

JCK Oral

JCK Oral 3 (II-JCKO3)

Cardiac Surgery

Chair:Tetsuya Kitagawa(Department of Cardiovascular Surgery, Institute of Biomedical Sciences, Tokushima University Graduate School, Japan)

Chair:Fen Li(Department of Cardiology, Shanghai Children's Medical Center, China)

Chair:Tae Gook Jun(Department of Thoracic and Cardiovascular Surgery Sungkyunkwan University School of Medicine, Heart Vascular Stroke Institute, Samsung Medical Center,Korea)

Sat. Jul 8, 2017 1:50 PM - 3:20 PM ROOM 3 (Exhibition and Event Hall Room 3)

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[II-JCKO3-01]Coronary Morbidity after Arterial Switch Operation

○Woong Han Kim (Seoul National University, Seoul, Korea)

Objective: Coronary artery morbidity after an arterial switch operation causes subsequent reoperation. We investigated the freedom from reoperation, risk factors for reoperation, and results of reoperation.

Methods: Between Sep. 2003 and Dec. 2016, 79 consecutive patients who underwent an arterial switch operation and survived the early postoperative period were included. Preoperative characteristics and operative techniques were investigated in the risk factor analysis. The reoperation techniques and postoperative results were analyzed.

Results: There were no late deaths. Seven patients underwent reoperation due to coronary morbidity. Freedom from reoperation at 5 years and 10 years after the initial operation were 94.5% and 88.6%, respectively. Multivariate analysis revealed that a coronary artery between the great arteries and a high take-off coronary artery were significant risk factors for reoperation. Reoperation techniques included coronary artery ostium unroofing, cut-back angioplasty, and ostioplasty. No patients who underwent unroofing and cut-back angioplasty experienced complications during the median follow-up period of 36.7 months. However, 2 patients who underwent ostioplasty required an additional reoperation due to coronary artery restenosis.

Conclusions: A coronary artery between the great arteries and a high take-off coronary artery were significant risk factors for reoperation due to coronary artery stenosis following the arterial switch operation. Good reoperation results were observed using the unroofing and cut-back angioplasty techniques.