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Authors reply: Exercise, but with caution!



Reply

There is a need for regular aerobic exercise in patients with heart failure with a view to improve functional capacity and reduce symptoms as well as the risk of heart failure related hospitalization. However, the therapeutic window of this approach is rather narrow and there is a possibility of harm as well if overdone. The need of the hour is to individualize this approach for each specific patient (tailor the exercise regimen according to patient's phenotype and ability) but also region-specific guidelines (based on resources available and level of general education in the area). In this context proposed rehabilitation algorithm is a good idea particularly its emphasis on low-resource regions with emphasis on six-minute walk test to determine the physical capacity. As a matter of fact, active measures should be undertaken to educate not only cardiologists/physicians, physiotherapists, regulators but also patients regarding the salutary aspects of regulated exercise. However, the exercise programs should be custom made for individual patients and may even require the help of professionals. Furthermore, some practical tips should be given to these patients:

1. Don't exercise outdoors in extreme weather/high humidity. Do indoor exercise instead.

2. If the exercise produces any undue symptoms (palpitations, chest pain or pressure, difficulty in breathing, dizziness or

lightheadedness) immediately stop exercising and take rest. Seek medical attention if symptoms persist.

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Response to the editorial titled “BVS, RDN, IABP: The Afghanistan of interventional clinical trials



The Editor,

We read your editorial article¹ titled “BVS, RDN, IABP-The Afghanistan of interventional cardiology trials with great interest. You provide us with a great insight into the understanding of the failure of these highly anticipated therapies in their respective pathologies. We agree that these therapies like BVS and RDN were launched into the market in a haste and hype was created earlier than evidence was provided for their beneficial role. But we would like to differ in the inference of conclusion about IABP in cardiogenic shock. In our setting IABP is the one of most important tool in the management of cardiogenic shock other than revascularisation. The reason for failure of IABP SHOCK II² was probably because the etiology of cardiogenic shock is multifactorial IABP supports only one aspect of the cardiogenic shock by decreasing the afterload to the heart and increasing the diastolic blood flow in the coronaries. Patients presenting >12 h were excluded in this trial, these are the most high risk patients and these patients are more likely to benefit from IABP because management of these patients will not only be revascularisation but also myocardial stabilisation as shown in studies involving strain imaging.³ Along with RVMI patients, a significant number of patients with LV dysfunction and cardiogenic shock have a component of fluid responsiveness and these patients are better managed by giving fluid therapy based on IVC diameter. So blindly putting IABP in all patients with cardiogenic shock will neutralise the beneficial results, as it occurred in the IABP SHOCK II trial. Rather IABP insertion should be done in high risk cardiogenic shock patients like late presenters, with severe left ventricular dysfunction, critical Left main/triple vessel disease, then only we can show a beneficial role of these mechanical circulatory device in cardiogenic shock patients. Sicker the patient, more likely is the benefit of IABP.

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**Authors reply: Response to the editorial titled
 “BVS, RDN, IABP: The Afghanistan of
 interventional clinical trials”**



Reply

It is an interesting point, but it again boils down to the fact that limitation of intra-aortic balloon pump (IABP) in cardiogenic shock is due to incomplete understanding of pathophysiology of this condition, being different in different etiologies responsible for cardiogenic shock. Since IABP helps mostly “by decreasing the afterload to the heart and increasing the diastolic blood flow in the

coronaries,” it may be useful in ischemic destabilization but only when delivered quite early.¹ Once hemodynamic decompensation sets in, IABP may not be useful in this condition as well because it only very slightly improves cardiac output as compared to other assist devices like Impella or Tandem Heart.² Thus there is a narrow window where IABP can work and the crux lies in identifying this window and delivering IABP within this period itself. If delayed beyond a certain point, even this therapy may be worthless.

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