

The effects of different preventive counseling programs on anxiety and depression symptoms in patients with paroxysmal atrial fibrillation after catheter ablation

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Background: Depression and anxiety are common in patients (pts) with atrial fibrillation (AF). These psychosocial risk factors add to the symptoms burden and further deteriorate the quality of life.

Purpose: To assess the effects of different preventive counseling programs on anxiety and depression symptoms in pts after catheter ablation (CA) performed for paroxysmal AF.

Methods: This is a prospective randomized controlled study with 3 parallel groups of pts with paroxysmal AF after CA (radiofrequency or cryoablation). Pts were randomized into 3 groups in 1:1:1 ratio. During hospitalization for CA pts from all groups received single-session preventive counseling with focus on their individual cardiovascular risk factors profile. After discharge pts from Group 1 received remote preventive counseling by phone and

pts from Group 2 – by email every two weeks for the first 3 months after enrollment (a total of 6 sessions). Group 3 received usual care. All pts underwent anxiety and depression assessment using Hospital Anxiety and Depression Scale (HADS) 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, 51.8% men). The groups were well balanced according to demographic and clinical features. At 1 year of follow-up there was a significant decrease in anxiety and depression scores as measured by HADS in both intervention groups vs. control (Table).

Conclusions: Preventive counseling followed by 3 months of remote support via phone and email reduced anxiety and depression level in AF pts after CA.

Anxiety and depression symptoms changes

	Group 1 (support via phone)	Group 2 (support via e-mail)	Control group	P for change from baseline, 1 group vs. control	P for change from baseline, 2 group vs. control
Changes in anxiety symptoms according to HADS-A					
Baseline, Me (25%; 75%)	8 (4; 10.5)	7 (4; 8)	7 (5.5; 10)	n/s	n/s
At 12 months, Me (25%; 75%)	3 (1.5; 5)**	4 (2; 5)**	7 (5; 9.5)	<0.001	<0.001
Δ% after 12 months, Me (25%; 75%)	-50.0 (-77.8; -24.0)	-40.0 (-57.1; -20.0)	-9.1 (-17.8; 16.1)	<0.001	<0.001
Changes in depression symptoms according to HADS-D					
Baseline, Me (25%; 75%)	5 (3.5; 7)	4 (2; 5)	6 (3.5; 8)	n/s	<0.05
At 12 months, Me (25%; 75%)	3 (1; 4)**	3 (2; 4)**	5 (3; 8)*	<0.001	<0.001
Δ% after 12 months, Me (25%; 75%)	-46.4 (-75.0; 0)	-30.9 (-51.8; 0)	-10.0 (-31.3; 0)	<0.001	<0.05

*p<0.05 vs baseline; **p<0.001 vs baseline.