**IMPLANTATION OF LEADLESS PACEMAKER FOR DEVELOPMENT OF NEW LEFT BUNDLE BRANCH BLOCK AND SYMPTOMATIC PAUSE FOLLOWING TRANSCATHETER AORTIC VALVE REPLACEMENT (TAVR)**

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**Background**: Cardiac conduction disturbances such as left bundle branch block (LBBB) and atrio-ventricular (AV) blocks occur frequently following transcatheter aortic valve replacement (TAVR) and may be associated with adverse clinical events. There are no evidence based guidelines regarding the implantation of a leadless pacemaker following development of a new LBBB post TAVR.

**Case**: A 71-year-old female with permanent atrial fibrillation and severe symptomatic aortic valve stenosis underwent a 26-mm Sapiens S3 TAVR. Postprocedure, her ECG demonstrated new LBBB with QRS duration of 172 ms. Four days post operatively, she had an eight-second pause and presyncope. Due to patient body habitus and body mass index (BMI) of 54 kg/m2, as well as permanent atrial fibrillation precluding the need for an atrial lead, a leadless pacemaker (Medtronic Micra) was implanted. Patient felt well and was discharged in stable condition.

**Discussion**: LBBB rates of 12% to 22% have been reported after implantation of the Edwards SAPIEN 3 valve. The patient developed symptomatic pauses 4 days after the new LBBB. There is a lack of consensus regarding permanent pacemaker implantation in case of occurrence of TAVR-related bundle branch blocks or combination of AV block and bundle blocks. Furthermore, there are no guidelines regarding the use of the leadless pacemaker in this setting.

**Conclusion**: Leadless pacemaker may be a good option for patients not requiring atrial leads and having conduction abnormalities post TAVR placement.

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