

## **Endo-Epicardial Homogenization of the Scar versus Limited Endocardial Substrate Ablation for the Treatment of Electrical Storms in patients with Ischemic Cardiomyopathy**

**Background:** Catheter ablation of electrical storms for ventricular arrhythmias (VA) has shown moderate long-term efficacy in patients with ischemic cardiomyopathy. We investigated the impact on recurrences of two different substrate approaches for the treatment of these arrhythmias.

**Methods and Results:** 92 consecutive patients (81% male,  $62\pm 13$  years) with ischemic cardiomyopathy underwent VA ablations. Patients were treated either by confining the radiofrequency lesions to the endocardial surface with limited substrate ablation (group 1, n=49)], or underwent endocardial and epicardial ablation of all potentials within the scar (homogenization of the scar, group 2, n=43). In the latter group epicardial access and ablation was performed in 33% (14) of the patients. Mean E.F. was  $27\pm 5$ . During a mean follow-up of  $25\pm 10$  months, no deaths occurred. The VAs recurrence rate of any ventricular tachycardia (VTs) was 47% (23/49 pts) in group 1 and 19% (8/43 pts) in group 2 (log-rank  $p=0.006$ ). See figure.

**Conclusions:** Our study demonstrates that ablation using endo-epicardial homogenization of the scar significantly increases freedom from VAs in ischemic cardiomyopathy patients.

