Frequent PVCs in Patients with CRT-D

Kyoung-Min Park M.D., Ph.D.

Division of Cardiology, Samsung Medical Center,

Sungkyunkwan University School of Medicine, Seoul, Korea

Frequent premature ventricular contractions (PVCs) have been shown to significantly decrease the effectiveness of cardiac resynchronization therapy (CRT) increasing the risk of heart failure or death. In order to improve the response to biventricular pacing, antiarrhythmic drug therapies and/or catheter ablation of PVCs are considered for patients who have a high PVC burden. In patients deemed to be non-responders to CRT, successful PVC ablation has been shown to improve left ventricular ejection fraction and New York Heart Association (NYHA) functional class. Frequent PVCs result in dyssynchronous ventricular activation and contraction and a high PVC burden can lead to PVC-induced cardiomyopathy. In such patients, successful PVC ablation has been shown to improve LV function and in some cases complete recovery of LV function has been reported.