SUSTAINED VENTRICULAR TACHYCARDIA PRESENTING AS PERSISTENT HICCUPS

Ayesha Jamil¹, MD, Muhammad Sharif¹, DO, Ali Iqbal¹, MD, Smriti Bhatia, MD², Steven Kutalek³, MD

1. Internal Medicine, Nazareth Hospital, Philadelphia, PA; 2. Chief Resident, Internal Medicine, St. Mary’s Medical Center, Langhorne, PA; 3. Electrophysiologist, Dept of Cardiology, St. Mary’s Medical Center, Langhorne, PA

INTRODUCTION

Sustained monomorphic ventricular tachycardia (SMVT) along with ventricular fibrillation is responsible for most sudden cardiac deaths caused by arrhythmias[1]. Patients with SMVT typically present with dyspnea, chest pain, palpitations, syncope/presyncope or generalized malaise. We present a unique case where the presenting symptom was persistent hiccups.

CASE

- A 65-year-old male with medical history significant for coronary artery bypass graft, heart failure with reduced ejection fraction and Automatic Implantable Cardioverter Defibrillator (AICD) in place, status post mechanical aortic valve and Cerebrovascular accident with residual left sided weakness, presented to the Emergency department with complaints of recurrent persistent hiccups for one day.
- He denied associated complaints including chest pain, shortness of breath or palpitations.
- ECG showed T wave changes concerning for lateral wall ischemia. High sensitivity troponins were found to be elevated with a flat pattern. (Image 1)
- AICD interrogation demonstrated episodes of increased frequency of sustained ventricular tachycardia beginning from April and continued through June, when he presented. He was found to have at least 4 episodes of sustained VT lasting more than 2 hours at a rate of 161 bpm with cycle length 360-370 ms.
- In the light of hiccups, elevated troponins and inferolateral T wave changes, ischemic workup was warranted by electrophysiologist. The patient was started on sotalol, and the patient’s symptoms significantly improved the next day.
- The nuclear stress test showed a fixed defect in the inferolateral wall with minimal reversibility noted in the inferior wall. LV function was found to be severely depressed with global hypokinesia and septal akinesia and LVEF 25%.
- Coronary angiography reported severe native coronary artery disease, occluded mid LAD, proximal Left circumflex, and mid RCA. LIMA to LAD was patent. However, no targets were deemed suitable for intervention and medical management was initiated.
- Eventually, sotalol was discontinued based on prolonged QTc on follow up ECG and patient was started on amiodarone and metoprolol succinate.
- Anti-tachycardia pacing programmed into the VT zone 160-190 bpm for the defibrillator. During his eleven days while inpatient, he did not develop recurrence of his symptoms.

CONCLUSION

- Thus far, hiccups have been reported in case reports as the presenting complaint for myocardial infarction and AICD lead displacement for CVS related events[2,3]. Hence, our case serves to highlight hiccups as the initial presentation of SMVT requiring intervention that could otherwise be life-threatening for the patients.

References: