

Left Ventricular Summit Ventricular Arrhythmia

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Catheter ablation of idiopathic ventricular arrhythmias (VAs) is highly successful, with overall cure rates >90%, and is accepted as a first-line therapy by current guidelines. However, despite the advances in mapping and ablation techniques, there is a percentage of patients in whom successful ablation cannot be achieved because of anatomic limitations. In this regard, one of the most challenging clinical problems that electrophysiologists may face in the laboratory is the approach to VAs arising from the summit of the left ventricle. This region is the highest portion of the left ventricle (LV) epicardium, near the bifurcation of the left main coronary artery, and accounts for up to 14% of LV VAs. The complex relationships between the LV summit (LVS) and surrounding structures underscore the importance of understanding the anatomy of this region and the value of imaging techniques for detailed mapping and safe ablation. In our case, we review the anatomy of the LVS and our approach to mapping and ablating arrhythmias originating from this region.