A Case of Implantation of ICD over 30 Years after CABG for Coronary Arterial Lesions Due to Kawasaki Disease

Shinzo Torii, Kagami Miyaji, Kou Shibata, Tadashi Kitamura, Nobuyuki Inoue, Hideki Sarukawa, Norihiko Oka, Takeshi Yoshii, Takuma Fukunishi

Department of Cardiovascular Surgery, Kitasato University, Sagamihara, Japan

The patient was a 41-year-old male. In 1970, at 2 months of age, he was affected by Kawasaki disease; he suffered a broad anterior myocardial infarction at 7 months of age. When the patient was 7 years old, cardiac catheterization revealed a left ventricular aneurysm and left ventricular dysfunction (EF 29%). Coronary angiography (CAG) revealed coronary artery aneurysm in the left main trunk and proximal right coronary artery (RCA), an occlusion in the left anterior descending artery (#6), and 75% stenosis in the distal portion of the RCA aneurysm. The left ventricular aneurysmectomy and CABG (SVG-RCA #3) were performed in 1978. A patent SVG was demonstrated by CAG when the patient was 8, 10, 15, and 26 years old. The EF of the left ventricle improved from 26% to 39%. The patient had been in NYHA I; however, ventricular tachycardia occurred in 2004 while he was hiking around Mt. Fuji. CAG showed favorable patency of the SVG, but ventricular fibrillation was induced. He had an implantable cardioverter defibrillator (ICD) implantation 34 years after myocardial infarction. There was no sustained VT observed afterwards and the ICD has not performed any defibrillation. This case shows that myocardial remodeling will cause lethal arrhythmia over 30 years after CABG even if with patent grafts.

Keywords: Kawasaki disease, CABG, ICD