for the treatment of AF. Moreover, in our series the younger patients experienced no exercise intolerance or atrial flutter.

The young patients (age <50 years) seemed to benefit the most from PVs isolation procedure. The relative risk of recurrence was 2.5 fold compared to patients with normal PR. A prolonged PR interval (>0.20 set) with those with a normal PR (0.12-0.20). A prolonged PR interval was associated with increased risk of AF in both sexes (Table). Conclusion: Isolation of the PVs is an effective cure for atrial fibrillation. From our preliminary experience, we recommend isolation in younger patients with paroxysmal or persistent atrial fibrillation.

ORAL CONTRIBUTIONS

885 Atrial Fibrillation Ablation: Clinical Outcomes

Wednesday, March 20, 2002, 8:30 a.m.-10:00 a.m.
Georgia World Congress Center, Ballroom II

8:30 a.m.

Pulmonary Vein Isolation for Treatment of Atrial Fibrillation: Impact of Age on Success and Complications

Thomas Dresling, Nasir F. Marrouche, David O. Martin, Christopher Cole, Ahmad Abdul-Karim, Robert Schwerken, Eduardo Saad, Robert Van Hare, Christopher Cole, bandwidth. In this study, we describe the long-term success rates and follow-up of PVs isolation using the circular mapping technique in patients with impaired LV function (LVF). Methods and Results: Out of 182 patients, 181 (95%) were completely isolated. In 48 of 62 patients (77%), all targeted PVs were completely isolated. ERAF occurred in 7 of 62 patients (11%). Among the 7 patients with ERAF, there was no significant difference in the incidence of ERAF between patients who had complete (n=4) and incomplete (n=3) isolation of all targeted PVs (p=NS). After 56±42 days of follow-up, 3 of the 7 patients who had ERAF were free of AF. One patient had a significant improvement in the frequency of symptoms and 3 had no improvement. The incidence of recurrence of AF was similar in patients with ERAF who had complete (2 of 3) and incomplete (2 of 3) isolation. Conclusions: ERAF within 24 hours may not be predictive of the clinical outcome during the first several weeks of follow-up. This implies that ERAF may be caused by a transient phenomenon such as an acute inflammatory response.

8:45 a.m.

Clinical Significance of Early Recurrence of Atrial Fibrillation After Pulmonary Isolation in Patients With Paroxysmal Atrial Fibrillation

Hakan Orali, Hiroshi Tada, Mohsen Ozaydin, Amarn Chugh, Bohali Hassan, Christoph Schart, Radimina Greenstein, Frank Pelosi, Jr., Bradley P. Knight, S. Adam Strickerberger, Fred Moses, University of Michigan, Ann Arbor, Michigan.

Background: Radiofrequency (RF) catheter ablation of the pulmonary veins (PV) ostia using a segmental approach is performed to electrically disconnect the atrioventricular node within the right PVs. The aim of this study was to determine the prevalence and clinical significance of early recurrence (ERA) of atrial fibrillation (AF) within 24 hrs after the ablation is occasionally encountered. The clinical significance of ERAF has not been evaluated.

Objective: To determine the prevalence and clinical significance of ERAF after isolation of PVs in patients with paroxysmal or persistent atrial fibrillation (AF).

Methods: PV isolation was performed in 51 men and 11 women (mean age ± SD = 52 ± 11 years) who had paroxysmal or persistent AF for 6.2 ± 5.6 years. One patient had ischaemic heart disease and 3 had non-ischaemic cardiomyopathy. AF was paroxysmal in 54 and persistent in 8 patients. All PVs with PV potentials were targeted using activation mapping guided with a decapolar Lasso catheter positioned within 5mm of the ostium. Complete electrical isolation was determined by elimination of all high-frequency PV potentials. ERAF was defined as any episode of atrial fibrillation that occurred within 24 hours after the ablation procedure.

Results: In 49 patients, the left superior and inferior and right superior PVs (LSPV, LIPV, and RSPV) and in 15 patients, all 4 PVs were targeted. Of the 108 PVs, 181 (95%) were completely isolated. In 48 of 62 patients (77%), all targeted PVs were completely isolated. ERAF occurred in 7 of 62 patients (11%). Among the 7 patients with ERAF, there was no significant difference in the incidence of ERAF between patients who had complete (n=4) and incomplete (n=3) isolation of all targeted PVs (p=NS). After 56±42 days of follow-up, 3 of the 7 patients who had ERAF were free of AF. One patient had a significant improvement in the frequency of symptoms and 3 had no improvement. The incidence of recurrence of AF was similar in patients with ERAF who had complete (2 of 3) and incomplete (2 of 3) isolation. Conclusions: ERAF within 24 hours may not be predictive of the clinical outcome during the first several weeks of follow-up. This implies that ERAF may be caused by a transient phenomenon such as an acute inflammatory response.