THE EFFECT OF ANXIETY AND DEPRESSION ON THE RECURRENCE OF PAROXYSMAL ATRIAL FIBRILLATION AFTER CIRCUMFERENTIAL PULMONARY VEIN ABLATION

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Background Whether circumferential pulmonary vein ablation (CPVA) can alleviate the anxiety and depression symptoms of patients with AF is unknown and the effect of anxiety and depression on the recurrence of paroxysmal AF after CPVA is not clear.

Material and methods 98 patients with paroxysmal AF and treated with CPVA were enrolled. Zung Self-Rating Anxiety Scale (SAS), and Zung Self-Rating Depression Scale (SDS) were assessed before and after treatment 12 months in all patients.

Results 97 patients were completed in this study. The scores of SAS and SDS decreased after CPVA 12 months (41.69±8.32 vs 37.66±4.82, P<0.001 and 45.01±9.71 vs 40.05±8.56, P<0.001, respectively). Over 12 months follow-up, AF relapsed in 28 patients. Compared with the data in recurrent group (28 patients), the scores of SAS and SDS were significantly lower in non-recurrent group (69 patients) at baseline (44.68±8.40 vs 38.10±7.55, P<0.001 and 51.75±9.41 vs 43.96±8.95, P<0.001, respectively). The results of multivariate logistic regression analysis showed normal score of SAS (OR 3.20, 95% CI 3.05 to 3.48, p=0.023) and SDS (OR 3.26, 95% CI 3.12 to 3.49, p=0.023) were the independent risk factors of AF recurrence after CPVA.

Conclusions CPVA can ameliorate the anxiety and depression symptom in patients with paroxysmal AF. Anxiety and depression increase the recurrence risk of AF after CPVA.