Abstract No. 55

Category: Valvular Heart Disease

Title: Percutaneous Paravalvular Leak Closure: Results Based on Paravalvular Leak

Academic Research Consortium

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Abstract:

Background: The Paravalvular Leak Academic Research Consortium (PVLARC) provided appropriate clinical endpoints, and outcomes definitions for percutaneous paravalvular leak repair (PVLR). We aim to evaluate paravalvular leak device closure according to PVLARC definitions.

Methods: A case series of patients who underwent paravalvular leak device closure was analyzed. Perioperative variables were assessed, as well as outcomes after discharge, including major adverse cardiovascular events (MACE). Quantitative variables are presented as mean and standar deviation, and qualitative are presented as absolute frequencies.

Results: Nine percutaneous paravalvular leak device closure (PVLDC) were assessed. Patients mean age was 56,4 (SD=18,9), all were male. The mean time between surgical replacement and PVLDC was 4,5 years (SD=4,1). Aortic paravalvular leaks were found in six patients and mitral paravalvular leaks in three. New York Heart Association functional class was > II (n=7), the mean Society of Thoracic Surgeons score was 3,6% (SD= 3,2) and EUROSCORE II 6,1% (SD=4,7). Mitral PVL location (n=2 between 9 o´clock and 12 o´clock, n=1 between 12 o´clock and 3 o´clock) and aortic PVL location (n=4 between 7 o´clock and 11 o´clock, n=1 between 11 o´clock and 3 o´clock, n=1 between 3 o´clock and 7 o´clock). In 8 cases we used AMPLATZER® Vascular Plug II (AGA Medical Corporation, Golden Valley, MN, USA). There was not in-hospital MACE. Three aortic residual PVL were identified. All patients had technical and device success, although procedural success was reached in 87,5%.

Conclusion: PVLDC had high technical, device and procedural success in our center, according to the new PVLARC definitions. These results are comparable with the literature. There was not inhospital MACE, however long term follow-up with individual patient success are necessary to assess prospectively effectiveness of procedure.