

JSPCCS-AEPC Joint session

JSPCCS-AEPC Joint session (II-AEPCJS)

座長:坂本 喜三郎 (静岡県立こども病院)

座長:Katarina Hanseus (Children's Heart Center, Skane University Hospital, Lund, Sweden)

Mon. Nov 23, 2020 4:00 PM - 5:30 PM Track2

[II-AEPCJS-1]Impacts of transcatheter balloon aortic valvuloplasty in children with aortic valvular stenosis

○Jun Muneuchi ¹, Ayako Kuraoka ², Yusaku Nagatomo ³, Koichi Yatsunami ⁴, Koichi Sagawa ², Hazumu Nagata ³, Yuichiro Sugitani ¹, Mamie Watanabe ¹: Kyushu Congenital Heart Research Group. (1. Department of Pediatrics, Kyushu Hospital, Japan Community Healthcare Organization, 2. Department of Cardiology, Fukuoka Children's Hospital, 3. Department of Pediatrics, Graduate School of Medical Science, Kyushu University, 4. Department of Pediatric Cardiology, Kumamoto City Hospital)

Background: It is controversial whether children with isolated aortic valvular stenosis undergo transcatheter balloon aortic valvotomy (BAV) or surgical aortic valvotomy (SAV) as the first intervention. This multicenter retrospective cohort study aimed to explore the rates of survival and reintervention after BAV or SAV among them.

Methods: We studied subjects who underwent BAV or SAV at 4 tertiary congenital heart centers in Kyushu, Japan. We compared survival, and freedom from reintervention and aortic valve replacement (prosthetic or autograft) between the groups

Results: A total of 78 subjects were enrolled. Age and aortic valve annulus z-score at the first intervention were 70 (23–415) months and -0.72 (-1.84–0.60), respectively. There were 62 BAV and 16 SAV. During the follow-up period of 13.3 (5.9–16.7) years, there was no significant difference in 10-year survival between the groups (BAV: 88% vs SAV: 100%, P= 0.162). Reinterventions included BAV in 3, surgical valve plasty in 9, Ross operation in 17, and prosthetic valve replacement in 6. Freedom from reintervention at 10 years were 46% and 65% in BAV and SAV subjects, respectively (P=0.592), while freedom from valve replacement at 10 years were 77% and 85% in BAV and SAV subjects, respectively (P=0.988).

Conclusions: Long-term survivals after BAV and SAV were acceptable. Freedom from reintervention and from prosthetic/autograft valve replacement were similar between the groups.