How to approach for atrial fibrillation case post Amplatzer implantation

Aya Obuchi
Masatugu Ooe
Jun Kumanomido
Go Haraguchi
Yoshihiro Fukumoto

Introduction: There are few reports of atrial fibrillation ablation cases after Amplatzer implantation.

Methods: The case is a 70-year-old female. After Amplatzer Implantation, drug-resistant paroxysmal atrial fibrillation appeared, so atrial fibrillation ablation (pulmonary vein isolation: PVI) was performed. Anatomical relationship between the left atrium and the pulmonary vein was confirmed by contrast-enhanced CT before surgery, and at the time of ablation, we attempted an Amplatzer's brockenbrough with an RF needle under echocardiography. However, even though Brockenbrough was performed on the upper and lower edges of Amplatzer, respectively, the Amplatzer device could not be avoided and could not reach the left atrium. For this reason, it changed to the long needle of the metal needle, and punctured in the center of Amplatzer under echo guidance. When the needle reached the left atrium, a guide wire was advanced. While maintaining the guide wire in the left atrium, the needle was changed only to the inner cylinder of the catheter sheath and passed through the puncture hole to enlarge the hole diameter. Subsequently, in order to size up the diameter of the puncture hole, the outer cylinder was replaced with a sheath attached, and similarly, the puncture hole was passed, the hole diameter was further enlarged, and the sheath was successfully inserted into the left atrium. Later, using a 3D mapping system, bilateral pulmonary vein isolation was performed and the procedure was completed.

Result: Since then, atrial fibrillation has not recurred until now, and it has been confirmed that there is no echocardiographic left and right shunt.

Conclusion: We report case where ablation was safe and progress was good.