Tako-Tsubo Cardiomyopathy

Is a Temporal Pattern of Onset Confirmed?

To the Editor:

In a recent issue of CHEST (April 2011), Parodi et al 1 presented interesting results about recurrence and long-term mortality in a prospective cohort of 116 patients with tako-tsubo cardiomyopathy (TTC) observed in five hospitals of the urban area of Tuscany, Italy. This cohort of patients, together with that of the Tako-Tsubo Italian Network (n = 112 at the update of December 31, 2009) probably represents the largest population of patients with TTC ever reported in literature. After our first reports of a temporal variation in the onset of TTC, characterized by seasonal (summer), circadian (morning), and weekly (Monday) patterns of onset, 2,3 we performed a computer-assisted search of the literature (years 2000–2010) to verify whether the temporal occurrence of TTC has been studied by other investigators around the world. 4 We focused on studies with a minimum of numbers to allow statistical analysis and found 19 studies with ≥30 cases. Of these, only seven (four from Europe and one each from Asia, Australia, and the United States; total number of cases: 391) included in the time of onset of events and confirmed preferential peaks during summer months and morning hours. 4 Of course, the limited number of cases reported by Parodi et al 1 and also considering that the observation period (July 2003–March 2008) limits the possibility of a seasonal analysis (complete years are required), it could be very interesting to verify whether temporal patterns of onset are observed also in the Tuscany Registry.

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REFERENCES


Response

To the Editor:

We thank Drs Manfredini and Bossone for their interest for our recent article. 1 As suggested, we reviewed our data in order to verify potential temporal patterns of tako-tsubo cardiomyopathy (TTC) onset in the study population. According to a previous report, 2 in 116 patients with TTC enrolled during a 6-year period, the day of symptom onset was categorized into both 12 1-month intervals (from January to December) and four 3-month intervals (winter, spring, summer, autumn). Moreover, we classified the day of onset as weekend (Saturday and Sunday) or workweek day. The distribution of symptom onset was tested for uniformity in the overall population by the χ 2 test for goodness of fit. Significance levels were set at P < .05. Figure 1 shows the results of the analyses performed. Despite the number of TTC diagnoses that were slightly higher during the spring and summer compared to winter and autumn, the onset of TTC did not significantly differ as a function of season (Fig 1A). Similarly, there was no significant difference regarding the observed month (Fig 1B) and the observed weekday (Fig 1C) of symptom onset compared with the expected month or day of onset.