LETTER TO THE EDITOR

Racial and gender disparities among patients with Takotsubo syndrome

To The Editor

We read with great interest the original article by Lemor et al¹ in the recent issue of *Clinical Cardiology*, titled, "Impact of Gender on In-Hospital Outcomes in Patients with Takotsubo syndrome: A Nationwide Analysis from 2006 to 2014." The authors report important racial and gender disparities among patients with Takotsubo syndrome (TTS) from the large National Inpatient Sample (NIS) database. We wish to highlight a few important points relevant to the article.

Patients with TTS generally seem to have a low prevalence of diabetes despite having conventional cardiovascular risk factors. In several TTS series² with ≥ 100 subjects, the prevalence of diabetes mellitus (DM) is reported to be from 1.6% to 25.5% with a mean of 16.8%. This is less than the 27% prevalence of DM in the general population for individuals aged >65 years as reported by NHANES.³ We similarly observed only 1/16 (6.25%) of patients with TTS to have diabetes mellitus in prior studies.^{4,5} In the current study, the reported incidence of diabetes in TTS patients was 16.8% in males and 18.9% in females¹ with no statistically significant difference between the two groups ($P = 0.178$). One explanation for the possible diabetes paradox in TTS patients is that the blunted autonomic responses or catecholamine spillover in patients with diabetic neuropathy may be protective against the development of TTS in the background of stressful triggers.^{2, 4, 5, and}

An important message conveyed by the current paper is that despite the low prevalence of TTS in males (a well-established fact) they have higher rates of in-hospital mortality which makes it a relevant disease even among males. Similar findings have been reported previously.⁶ This is likely explained by the fact that males possess higher prevalence of acute critical illnesses with elevated circulating catecholamines and resultant higher in-hospital mortality. In the present study, over one third of patients had underlying coronary artery disease (CAD), emphasizing that TTS and CAD can occur concomitantly. Notably, over 10% of patients in this study were not noted to have had a coronary angiogram, a crucial diagnostic tool for TTS. Given the inherent limitations of the NIS database, additional work is needed to assess if differences in the resolution of cardiomyopathy and long-term outcomes exist in specific patient populations. Large-scale, multi-national registries of patients with TTS such as the Inter-TAK registry⁷ are essential to provide important and impactful insights.

CONFLICTS OF INTEREST

The authors declare no potential conflict of interests.

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