

For Physicians and  
Health Care  
Professionals from  
The University of  
Kansas Hospital

## PREVENTING AND TREATING SUDDEN CARDIAC ARREST



Loren Berenbom, MD

Sudden cardiac arrest (SCA) is one of the leading causes of death in the United States. Most episodes of SCA are secondary to ventricular tachycardia or fibrillation and often can be treated.

### ICD Provides Effective Early Treatment

Cardiac death due to ventricular tachycardia/fibrillation is preventable if early treatment with defibrillation is available. The implantable cardioverter defibrillator (ICD), first implanted in the Kansas City area in 1986 by Loren Berenbom, MD, provides this therapy to patients at risk for SCA.



Martin Emert, MD

Initially, ICDs were indicated only for patients who survived an out-of-hospital cardiac arrest (typically fewer than 5 percent of these patients). In the 1990s, new research demonstrated the life-saving benefits of ICDs in high-risk patients who had never had an arrhythmic event. More recent studies have broadened the scope of patients who are candidates for ICD treatment as primary prevention for SCA.

Numerous large randomized studies, including NIH studies, have evaluated the effectiveness of ICD therapy to prevent SCA. These studies have demonstrated a 23-54 percent reduction in mortality when patients are treated with ICDs compared to other treatments. These studies included patients with cardiomyopathy of all causes and an ejection fraction less than or equal to 40 percent.

### Evaluation Performed by Electrophysiologists

The electrophysiologists at The University of Kansas Hospital will assess your patients' risk of SCA and initiate therapy when it is indicated.

The SCA risk assessment may include an electrophysiology study or a non-invasive Microvolt T-wave Alternans test. The University of Kansas Hospital is one of only a few hospitals in the region to perform this test.

Unfortunately, only one in five patients who has a Class I indication for an ICD (for example, those who have survived a cardiac arrest) actually get an ICD implanted. These statistics clearly need to improve. Our specialists can work with you to ensure your patients' risk of SCA is properly addressed.

For more information or to refer a patient, call 913-588-5862 or toll free 877-588-5862. Or visit our Web site at [kumed.com](http://kumed.com).



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