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Titel des Beitrags:
Catheter Ablation of Ventricular Arrhythmias using a Fluoroscopy Image Integration Module.

Abstract:
The impact of the CartoUnivu(TM) technology (Biosense Webster, Diamond Bar, CA, USA) on fluoroscopy exposure compared to a conventional approach using electroanatomical mapping (Carto 3(TM)) was evaluated in patients undergoing radiofrequency ablation for ventricular tachyarrhythmias (VT). We prospectively evaluated 23 patients undergoing VT ablation using the CartoUnivu(TM) technology. The CartoUnivu(TM) Module integrates fluoroscopic images and cine loops into the electroanatomical mapping system. As a control group, 23 out of 88 VT patients (ablated using conventional fluoroscopy supplemented by electromagnetic mapping with the Carto 3(TM) System) were matched for age, gender, body surface area, operator, redo-procedure, presence of coronary artery disease, and left ventricular dysfunction using propensity score matching. A significant reduction in fluoroscopy exposure was observed in the CartoUnivu(TM) group when compared to the conventional group (10.57 ± 7.93 minutes vs 18.52 ± 11.24 minutes, $P = 0.008$; 611 cGy/cm(2) vs 1650 cGy/cm(2), $P = 0.001$). In multivariate analysis, the CartoUnivu(TM) module was an independent predictor of reduced fluoroscopy use. This is a report on the
clinical application of the CartoUnivu system for VT ablation. CartoUnivu(TM) markedly reduced fluoroscopy time and dose compared to conventional fluoroscopy/electroanatomical mapping.