

Apropos the treatment strategy, we strongly agree with the solution of Lezcano Gort et al.¹ This treatment strategy is fully in accordance with that suggested in our flowchart. In fact, for asymptomatic patients with distal vessel SCAD or < 3.0 mm vessel diameter, we propose considering conservative management (first choice) or the use of one of the following devices: bioresorbable vascular scaffold, drug-eluting stent or drug-coated balloons, according to the clinical/angiographic characteristics of the patient.^{6,10}

On the other hand, a bioresorbable vascular scaffold strategy should be preferred in cases of proximal/middle vessel lesion, \geq 3.0 mm diameter or if the patient is still symptomatic/hemodynamically unstable, as reported by our group^{8,10,11} and in line with an emblematic case previously published in this journal.¹²

Close follow-up with or without invasive coronary imaging to assess the risk of SCAD recurrence and the optimal sealing of the vessel over time is of primary importance.^{3,4}

In conclusion, we wish to stress that a clinical/angiographic point system seems to be mainly useful in helping interventionists to avoid a missed diagnosis of SCAD. Furthermore, we believe that our treatment suggestion could be a good starting point in the absence of universal expert consensus or broad clinical experience to establish the most appropriate treatment for patients with SCAD.

Dario Buccheri,* Davide Piraino, and Giuseppe Andolina

Interventional Cardiology, A.O.U.P. Paolo Giaccone Hospital, Palermo, Italy

* Corresponding author:

E-mail address: dariobuccheri@gmail.it (D. Buccheri).

Available online 18 July 2016

REFERENCES

1. Lezcano Gort LE, Romani SA, Rodríguez Carreras CR. Postpartum Multivessel Spontaneous Coronary Artery Dissection. *Rev Esp Cardiol*. 2016. Available at: <http://dx.doi.org/10.1016/j.recesp.2015.12.027> [Epub ahead of print]
2. Saw J, Mancini GBJ, Humphries K, Fung A, Boone R, Starovoytov A, et al. Angiographic appearance of spontaneous coronary artery dissection with intramural hematoma proven on intracoronary imaging. *Catheter Cardiovasc Interv*. 2016;87:E54–61.
3. Alfonso F, Paulo M, Gonzalo N, Dutary J, Jimenez-Quevedo P, Lennie V, et al. Diagnosis of spontaneous coronary artery dissection by optical coherence tomography. *J Am Coll Cardiol*. 2012;59:1073–9.
4. Saw J. Spontaneous coronary artery dissection. *Can J Cardiol*. 2013;29:1027–33.
5. Giacoppo D, Capodanno D, Dangas G, Tamburino C. Spontaneous coronary artery dissection. *Int J Cardiol*. 2014;175:8–20.
6. Buccheri D, Piraino D, Andolina G. Behçet disease and spontaneous coronary artery dissection: The chicken or the egg? *Int J Cardiol*. 2016. Available at: <http://dx.doi.org/10.1016/j.ijcard.2016.04.145> [Epub ahead of print]
7. Alfonso F, Bastante T, Cuesta J, Rodríguez D, Benedicto A, Rivero F. Spontaneous coronary artery dissection: novel insights on diagnosis and management. *Cardiovasc Diagn Ther*. 2015;5:133–40.
8. Buccheri D, Piraino D, Silva Orrego P, Cortese B. Is vasospasm overestimated in acute coronary syndromes presenting with non-obstructive coronary artery disease? The case for intravascular imaging *Int J Cardiol*. 2016;203:1125–6.
9. Buccheri D, Piraino D, Cortese B. Intravascular imaging as a tool for definite diagnosis of acute coronary syndrome caused by spontaneous coronary artery dissection. *Int J Cardiol*. 2016;214:43–5.
10. Buccheri D, Piraino D, Latini RA, Andolina G, Cortese B. Spontaneous coronary artery dissections: a call for action for an underestimated entity. *Int J Cardiol*. 2016;214:333–5.
11. Buccheri D, Piraino D, Andolina G. Biovascular resorbable scaffold for spontaneous coronary artery dissection: RALders on the storm of a debatable therapy. *Int J Cardiol*. 2016;214:387–8.
12. Ortas-Nadal MR, Pascual I, Moreno-Ambroj C. A Spontaneous Coronary Dissection Successfully Treated With Bioabsorbable Scaffolds. *Rev Esp Cardiol*. 2015;68:894.

SEE RELATED ARTICLES:

<http://dx.doi.org/10.1016/j.rec.2015.12.027>

<http://dx.doi.org/10.1016/j.rec.2016.05.008>

<http://dx.doi.org/10.1016/j.rec.2016.05.007>

Score System Approach to Diagnose and Manage Spontaneous Coronary Artery Dissection. Response



Sistema de puntuación para el enfoque diagnóstico y terapéutico de la disección coronaria espontánea. Respuesta

To the Editor,

We appreciate the interest of Buccheri et al. in our report.¹ After reading it carefully, we would like to comment on their considerations.

Spontaneous coronary artery dissection (SCAD), formerly considered rare, is now the most common cause of myocardial infarction associated with pregnancy and an important cause of acute coronary syndrome in women under the age of 50 years, in whom it can reach a prevalence of nearly 30%.² However, it is difficult to diagnose unless there is a high level of suspicion, and interventional cardiologists are not familiar with the most common angiographic pattern of SCAD (type 2). This leads to erroneous diagnoses and the underdiagnosis of SCAD.

The advent of intracoronary imaging techniques (optical coherence tomography and intravascular ultrasound) has contributed to the optimization of the identification of this entity.³ These techniques are essential parts of the algorithms designed for the diagnosis and treatment of SCAD.⁴ The system proposed by Buccheri et al.⁵ is novel in that it scores clinical and angiographic

variables that increase the suspicion of SCAD, an approach that favors the use of optical coherence tomography and/or intravascular ultrasound to confirm and treat it. We consider this to be a useful and practical diagnostic strategy that certainly would avoid many erroneous diagnoses. However, the treatment they propose is based on their own experience and a review of the literature; in contrast to atherosclerotic disease, there are no randomized controlled trials dealing with SCAD, and the conservative strategy proves to be valid for most stable patients. Therefore, while their generalized implementation is well-founded, at the present time, it is not a very likely prospect. Nevertheless, we agree that it can be a starting point from which, working together, we could establish the optimal management of SCAD and that this be reflected in our clinical practice guidelines.

Luis Enrique Lezcano Gort,* Sebastián Alejandro Romani, Cecilio Raúl Rodríguez Carreras, and Francisco Javier Fernández Portales

Unidad de Hemodinámica y Cardiología Intervencionista, Servicio de Cardiología, Hospital San Pedro de Alcántara, Cáceres, Spain

* Corresponding author:

E-mail address: lezcanogort@gmail.com (L.E. Lezcano Gort).

Available online 18 July 2016

REFERENCES

1. Lezcano Gort LE, Romani SA, Rodríguez Carreras CR. Disección coronaria espontánea multivaso en el puerperio. *Rev Esp Cardiol*. 2016. Available at: <http://dx.doi.org/10.1016/j.recesp.2015.12.027>
2. Saw J, Aymong E, Mancini GB, Sedlak T, Starovoytov A, Ricci D. Nonatherosclerotic coronary artery disease in young women. *Can J Cardiol*. 2014;30:814–9.
3. Alfonso F, Paulo M, Dutary J. Endovascular imaging of angiographically invisible spontaneous coronary artery dissection. *JACC Cardiovasc Interv*. 2012;5:452–3.
4. Ortas-Nadal MR, Pascual I, Moreno-Ambroj C. Disección coronaria espontánea tratada con armazones bioabsorbibles. *Rev Esp Cardiol*. 2015;68:894.
5. Buccheri D, Piraino D, Latini RA, Andolina G, Cortese B. Spontaneous coronary artery dissection: a call for action for an underestimated entity. *Int J Cardiol*. 2016;214:333–5.

SEE RELATED ARTICLE:

<http://dx.doi.org/10.1016/j.rec.2016.05.007><http://dx.doi.org/10.1016/j.rec.2016.05.008>

Sustainability of the Health System: Beyond Cost-effectiveness Analyses



Sostenibilidad del sistema sanitario: más allá de los análisis de coste-efectividad

To the Editor,

We have read the editorial on cost-effectiveness analysis by Campillo-Artero and Ortún¹ with great interest and are in complete agreement with their views. Spain can boast of a universal public health care system; although its major drawback may be the sometimes long waiting lists, the level of training of its professionals is excellent and they have access to technology comparable to that of any of the leading countries. However, alarms are beginning to be sounded with regard to its sustainability. The authors propose analysis of its cost effectiveness along the lines of the appropriate use criteria (AUC)² being developed in the United States and Japan. Together with the measure outlined by Campillo-Artero and Ortún,¹ the present situation demands additional actions.

The pharmaceutical industry and device manufacturers are essential in the design of the technology without which we would be unable to work. In cardiology, both have provided advances that have often been extrapolated directly to other specialties, such as vascular surgery or neurology. Moreover, the industry has always sustained our continuing education, which is especially important in Spain because of the always insufficient funding inherent in a system of universal coverage. The opportunity cost model implies that the needs of patient care limit public funding for continuing education. Thus, for us, support for this training is considered necessary. In addition, we should not overlook the growing tendency to channel investment toward other more profitable sectors, such as cancer drug development.³

We feel that sustainability requires an understanding between authorities, health professionals, and industry. In this respect, we believe that there is room for improvement in the application of study results and how they are reflected in clinical practice guidelines. A class I recommendation must be supported by randomized studies and meta-analyses and, according to evidence-based medicine, post hoc analyses only serve to generate hypotheses for a future study, which often is not carried out because, once the main outcome of the core trial is obtained, the sponsor's interest disappears. However, we should not lose sight of the fact that the guidelines should never contemplate costs, since health systems differ widely from one country to another; moreover, some patients might want to pay for their treatment, regardless of the cost.

The truth is that the public health system is often unable to fund treatment for every class I indication (in fact, it is probably not cost-effective in all of them), and that is where tensions arise. On the one hand, the manufacturer's marketing department defends this class I indication, regardless of the number of patients needed to treat to prevent one event; on the other hand, some professionals defend this universal indication, at times, too adamantly, which stands in the way of communication with the administration, which becomes impervious to the opinion of the physician. Moreover, managers usually take a short-term view, depending on the political system at the time, and consider the request for therapy only in economic terms. This usually generates rejection of the new treatment and of its advocates, including the refusal of or delay in its acquisition.

Keeping in mind that the purpose of guidelines is not to deal with economic aspects, we feel that the solution requires understanding among the 3 stakeholders. First, marketing departments should understand the situation and not design strategies based on achieving treatment for every patient and, second, as professionals, we should make the administration's job easier by promoting therapies and innovations in the subgroups that could derive the most benefit from them and limiting them in the rest.⁴ Finally, if this all comes about, the administration itself should acknowledge these actions and take a more technical and long-term view. This is the only way to achieve a rational use of the available therapies. In fact, given that the major cause of drug failure in the cardiovascular setting is not a lack of safety or efficacy, but of commercial viability,³ an agreement could be reached with the administration regarding a more cost-effective penetration, but in exchange for an extension of the patent to make it easier for the manufacturer to make a profit. In cardiology, we should learn the recent lesson concerning the new antiplatelet agents, in which there are wide differences among the Spanish autonomous communities in terms of the indications and funding, because history could repeat itself with the arrival of PCSK9 and LCZ696 for heart failure.

Iñigo Lozano,* Juan Rondán, José M. Vegas, and Eduardo Segovia

Servicio de Cardiología, Hospital de Cabueñes, Gijón, Asturias, Spain

*Corresponding author:

E-mail address: inigo.lozano@gmail.com (I. Lozano).

Available online 4 July 2016