Management of Electrical Storm

가톨릭의대 서울성모병원 순환기내과

김 성 환

Electrical storm is defined by 3 or more sustained episodes of appropriate shocks from an implantable cardioverter-defibrillator within 24 hours. The presence or absence of structural heart disease and the electrocardiographic morphology of the presenting arrhythmia can provide important diagnostic clues into the mechanism of electrical storm. Electrical storm typically has a poor outcome. The effective management of electrical storm requires an understanding of arrhythmia mechanisms, therapeutic options, device programming, and indications for radiofrequency catheter ablation. Initial management involves determining and correcting the underlying ischemia, electrolyte imbalances, or other causative factors. Radiofrequency ablation can control electrical storm in drug-refractory patients. Patients who have implantable cardioverter-defibrillators can present with multiple shocks and may require drug therapy and device reprogramming. After the acute phase of electrical storm, the treatment focus should shift toward maximizing heart-failure therapy, performing revascularization, and preventing subsequent ventricular arrhythmias.