

Letters to the Editor

Reply to Sanchis-Gomar et al.—Undeniable Benefits of Exercise Should Not Preclude Inquiry Into the Mechanisms of Arrhythmias in Athletes



We thank Sanchis-Gomar et al. for their interest in our review but regret their inference that our article raises concern about the potential negative effects of endurance exercise. We do not think that our position differs from that of our colleagues. In fact, the critique raised by our colleagues in this letter is almost an exact restatement of the words in our article. For example, we state unambiguously: “We do not believe that the small risks associated with disorders such as this are sufficient to discourage anyone from exercise practice and the many health benefits that it provides,” which seems virtually identical to the final comment in our colleagues’ letter.

If there is a single point on which our views may diverge, it is on the interpretation of available data regarding the long-term clinical sequelae of transient right ventricular (RV) injury. In our article, we discuss animal and human data suggesting that long-term endurance exercise may be associated with an excess of some arrhythmias, particularly atrial fibrillation. We recognize that there are limitations in the available evidence base and have discussed this at length elsewhere,¹ but we believe that there are sufficient data to at least raise the issue about whether endurance exercise may have some deleterious health effects. We do not wish to infer that this means that sport does not have an overall net health benefit for the community or the individual. We appreciate that Sanchis-Gomar et al. detailed in a letter to the editor their findings of 23 former athletes who had RV measures similar to those of 22 control participants,² but we do not believe that this small cross-sectional experience is sufficient to negate the many larger studies suggesting that chronic RV structural and functional remodelling may occur in endurance athletes.^{1,3} Intriguingly, the interaction between exercise and chronic RV remodelling is even measurable in the general nonathletic population.⁴

We believe that there is much to be learned about the interaction between cardiac health and environmental influences, including exercise. These interactions are complex and may differ between individuals. Our strong conviction is that there is not sufficient evidence to discount the possibility that extreme exercise may have some health consequences in some individuals. This message should not be confused with the undeniable benefits of exercise on a population level.

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Disclosures

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