## ARTICLE IN PRESS

INDIAN HEART JOURNAL XXX (2015) XXX-XXX



Available online at www.sciencedirect.com

## **ScienceDirect**

journal homepage: www.elsevier.com/locate/ihj



## **Case Report**

# Apical hypertrophic cardiomyopathy with hemodynamically unstable ventricular arrhythmia – Atypical presentation

Hemant Chaturvedi <sup>a,\*</sup>, Rudra Dev Pandey <sup>b</sup>, Krishna Kumar Sharma <sup>c</sup>, Jitendra Singh Makkar <sup>b</sup>, Sanjeev K. Sharma <sup>b</sup>

#### ARTICLE INFO

Article history:
Received 16 April 2015
Accepted 7 August 2015
Available online xxx

Keywords: Apical hypertrophic cardiomyopathy Electrocardiogram Arrhythmia

#### ABSTRACT

We present a patient with asymptomatic apical hypertrophic cardiomyopathy (AHCM) who recently developed cardiac arrhythmias, and shortly discuss the diagnostic modalities, differential diagnosis, and treatment strategy for this condition. AHCM is a rare form of hypertrophic cardiomyopathy, which usually involves the apex of the left ventricle. AHCM can occur with varied presentations such as chest pain, palpitations, dyspnea, syncope, atrial fibrillation, myocardial infarction, embolic events, ventricular fibrillation, and congestive heart failure. The most peculiar electrocardiogram findings are giant T-waves inversion in the precordial leads with left ventricular (LV) hypertrophy. A transthoracic echocardiogram is the initial diagnostic modality in the evaluation of AHCM and shows hypertrophy of the LV apex. Other diagnostic modalities, including left ventriculography, multislice spiral computed tomography, and cardiac magnetic resonance imagings, are also valuable tools. Medications used to manage include verapamil, beta-blockers, and antiarrhythmic agents. An implantable cardioverter defibrillator (ICD) is recommended for high-risk patients.

© 2015 Cardiological Society of India. Published by Elsevier B.V. All rights reserved.

#### 1. Introduction

Apical hypertrophic cardiomyopathy (AHCM) is an uncommon type of hypertrophic cardiomyopathy (HCM), which usually involves the left ventricle apex and rarely involves the right ventricular apex or both. Initially, it was thought that AHCM is limited only to the Japanese population, but nowadays it is also found in other populations.

#### 2. Case report

A 77-year-old Indian male with a history of hypertension and diabetes mellitus was asymptomatic before July 2014. He had complaints of two episodes of syncope in the last 1 month. There was no family history of sudden death, congestive heart failure, or cardiomyopathy. On examination, his blood pressure was 118/72 mmHg and heart rate 67 bpm (beats per

E-mail address: drhemant.chaturvedi@gmail.com (H. Chaturvedi). http://dx.doi.org/10.1016/j.ihj.2015.08.011

0019-4832/@ 2015 Cardiological Society of India. Published by Elsevier B.V. All rights reserved.

Please cite this article in press as: Chaturvedi H, et al. Apical hypertrophic cardiomyopathy with hemodynamically unstable ventricular arrhythmia – Atypical presentation. *Indian Heart J.* (2015), http://dx.doi.org/10.1016/j.ihj.2015.08.011

<sup>&</sup>lt;sup>a</sup> Consultant, Non-Invasive Cardiologist, Eternal Heart Care Center & Research Institute, Jaipur, India

<sup>&</sup>lt;sup>b</sup> Consultant Intervention Cardiologist, Eternal Heart Care Center & Research Institute, Jaipur, India

<sup>&</sup>lt;sup>c</sup> FCCP Consultant Pulmonologist, Eternal Heart Care Center & Research Institute, Jaipur, India

<sup>\*</sup> Corresponding author.

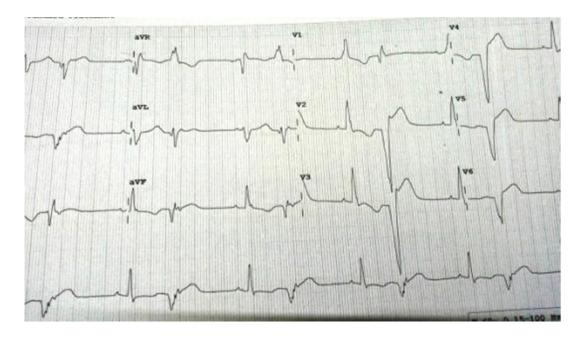
# ARTICLE IN PRESS

INDIAN HEART JOURNAL XXX (2015) XXX-XXX

minute), with no heart murmur or any signs of congestive heart failure. The rest of the examination was normal. A 12-lead electrocardiogram (ECG) showed right bundle branch block (RBBB) with generalized giant T wave inversion with frequent ventricular premature complexes (VPCs)/ventricular bigeminy (Fig. 1). The cardiac enzymes and chest X-ray were normal. Initial transthoracic echocardiogram (TTE) was reported as moderate concentric left ventricular (LV) hypertrophy (Inter ventricular septum thickness 1.39 cm) with

Mild Aortic Regurgitation and normal LV systolic function LVEF (Left ventricular ejection fraction) 60%. Holter monitoring was done, which recorded frequent unifocal VPCs with episodes of ventricular runs (Maximum one lasted for 16 s) having all negative QRS concordance morphology (Fig. 2), which were managed with antiarrhythmic medication (Amiadarone).

He was then referred to higher institute for electrophysiological study and Radio frequency ablation, where he had



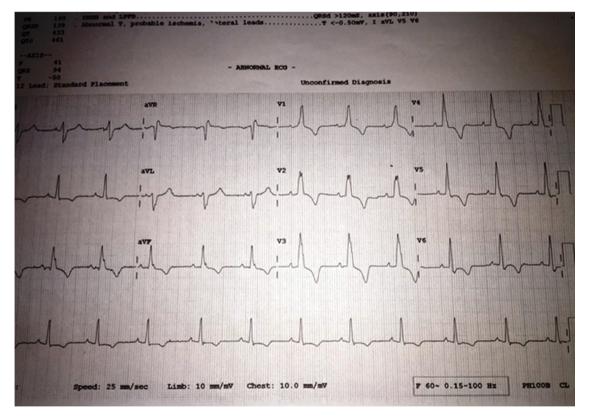


Fig. 1 - Resting 12 lead electrocardiogram showing RBBB with generalized T wave inversion and ventricular bigeminy.

Please cite this article in press as: Chaturvedi H, et al. Apical hypertrophic cardiomyopathy with hemodynamically unstable ventricular arrhythmia – Atypical presentation. Indian Heart J. (2015), http://dx.doi.org/10.1016/j.ihj.2015.08.011

### Download English Version:

# https://daneshyari.com/en/article/5603854

Download Persian Version:

https://daneshyari.com/article/5603854

<u>Daneshyari.com</u>