PJ1-097  Radiofrequency Catheter Ablation for Atrial Fibrillation Followed by Cardiac Resynchronization Therapy in a Case of Lamin-Related Cardiomyopathy: A Case Report

Mitsuhiko Yahata, Satoshi Sizuta, Mamoru Hayano, Naoki Onishi, Yasuhiro Sasaki, Kentaro Nakai, Koji Goto, Takeshi Makiyama, Takahiro Doi, Takeshi Kimura

Department of Cardiovascular Medicine, Kyoto University Graduate School of Medicine, Kyoto, Japan

Lamin-related cardiomyopathy (LRCM) is an inherited progressive heart disease of autosomal dominant form, which is associated with conduction system disease, atrial fibrillation (AF), congestive heart failure (CHF), and sudden cardiac death (SCD). There has been no report of radiofrequency catheter ablation (RFCA) for AF in a case of LRCM. A 57-year old male, who had a family history of AF, pacemaker, CHF, and SCD, was admitted to our hospital because of AF and advanced AV block. His CHF status was NYHA class II, and BNP level was 31 (pg/ml). His ECG showed AF with reduced ventricular response (HR=46bpm) and QRS of 118ms. His UCG data were as follows; LVDD=52mm, LVEF=59%, LAD=37mm. He underwent RFCA for AF, which consisted of extensive pulmonary vein isolation, left atrial roof-line, and mitral and tricuspid isthmus blocklines. Because a mutation in lamin-A/C gene (S303fsX25) was identified, he underwent cardiac resynchronization therapy with defibrillator (CRT-D) 4 days after RFCA. During the follow-up period of 6 months, the patient was free from AF. This was the first report suggesting the efficacy of RFCA for AF in a case of LRCM at an early stage of the disease.

Keywords: lamin-related cardiomyopathy, atrial fibrillation, cardiac resynchronization therapy