Exhaustion and fainting after mild physical activity in a patient with multiple sudden cardiac deaths in their medical family history

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Introduction: Hypertrophic obstructive cardiomyopathy is the most common cardiac disease with genetic predisposition[1]. We are presenting the case of a 57-year-old patient with broad, non-specific symptoms that was later diagnosed with hypertrophic obstructive cardiomyopathy.

Case report: 57-year-old male presented to the Emergency Department after collapsing on the airport while waiting in line. He felt epigastric pain and constant exhaustion prior the event which he connected with Barrett's esophagus, diagnosis he was previously diagnosed with. He felt palpitations and measured low blood pressure even though he was diagnosed with arterial hypertension. During medical history taking he stated he was the only family member living past 55 years of age since his siblings and father died due to heart condition with whom he was not familiar with. Auscultation revealed grade 3/6 systolic murmur over the heart apex. His blood work showed elevated N-terminal pro b-type natriuretic peptide (2054 pg/mL) and insignificantly elevated high sensitive troponin T. 12-lead electrocardiogram showed signs of left ventricle hypertrophy. Routine echocardiography visualized obstructive hypertrophic cardiomyopathy with high mean gradient in left ventricular outflow tract (LVOT mean PG 111.52 mmHg) (**Figure 1**), systolic anterior motion (SAM) (**Figure 2**) and severely thickened basal septum (IVSd 2.2 cm) (**Figure 3**. During his stay invasive coronary angiography was performed and significant coronary atherosclerosis was ruled out. A 24-hour heart monitor device was used with whom we ruled out rhythm disturbances. After clinical stabilization patient was referred to further medical evaluation in his country.

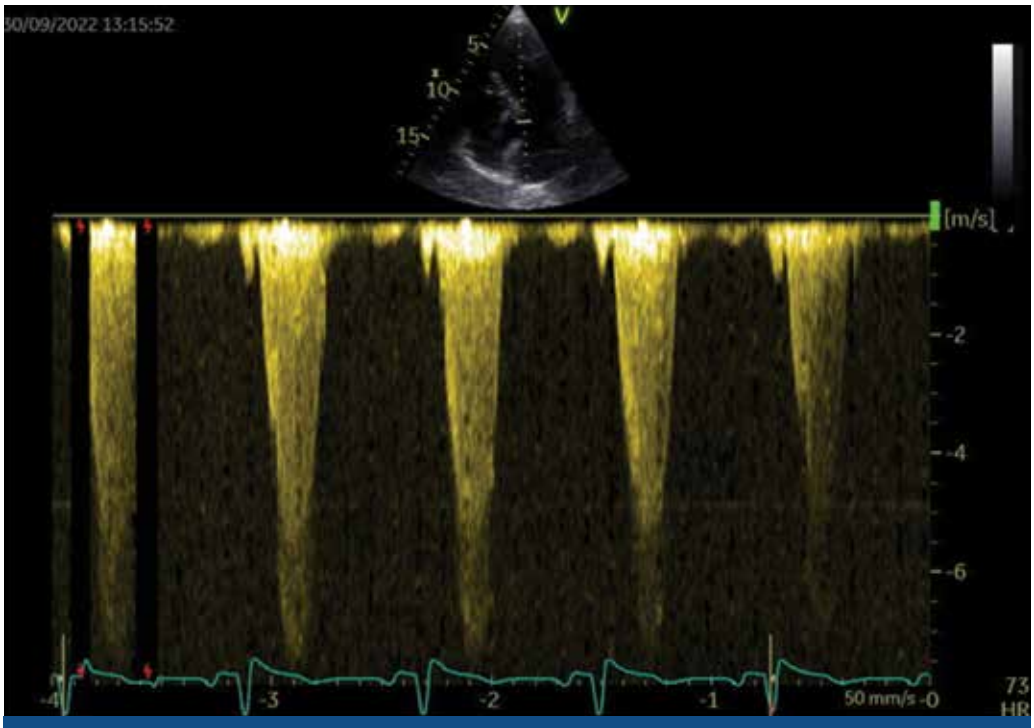

FIGURE 1. Doppler flow in left ventricular outflow tract.

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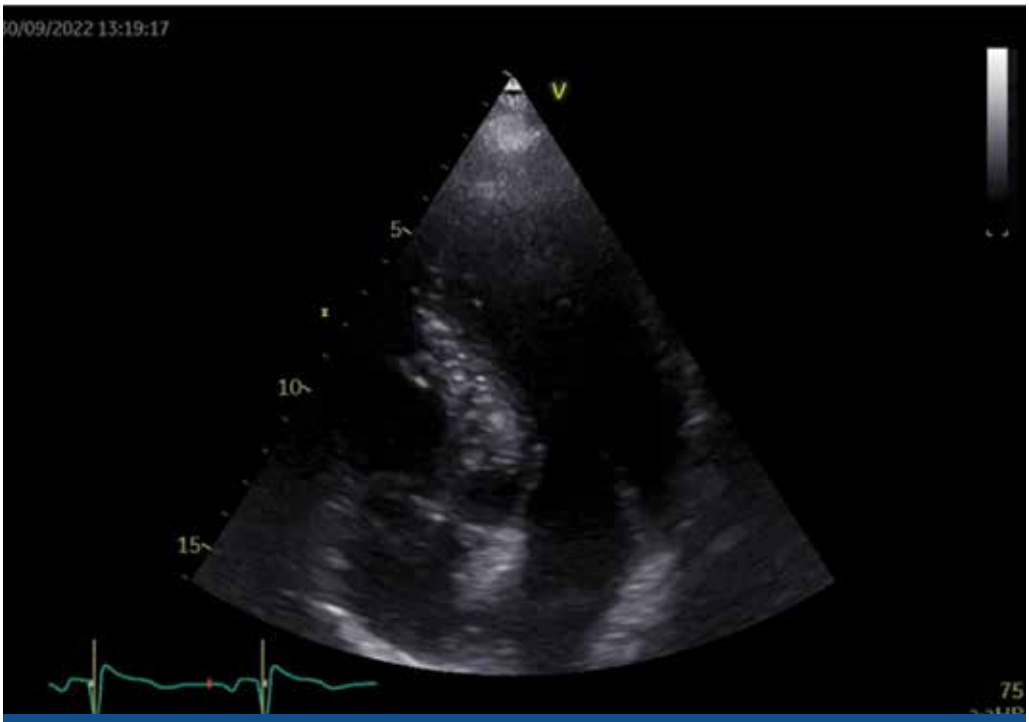

FIGURE 2. Systolic anterior motion.

FIGURE 3. Interventricular septum hypertrophy.

Conclusion: Hypertrophic obstructive cardiomyopathy is not always a first diagnose that comes to our mind when patient presents with exhaustion and lightheadedness. Since it is a significant sudden cardiac death cause in younger people and often diagnosed after the fatal event we should think about it more often, even more since we have such a powerful and easily obtained diagnostic procedure like echocardiography.

LITERATURE

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