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## Letter to the editor

# Response to: Coronary artery systolic “milking” and “bridging” in Takotsubo syndrome: substrate or an epiphenomenon?

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Dear Editor,

We enjoyed reading the Letter to the Editor by Madias published in the *Journal* recently. Our study group reported that myocardial bridging (MB) of the left anterior descending coronary artery (LAD) is a frequent finding in Takotsubo syndrome (TTS) compared with controls, as revealed both by coronary angiography (CA) (40% vs. 8%;  $p < 0.001$ ) or by computed tomography angiography (CTA) (76% vs. 31%;  $p < 0.001$ ) suggesting a role of MB in the pathogenesis of TTS.<sup>1–2</sup> From the pathophysiological point of view, MB-related myocardial ischemia may be attributed to a combination of different factors: sudden tachycardia, increased contractility; coronary spasm and systolic kinking of the coronary arteries.<sup>3</sup> The result is the precipitation of symptoms in an otherwise asymptomatic individual with MB as well as the onset of TTS. We agree with Dr Madias that systolic “milking” of the LAD by CA could be enhanced by hypercontractility of the left ventricle. On the other hand, we reported an high prevalence of MB by CTCA defined as vessel encasement by the myocardium which is not interplay by the hypercontractility suggesting a role of MB as potential anatomic substrate of TTS rather than an epiphenomenon. Larger studies are needed to confirm and extend the consistency of our data.

## REFERENCES

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