Journal of
Cardiology & Cardiovascular Therapy
ISSN: 2474-7580

Juniper Publishers
key to the Researchers

Case Report
Volume 19 Issue 5 - March 2025
DOI: 10.19080/JOCCT.2025.19.556022

J Cardiol & Cardiovasc Ther

Coexisting Takotsubo and Hypertrophic Cardiomyopathy in an Octogenarian Patient: A Clinical Challenge

Konstantinos Bratis MD, PhD[1]*, Raphael Patras MD[2] and Argyrios Ntalianis MD, PhD[2]

[1]*CMR Unit, Bioiatriki Healthcare Group, Athens, Greece*

[2]*Cardiomyopathy Outpatient Clinic, Alexandra General Hospital, Athens, Greece*

Submission: February 27, 2025; **Published:** March 10, 2025

***Corresponding author:** Argyrios Ntalianis, Alexandra General Hospital, 1152 Athens, Greece

Keywords: Takotsubo; HCM; Concurring; Overlap

Case Report

An 84-year-old female with past medical history of atrial fibrillation, hypertension, diabetes mellitus, giant cell arteritis and depression, presented to the ER with chest pain. Electrocardiogram showed ST depression in leads I, AVL and V1-V6; serum Troponin I levels on admission were found to be elevated (1042 ng/l). Emergency cardiac catheterization showed unobstructed coronary lesions, but apical ballooning was demonstrated on ventriculography (Panel). Echocardiography confirmed near-akinesis and ballooning of the mid and apical segments with a reduced left ventricular ejection fraction of 35% (Panel). These findings were suggestive of Takotsubo (TTS).

Twelve days later a Cardiac Magnetic Resonance (CMR) showed complete resolution of apical ballooning, supranormal LVEF, with small size ventricles, asymmetrical hypertrophy of the interventricular septum and all apical segments (maximal thickness 16 mm), and associated intracavitary end systolic obliteration. On late enhancement images, there was patchy mid- wall enhancement detected in the mid and apical segments. Papillary muscles were apically displaced. These findings were typical of Hypertrophic Cardiomyopathy (HCM) (Figure 1).

TTS is an acquired condition most commonly affecting postmenopausal women who suffer a severe psychological or physical stressor. Concurring TTS and HCM presents mainly in females, with only half of them having being previously outlined with a known history of HCM. Although the approach to treat either condition separately is common practice, the simultaneous management of both entities in the acute phase poses a clinical challenge and relies on close monitoring and balancing of their opposing haemodynamic profiling.

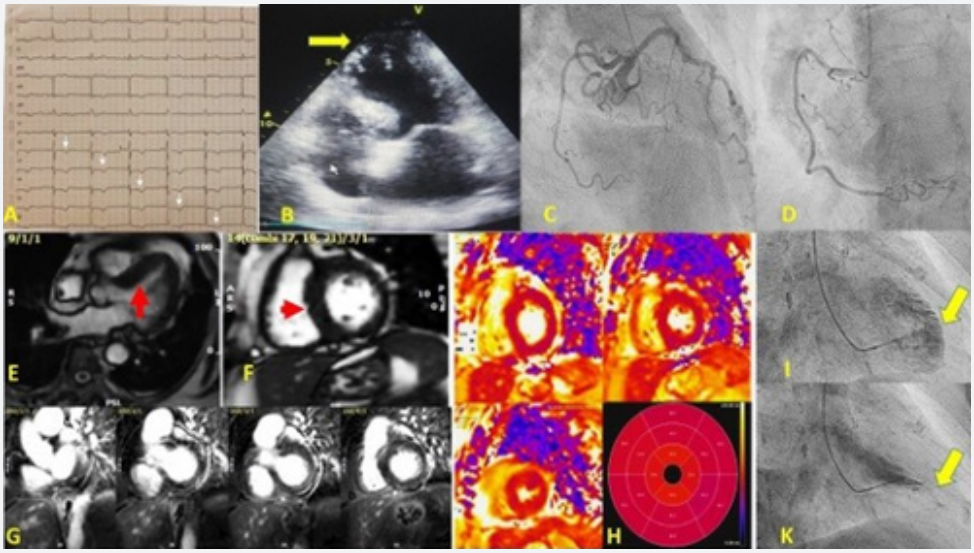

Figure 1: A. ECG (White arrows show negative T in precordial leads), B. Echocardiography (Yellow arrow shows apical ballooning), C & D. Left and Right coronary angiography with normal coronaries, E & F. Cardiac MRI (Red arrows show asymmetrical septal and apical hypertrophy), G. Cardiac MRI (Late gadolinium enhancement in mid and apical left ventricular segments), H. T2 Mapping (Increased T2 in apical segments), I & K. Left ventriculography (Red arrows show left ventricular apical ballooning).

DOI: 10.19080/JOCCT.2025.19.556022

How to cite this article: Konstantinos Bratis MD, PhD, Raphael Patras MD, Argyrios Ntalianis MD, PhD. Coexisting Takotsubo and Hypertrophic Cardiomyopathy in an Octogenarian Patient: A Clinical Challenge. J Cardiol & Cardiovasc Ther 2025; 19(5): 556022 DOI:10.19080/JOCCT.2025.19.556022