Letter to the Editor

Letter by Villa Abrille et al Regarding Article, “Hyperactive Adverse Mechanical Stress Responses in Dystrophic Heart Are Coupled to Transient Receptor Potential Canonical 6 and Blocked by cGMP-Protein Kinase G Modulation”

To the Editor:

The recent article by Seo et al,1 published in Circulation Research, presented many interesting aspects of the myocardium from mice lacking transient receptor potential canonical channels TRPC3 or TRPC6, from dystrophic animals, and their interaction with cGMP. These authors measured the muscle response to stretch, widely known as slow force response (SFR).

We would like to comment only on one aspect of this study that, although it might sound trivial at first glance, it unnecessarily confuses a well-established mechanical response. The authors arbitrarily changed the widely accepted denomination of SFR2–14 by the term tress-stimulated contractility without any explanation to justify the change.

The SFR or Anrep effect was described by Glen von Anrep in 1912 in a whole heart preparation and later on found in isolated cardiac preparations by Parmley and Chuck,16 Lakatta and Jewell,17 who called this mechanism slow increase in develop tension, and a few years later (1982) by Allen and Kurihara18 who in addition demonstrated that this slow phase of tension increase after a change in length was because a progressive increase in the calcium transient. The scientific community has accepted the term SFR to identify this powerful intrinsic heart mechanism to adapt cardiac output to changes in hemodynamic conditions, function and subcellular mechanisms.

We are sure that the authors from this prestigious University where we all 3 spend unforgettable times doing research can be more creative than changing the name to the SFR.

Disclosures

None.

Maria Celeste Villa-Abrille
Néstor Gustavo Pérez
Horacio Eugenio Cingolani
Centro de Investigaciones Cardiovasculares
Facultad de Ciencias Médicas de La Plata
UNLP-CONICET, Argentina

References

Letter by Villa Abrille et al Regarding Article, "Hyperactive Adverse Mechanical Stress Responses in Dystrophic Heart Are Coupled to Transient Receptor Potential Canonical 6 and Blocked by cGMP-Protein Kinase G Modulation"

María Celeste Villa-Abrille, Néstor Gustavo Pérez and Horacio Eugenio Cingolani

Circ Res. 2015;116:e11
doi: 10.1161/CIRCRESAHA.114.305543

Circulation Research is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2014 American Heart Association, Inc. All rights reserved.
Print ISSN: 0009-7330. Online ISSN: 1524-4571

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circres.ahajournals.org/content/116/1/e11