Archivos de Cardiología de México

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OPINION ARTICLE

Changing the paradigm: from cardiac rehabilitation to vascular rehabilitation

Cambiando el paradigma: desde la rehabilitación cardiaca a la rehabilitación vascular

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Cardiac rehabilitation, consisting of prescribed exercise and counseling for risk modification, has demonstrated not only to improve risk factors control, but also to reduce recurrent cardiovascular outcomes in patients with previous myocardial infarction. Nevertheless, most patients including in these programs have been limited to patients with prior acute cardiac conditions (i.e., acute coronary syndrome and heart failure)[1]. However, it should be noted that atherosclerotic vascular disease is not limited to heart disease, but to all vascular beds, including cerebrovascular and peripheral artery disease.

Stroke is a chronic and in many cases disabling condition with a high risk of recurrence (> 10% within the index event). In addition, these patients have a great risk of developing new events in other vascular beds[2]. Conventionally, the management of these patients has been mainly focused on the acute event and the follow-up on neurological rehabilitation to reduce the stroke-related disability. However, vascular risk factor control after stroke is clearly suboptimal in this population. In fact, more than a half of patients do not attain recommended targets, particularly blood pressure and low-density lipoprotein cholesterol. This is not related with a poor adherence to secondary preventive medication after ischemic stroke, but with an insufficient intensification of vascular protective medications[3].

Similarly, patients with peripheral artery disease are at high risk of major atherothrombotic vascular events, including myocardial infarction, ischemic stroke, and vascular-related death, even after revascularization. Thus, it has been reported that one-in-six patients with peripheral artery disease aged ≥ 50 years who underwent peripheral revascularization had a major atherothrombotic vascular event within 1 year[4]. Remarkably, vascular risk factors control remains far from optimal in this population[5]. Therefore, all these findings clearly indicate the need for developing new strategies to prevent major vascular events in patients with peripheral artery disease.

In summary, patients with cerebrovascular and peripheral artery disease are at high risk of recurrent events in the same or other vascular beds. This is mainly related with a poor secondary prevention approach. Considering the benefits that has been observed in patients with a previous myocardial infarction after undergoing cardiac rehabilitation programs, it would be desirable that these programs could be extended to patients with previous acute vascular conditions, regardless origin, and not limited to patients

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Date of reception: 22-07-2022
Date of acceptance: 29-11-2022
DOI: 10.24875/ACM.22000194

Available online: 28-02-2023
Arch Cardiol Mex. 2022;93(3):387-388
www.archivoscardiologia.com

with previous acute cardiac conditions. In this context, an urgent change of paradigm is warranted.

Funding

None.

Conflicts of interest

None.

Ethical disclosures

Protection of humans and animals. The authors declare that no experiments on humans or animals have been carried out for this research.

Confidentiality of data. The authors declare that no patient data appear in this article.

Right to privacy and informed consent. The authors declare that no patient data appear in this article.

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