

# Takotsubo Cardiomyopathy

## Overview

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### KEYWORDS

• Takotsubo cardiomyopathy • Apical ballooning • Stress cardiomyopathy

### KEY POINTS

- Takotsubo cardiomyopathy (TTC) is a unique acute syndrome characterized by transient left ventricular (LV) systolic dysfunction in the absence of significant coronary artery disease.
- TTC occurs mostly in postmenopausal women after an emotional and/or physical stress.
- Because the symptoms and signs are nonspecific, a high clinical index of suspicion is necessary to detect the disease in different clinical settings.
- Noninvasive multimodality imaging (ie, echocardiography, CT, and magnetic resonance) may be useful to promptly distinguish TTC from other acute cardiac and thoracic diseases; however, coronary angiography remains mandatory to differentiate TTC from acute coronary syndromes (ACSs).
- Despite the often dramatic clinical presentation, prognosis is generally favorable, with a rapid recovery of ventricular function within few weeks.

### INTRODUCTION

Takotsubo cardiomyopathy (TTC) is an acute reversible clinical condition mimicking an acute myocardial infarction (AMI).<sup>1</sup> It is also known as stress cardiomyopathy, transient LV apical ballooning syndrome (ABS), or broken heart syndrome (**Box 1**). The popular and original term, *takotsubo*, first described in Japan by Sato and

colleagues<sup>2</sup> in 1990 and reported in 5 patients by Dote and coworkers in 1991,<sup>3</sup> was coined on the basis of similarities between LV morphologic features observed on left ventriculography and the shape of a fishing pot takotsubo (round bottom and narrow neck) used in Japan to trap octopuses. TTC is usually characterized by transient LV systolic dysfunction, represented by a balloon-like apical akinesia with compensatory

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**Box 1**  
**Names tabulated from published reports**

*Apical ballooning*  
ABS  
Acute LV ABS  
LV ABS  
Transient LV ABS  
Primary apical ballooning  
Transient apical ballooning  
Transient ABS  
Transient cardiac ABS  
Transient left ABS  
Transient cardiac ballooning  
Left ABS  
Acute ABS  
Cardiac ABS  
Apical ballooning  
Apical ballooning without apical ballooning  
Apical ballooning cardiomyopathy  
Reversible apical ballooning of left ventricle  
LV ballooning syndrome  
Midventricular variant of transient apical ballooning  
Midventricular ballooning syndrome  
Transient LV midportion ballooning  
Transient midventricular ballooning  
Transient midventricular ballooning cardiomyopathy  
Transient LV nonapical ballooning  
Reverse or inverted LV ABS  
Inverted LV ABS  
Transient basal ballooning  
*Stress cardiomyopathy*  
Acute stress cardiomyopathy  
Human stress cardiomyopathy  
Acute and reversible cardiomyopathy provoked by stress  
Stress-induced cardiomyopathy  
Stress-induced TTC  
Stress-induced ABS  
Stress-related left ventricular dysfunction  
Stress-related cardiomyopathy  
Stress-related cardiomyopathy syndrome  
Stress TTC  
Emotional stress-induced ampulla cardiomyopathy

Midventricular stress cardiomyopathy  
Atypical transient stress-induced cardiomyopathy  
Stress-induced myocardial stunning  
Emotional stress-induced TTC  
Stress-associated catecholamine induced cardiomyopathy  
Neurogenic stress syndrome  
Other  
Neurogenic stunned myocardium  
Adrenergic cardiomyopathy  
Broken heart syndrome  
Ampulla cardiomyopathy  
Ampulla-shaped cardiomyopathy  
Chestnut-shaped transient regional left ventricular hypokinesia  
Ball-shaped spherical dilation of LV apex  
The artichoke heart  
Transient midventricular akinesia  
Transient anteroapical dyskinesia  
*Takotsubo*  
TTC  
Takotsubo-like cardiomyopathy  
Takotsubo syndrome  
Takotsubo disease  
Takotsubo LV dysfunction  
Takotsubo-like LV dysfunction  
Takotsubo-like transient biventricular dysfunction  
Takotsubo-like transient LV ballooning  
Takotsubo-shaped cardiomyopathy  
Takotsubo-shaped hypokinesia of left ventricle  
Takotsubo-type cardiomyopathy  
Takotsubo transient LV apical ballooning  
Midventricular TTC  
Midventricular form of TTC  
Inverted takotsubo contractile pattern  
Inverted TTC  
Inverted takotsubo pattern  
Atypical TTC  
Reverse takotsubo syndrome  
Atypical basal type TTC

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