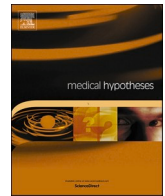




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Letter to Editors

COVID-19/takotsubo/spontaneous coronary artery dissection: Lost in the Bermuda triangle

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To the Editor

I truly enjoyed reading the comprehensive report by Shojaei et al. [1], about the interplay between 3 distinct cardiovascular pathologies i. e., COVID-19, takotsubo syndrome (TTS), and spontaneous coronary artery dissection (SCAD). There is no doubt that we will soon witness a frequent occurrence of patients with the COVID-19/TTS, or COVID-19/SCAD; indeed, the TTS/SCAD combination, independent of the currently ravaging COVID-19, has been repeatedly reported recently, as the authors discuss [1]. Under the subtitle of “Interplay between TTC, SCAD, and COVID-19” the authors state [1] “In the setting of TTC, vigorous contraction of the left ventricular base in conjunction with adjacent dyskinetic segments could form a prerequisite anatomical substrate for the causation of SCAD. The coronary dissection plane may develop as a result of excessive movement of the epicardial vessels and increased shear stress on the vessel wall at the hinge point between the hyperdynamic and akinetic myocardium [2]. It has also been speculated that the coronary arteries traversing the anterior or anterolateral wall would be more vulnerable to dissection as this region marks the transition point of the hyperdynamic basal segment and the remaining hypokinetic left ventricular segments [2]”. However, the concept of the SCAD triggered by TTS has been first enunciated in 2015 [3,4], and reads as follows: “The pathogenesis of SCAD is still elusive, but one wonders whether the excessive vigorous contraction of the LV base in conjunction with the adjacent akinetic/dyskinetic systolic “ballooning” of the LV mid-myocardium and apex could form a prerequisite anatomic/functional substrate for the causation of SCAD in a predisposed individual” [3]. Also, the reciprocal causation between TTC and SCAD” in the sense that an amphidromic relationship between TTS and SCAD exists, which leads not only to SCAD triggered by TTS, but of TTS triggered by SCAD, has been previously suggested [5].

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Disclosures

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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