One-stop procedure of "atrial fibrillation radiofrequency ablation + left atrial appendage closure" guided by 3D printing technology:A Case Report

Nuohan Liao<sup>1</sup>, qin zuoan<sup>2</sup>, Li Luo<sup>2</sup>, and Liangqing Ge<sup>2</sup>

November 30, 2022

## Abstract

Background: Left atrial appendage occlusion (LAAO) in the treatment of atrial fibrillation (AF) has become a hot topic in clinical research in recent years. Case presentation: we report a 68-year-old female patient who was admitted for "recurrent palpitations for three years," with an electrocardiogram finding of atrial fibrillation (Figure [1](#fig-cap-0001)). The diagnosis upon admission was: (1) arrhythmia: paroxysmal AF (CHA2DS2-VASc: 4 points, HAS-BLED: 3 points), (2) Grade 3 hypertension, and (3) carotid plaque with internal carotid artery stenosis. The patient had a history of AF for three years with poor drug treatment effect. The patient was unable to tolerate anticoagulation therapy. We gave the patient a one-stop procedure treatment of "AF radiofrequency ablation + LAAO" under the guidance of 3D printing technology. There was no recurrence of AF or paravalvular leakage at the three-month and one-year follow-ups. Conclusions: The 3D printing technology guide the one-stop operation of "AF radiofrequency ablation + LAAO" is helpful. But it whether can improve the prognosis and quality of life of patients, further multi-center research and large data statistics are required.

## Hosted file

case report1.doc available at https://authorea.com/users/558186/articles/607502-one-stop-procedure-of-atrial-fibrillation-radiofrequency-ablation-left-atrial-appendage-closure-guided-by-3d-printing-technology-a-case-report

## Hosted file

picture.doc available at https://authorea.com/users/558186/articles/607502-one-stop-procedure-of-atrial-fibrillation-radiofrequency-ablation-left-atrial-appendage-closure-guided-by-3d-printing-technology-a-case-report

<sup>&</sup>lt;sup>1</sup>University of South China <sup>2</sup>The First People's Hospital of Changde City