Apical ballooning in takotsubo cardiomyopathy

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Stress-induced takotsubo cardiomyopathy exhibiting transient left ventricular apical ballooning with chest symptoms, electrocardiogram changes and minimal myocardial enzymatic release has become accepted worldwide as a distinct clinical entity.

The present paper describes three patients who underwent left ventriculography because of chest symptoms and electrocardiogram abnormalities immediately after experiencing emotional stress. Left

ventriculography revealed apical akinesia and basal hyperkinesia without coronary artery disease (Figure 1). End-systolic ventriculograms resembled a takotsubo, which is a round-bottomed, narrow-necked Japanese fishing pot used for trapping octopi. Interestingly, the size of apical ballooning varied during the early phase, and the asynergy disappeared within two weeks in all patients. The precise mechanism of this disorder remains unclear, as are the determinants of the magnitude of apical ballooning.

Figure 1) End-systolic ventriculogram immediately after emotional stress in three cases. The size of apical ballooning varied during the early phase, and this asynergy disappeared within two weeks in all patients

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