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, 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 SFR-14 to the term stress-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, who called this mechanism slow increase in develop tension, and a few years later (1982) by Allen and Kurihara 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 to justify the change.


References


Disclosures

None.

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References
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