The impact of different preventive counseling programs on medication adherence in patients with paroxysmal atrial fibrillation after catheter ablation

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Background: Poor medication adherence is a major contributor to suboptimal health outcomes and increased costs in cardiovascular (CV) diseases including atrial fibrillation (AF).

Purpose: To assess the impact of different preventive counseling programs on medication adherence in AF patients (pts) after catheter ablation (CA).

Methods: A prospective randomized controlled study with 3 parallel groups of pts with paroxysmal AF after CA (radiofrequency or cryoablation). Pts were randomized (1:1:1) into 3 groups. Before discharge, pts from all groups received 1 preventive counseling session with focus on their individual risk factors profile. After discharge both intervention groups received 6 sessions of biweekly remote preventive counseling by phone (Group 1) or via email(Group 2) for 3 months after enrollment. Group 3 received usual care. Medication adherence was assessed using the 4-item Morisky-Green scale at baseline and at 12 months.

Results: A total of 135 pts aged 35 to 80 years were enrolled (mean age, 57.3 ± 9.1 years, men, 51.8%). The groups were well balanced according to demographic and clinical features. Baseline levels of non-adherence and partial adherence were high in all groups (53.4%, 71.1% and 73.3% respectively). At 1 year of follow-up pts from both intervention groups demonstrated a significant improvement of medication adherence vs control (table).

Conclusions: Preventive counseling programs with remote support via phone or e-mail improve medication adherence in AF pts after CA.

| Medication adherence | 1 group (support via phone) | | 2 group (support via e-mail) | | U | | P for Group 1 vs. control at 12 months | P for Group 2 vs. control at 12 months |
|----------------------|-----------------------------|----------|------------------------------|----------|-----------------|------|--|--|
| Baseline | After 12 months | Baseline | After 12 months | Baseline | After 12 months | | | |
| Adherence,% | 46.7 | 60 | 28.9 | 60 | 26.7 | 31.1 | < 0.01 | < 0.01 |
| Partial adherence ,% | 17.8 | 20 | 31.1 | 20 | 24.4 | 33.3 | n/s | n/s |
| Non-adherence,% | 35.6 | 60 | 40 | 20 | 48.9 | 35.6 | n/s | n/s |