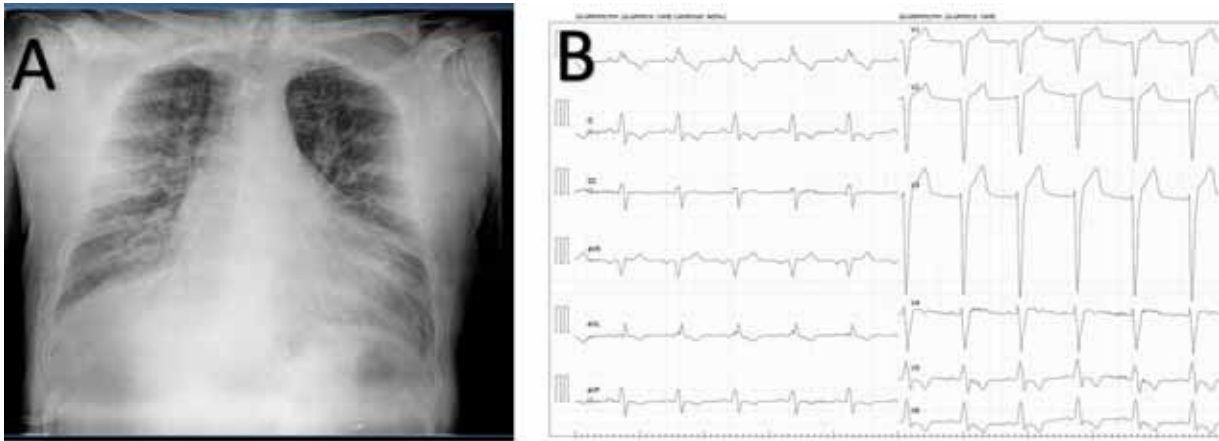


Figure 1. A, chest x-ray on admission. B, electrocardiogram on admission.

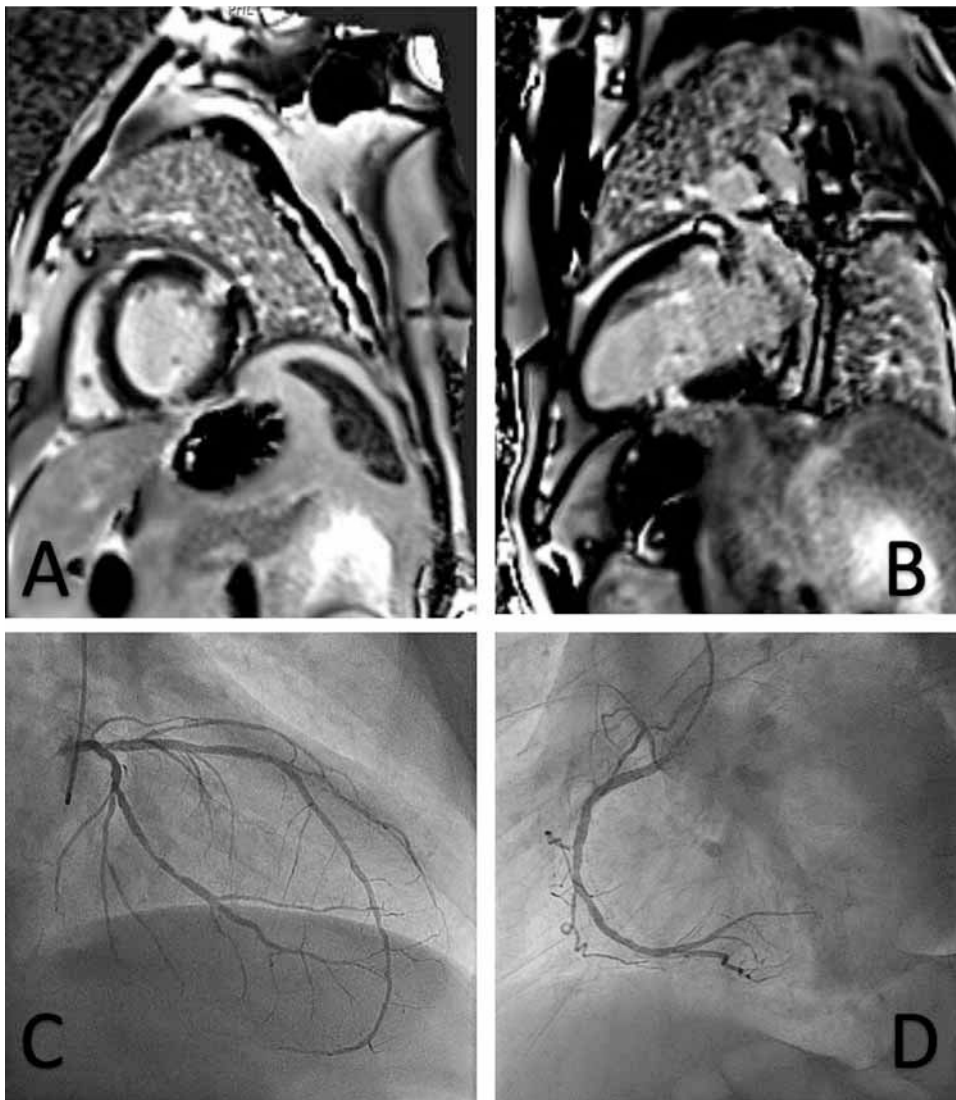


Figure 2. A, cardiac magnetic resonance imaging, short axis view. B, cardiac magnetic resonance imaging, long axis view. C, left coronary angiography. D, right coronary angiography.

magnetic resonance imaging revealed 2 infarctions in different coronary territories.

This case underscores the importance of implementing screening and diagnostic techniques suitable for detecting this type of patient, as well as asymptomatic carriers (in our patient 3 PCR tests were negative, but IgG was positive for COVID-19).

Iñigo Pereiro Lili,* Ainara Lozano Bahamonde,
and Nora García Ibarrondo

Servicio de Cardiología, Hospital Universitario Basurto, Bilbao, Spain

*Corresponding author:

E-mail address: inigopereiro@hotmail.com (I. Pereiro Lili).

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New words, not always clearer

Palabras nuevas, no siempre más claras

To the Editor,

When health care professionals use certain technical terms not found in the *Diccionario de la Lengua Española* of the *Real Academia Española* (RAE) and raise questions about their meanings, it is appropriate to ask what is meant. Of course, there are words that are universally understood, such as pain, and others, such as the broad term *fatigue*, that may have different nuances for different people. The risk of confusion when imprecise terms are used—which the author and reader may interpret differently—is evident.¹

Accuracy is the main consideration in scientific texts and is sometimes achieved with more than one word. In fact, not every concept requires using a single word, particularly if no single word exists and the word must be invented, thus requiring the reader to ask what is meant by the term.

Do we need to use *vasculature* when the author himself² proposes alternatives with more than one word? He uses *vasculature* to refer to all the blood vessels of the body or to the vascular system of an organ or area of the body. Although brief wording is recommended, possibly justifying the use of a single word instead of several, content clarity is also an issue. When choosing words that are comprehensible for patients and their relatives, the word *vasculature* is not likely to be risk-free.³ Certainly, the term *musculature* is more easily recognized than



the neologism *vasculature*, which will require some passage of time before it is readily understood.

It is a concern that *vasculature*, a word used in information provided to patients or relatives in outpatient or hospital situations, is simply another word with an unclear meaning for most of the population.

Jordi Delás

Departamento de Medicina, Hospital Universitari Sagrat Cor,
Universitat de Barcelona, Barcelona, Spain

E-mail address: jdelas@ub.edu

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