A 78-year-old man presents to establish care on his implanted cardiac resynchronization therapy–defibrillator. He has history of permanent atrial fibrillation, ischemic cardiomyopathy, left bundle branch block, and chronic New York Heart Association functional class III congestive heart failure. He had primary prevention cardiac resynchronization therapy–defibrillator implanted 2 years ago and subsequently had 2 appropriate implantable cardioverter defibrillator shocks 1 year ago for monomorphic ventricular tachycardia. His current cardiac medical regimen consists of aspirin, warfarin, lisinopril, carvedilol, and spironolactone. He is euvoletic on physical examination. A recent ECG is included in his medical chart (Figure 1). Device interrogation shows cardiac resynchronization therapy–defibrillator programmed to VVIR 60 to 120 beats/min. Since last interrogation 6 months ago, biventricular pacing percentage is 52%, there is appropriate distribution of heart rate histogram, and there are 4 nonsustained ventricular tachycardia episodes 1 to 7 seconds in duration. The presenting rhythm recorded by the cardiac resynchronization therapy–defibrillator is shown in Figure 2. What is the optimal course of action?

Figure 1. A recent 12-lead electrocardiogram included in the patient’s medical record.
Noheria; Challenge of the Week

Answer Options

A. Program trigger biventricular pacing response to ventricular sensing
B. Maximize $\beta$-blockade and increase rate responsiveness to ensure biventricular pacing delivery faster than intrinsic conduction with brisk walking challenge
C. Atrioventricular node ablation
D. Add amiodarone to suppress ventricular ectopy and slow atrioventricular nodal conduction and increase lower pacing rate limit
E. Upgrade to DDDR system

Figure 2. The patient's presenting rhythm noted on device interrogation.
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