

Sun. Jul 11, 2021

Track5

JCK Session

Session 05 (III-JCK05)

Pulmonary Circulation

Chair:Shozaburo Doi (National Hospital Organization Disaster Medical Center, Japan)

Chair:Jun-bao Du (Pediatrics, Peking University First Hospital, China)

Chair:Hong Ryang Kil (Pediatrics, Chungnam National University Hospital, College of Medicine, Chungnam National University, Republic of Korea)

9:00 AM - 10:30 AM Track5 (Web開催会場)

[III-JCK05-1] Understanding the pathophysiology of idiopathic pulmonary arterial hypertension

○Taichi Kato (Department of Pediatrics, Nagoya University Graduate School of Medicine, Japan)

[III-JCK05-2] The role of endogenous hydrogen sulfide in the pulmonary hypertension

○Hongfang Jin (Department of Pediatrics, Peking University First Hospital, China)

[III-JCK05-3] TBD

○JoWon Jung (Division of Pediatric Cardiology, Severance Cardiovascular Hospital, Yonsei University College of Medicine, Korea)

[III-JCK05-4] Management for pediatric PH associated with CHD

○Shozaburo Doi (National Hospital Organization Disaster Medical Center, Japan)

[III-JCK05-5] Treatment of pulmonary hypertension associated with congenital heart disease in children

○Toru Iwasa (National Cerebral and Cardiovascular Center, Japan)

[III-JCK05-6] Endogenous hydrogen sulfide sulfhydrylates IKK β at cysteine 179 to control pulmonary artery endothelial cell inflammation

○Yaqian Huang (Department of Pediatrics, Peking University First Hospital, China)

[III-JCK05-7] Selexipag as add-on therapy for patients with PAH associated with CHD

○Se Yong Jung (Division of Pediatric Cardiology, Department of Pediatrics, Severance Hospital, Yonsei University College

of Medicine, Korea)

JCK Session

Session 06 (III-JCK06)

Arrhythmia

Chair:Jun Yoshimoto (Shizuoka Children's Hospital, Japan)

Chair:Fen Li (Department of Cardiology/ Heart Center, Shanghai Children's Medical Center Aliated to Shanghai Jiaotong University School of Medicine, China)

Chair:Myung Chul Hyun (Pediatric Cardiology, Kyung Pook National University Hospital, Korea)

10:40 AM - 12:10 PM Track5 (Web開催会場)

[III-JCK06-1] Efficacy and safety of implantable cardioverter-defibrillator implantation in pediatric with cardiac ion channel diseases

○Yiwei Chen, Ji Wei, Zhu Diqi, Li Fen (Department of Cardiology/Heart Center, Shanghai Children's Medical Center Aliated to Shanghai Jiaotong University School of Medicine, China)

[III-JCK06-2] Non-genetic arrhythmias in pediatric patients

○Ji Eun Ban (Pediatric Cardiology, Ewha University Medical Center, Korea)

[III-JCK06-3] Preexcitation induced cardiomyopathy

○Aya Miyazaki (Department of Transitional Medicine, Division of Congenital Heart Disease, Shizuoka General Hospital, Japan)

[III-JCK06-4] Arrhythmia in patients with functionally single ventricle

○Eun-Jung Bae (Department of Pediatrics, Seoul National University College of Medicine, Seoul National University Children's Hospital, Korea)

[III-JCK06-5] Fetal arrhythmias : prenatal evaluation using fetal magnetocardiography

○Yoshiaki Kato (Department of Pediatric Cardiology, National Cerebral and Cardiovascular Center, Japan)

[III-JCK06-6] Radiofrequency ablation of accessory pathway in infants : a single-center cohort

○Lin Wu, Xuecun Liang (Cardiovascular Ccenter, Children's Hospital of Fudan University, China)

[III-JCK06-7] New algorithm for accessory pathway

localization in pediatric patients with
Wolff-Parkinson-White syndrome

○Seung-Min Baek (Pediatric Cardiology,
Department of Pediatrics, Seoul National
University Children's Hospital, Seoul National
University College of Medicine, Korea)

(Cardiac Center, Children's Hospital of Fudan
University, China)

JCK Session

Session 07 (III-JCK07)

Surgery vs Intervention or Collaboration

Chair:Takaya Hoashi (National Cerebral and Cardiovascular
Center, Japan)

Chair:Bin Jia (Pediatric Heart Center, Children's Hospital of
Fudan University, China)

Chair:Jinyoung Song (Pediatrics, Samsung Medical Center,
Korea)

1:40 PM - 3:10 PM Track5 (Web開催会場)

[III-JCK07-1] Systemic to pulmonary artery shunt

○Chun Soo Park (Division of Pediatric Cardiac
Surgery, Asan Medical Center, University of
Ulsan College of Medicine, Korea)

[III-JCK07-2] PDA stenting in duct dependent

pulmonary circulation- evolving role
&limitations

○Mazeni Alwi (Pediatric &Congenital Heart
Centre (PCHC) , Institute Jantung Negara,
Malaysia)

[III-JCK07-3] VSD closure : Anatomy &Surgery

○Masaaki Kawada (Jichi Children's Medical
Center Tochigi, Japan)

[III-JCK07-4] TBD

○ Do Tin (Cardiology, Pediatric. Cardiology
and Congenital Heart Disease Society of Ho Chi
Minh City, Vietnam)

[III-JCK07-5] Surgical strategy of truncus arteriosus after flow-adjustable bilateral pulm onary artery banding as the first palliation

○Norihiko Oka (Jichi Children's Medical
Center Tochigi, Jichi Medical University,
Japan)

[III-JCK07-6] Percutaneous balloon angioplasty for severe native aortic coarctation in young infants less than six months medium- to long-term follow-up

○Fang Liu, Lan He, Lin Wu, Qu-ming Zhao, Lu
Zhao, Xue-cun Liang, Chen Chu, Guo-ying Huang

JCK Session

Session 08 (III-JCK08)

Fontan

Chair:Hideo Ohuchi (National Cerebral and Cardiovascular
Center, Japan)

Chair:Qiang Shu (Pediatric Heart Center, The Children's
Hospital of Zhejiang University School of Medicine, China)

Chair:Jeong Jin Yu (Pediatric Cardiology Division, Asan
Medical Center, Korea)

3:20 PM - 5:05 PM Track5 (Web開催会場)

[III-JCK08-1] Mechanism of heart failure and evaluation of hemodynamics in the patients long- term after Fontan operation

○Satoshi Masutani (Saitama Medical Center
Saitama Medical University, Japan)

[III-JCK08-2] Fontan associated liver disease

○So Ick Jang (Department of Pediatrics,
Sejong General Hospital, Korea)

[III-JCK08-3] Catheter intervention for Fontan patients

○Atsuko Kato (Department of pediatric
cardiology / National cerebral and
cardiovascular center, Suita, Japan)

[III-JCK08-4] Atrioventricular valve repair in single ventricle patients

○Chang Ha Lee (Cardiovascular Surgery,
Sejong General Hospital, Korea)

[III-JCK08-5] The effect of Fontan conversion on hemodynamics and exercise tolerance

○Akihiko Higashida (Toyama University
Hospital, Japan)

[III-JCK08-6] Identification of high-risk Fontan candidates by intraoperative pulmonary flow study

○Jae Suk Baek (Pediatrics, Asan Medical
Center, University of Ulsan College of
Medicine, Korea)

JCK Session

Session 05 (III-JCK05)

Pulmonary Circulation

Chair:Shozaburo Doi (National Hospital Organization Disaster Medical Center, Japan)

Chair:Jun-bao Du (Pediatrics, Peking University First Hospital, China)

Chair:Hong Ryang Kil (Pediatrics, Chungnam National University Hospital, College of Medicine, Chungnam National University, Republic of Korea)

Sun. Jul 11, 2021 9:00 AM - 10:30 AM Track5 (Web開催会場)

[III-JCK05-1] Understanding the pathophysiology of idiopathic pulmonary arterial hypertension

○Taichi Kato (Department of Pediatrics, Nagoya University Graduate School of Medicine, Japan)

[III-JCK05-2] The role of endogenous hydrogen sulfide in the pulmonary hypertension

○Hongfang Jin (Department of Pediatrics, Peking University First Hospital, China)

[III-JCK05-3] TBD

○JoWon Jung (Division of Pediatric Cardiology, Severance Cardiovascular Hospital, Yonsei University College of Medicine, Korea)

[III-JCK05-4] Management for pediatric PH associated with CHD

○Shozaburo Doi (National Hospital Organization Disaster Medical Center, Japan)

[III-JCK05-5] Treatment of pulmonary hypertension associated with congenital heart disease in children

○Toru Iwasa (National Cerebral and Cardiovascular Center, Japan)

[III-JCK05-6] Endogenous hydrogen sulfide sulfhydrates IKK β at cysteine 179 to control pulmonary artery endothelial cell inflammation

○Yaqian Huang (Department of Pediatrics, Peking University First Hospital, China)

[III-JCK05-7] Selexipag as add-on therapy for patients with PAH associated with CHD

○Se Yong Jung (Division of Pediatric Cardiology, Department of Pediatrics, Severance Hospital, Yonsei University College of Medicine, Korea)

(Sun. Jul 11, 2021 9:00 AM - 10:30 AM Track5)

[III-JCK05-1] Understanding the pathophysiology of idiopathic pulmonary arterial hypertension

○Taichi Kato (Department of Pediatrics, Nagoya University Graduate School of Medicine, Japan)

(Sun. Jul 11, 2021 9:00 AM - 10:30 AM Track5)

[III-JCK05-2] The role of endogenous hydrogen sulfide in the pulmonary hypertension

○Hongfang Jin (Department of Pediatrics, Peking University First Hospital, China)

(Sun. Jul 11, 2021 9:00 AM - 10:30 AM Track5)

[III-JCK05-3] TBD

○JoWon Jung (Division of Pediatric Cardiology, Severance Cardiovascular Hospital, Yonsei University College of Medicine, Korea)

(Sun. Jul 11, 2021 9:00 AM - 10:30 AM Track5)

[III-JCK05-4] Management for pediatric PH associated with CHD

○Shozaburo Doi (National Hospital Organization Disaster Medical Center, Japan)

(Sun. Jul 11, 2021 9:00 AM - 10:30 AM Track5)

[III-JCK05-5] Treatment of pulmonary hypertension associated with congenital heart disease in children

○Toru Iwasa (National Cerebral and Cardiovascular Center, Japan)

(Sun. Jul 11, 2021 9:00 AM - 10:30 AM Track5)

[III-JCK05-6] Endogenous hydrogen sulfide sulfhydrates IKK β at cysteine 179 to control pulmonary artery endothelial cell inflammation

○Yaqian Huang (Department of Pediatrics, Peking University First Hospital, China)

(Sun. Jul 11, 2021 9:00 AM - 10:30 AM Track5)

[III-JCK05-7] Selexipag as add-on therapy for patients with PAH associated with CHD

○Se Yong Jung (Division of Pediatric Cardiology, Department of Pediatrics, Severance Hospital, Yonsei
University College of Medicine, Korea)

JCK Session

Session 06 (III-JCK06)

Arrhythmia

Chair:Jun Yoshimoto (Shizuoka Children's Hospital, Japan)

Chair:Fen Li (Department of Cardiology/ Heart Center, Shanghai Children's Medical Center Aliated to Shanghai Jiaotong University School of Medicine, China)

Chair:Myung Chul Hyun (Pediatric Cardiology, Kyung Pook National University Hospital, Korea)

Sun. Jul 11, 2021 10:40 AM - 12:10 PM Track5 (Web開催会場)

[III-JCK06-1] Efficacy and safety of implantable cardioverter-defibrillator implantation in pediatric with cardiac ion channel diseases

○Yiwei Chen, Ji Wei, Zhu Diqi, Li Fen (Department of Cardiology/Heart Center, Shanghai Children's Medical Center Aliated to Shanghai Jiaotong University School of Medicine, China)

[III-JCK06-2] Non-genetic arrhythmias in pediatric patients

○Ji Eun Ban (Pediatric Cardiology, Ewha University Medical Center, Korea)

[III-JCK06-3] Preexcitation induced cardiomyopathy

○Aya Miyazaki (Department of Transitional Medicine, Division of Congenital Heart Disease, Shizuoka General Hospital, Japan)

[III-JCK06-4] Arrhythmia in patients with functionally single ventricle

○Eun-Jung Bae (Department of Pediatrics, Seoul National University College of Medicine, Seoul National University Children's Hospital, Korea)

[III-JCK06-5] Fetal arrhythmias : prenatal evaluation using fetal magnetocardiography

○Yoshiaki Kato (Department of Pediatric Cardiology, National Cerebral and Cardiovascular Center, Japan)

[III-JCK06-6] Radiofrequency ablation of accessory pathway in infants : a single-center cohort

○Lin Wu, Xuecun Liang (Cardiovascular Ccenter, Children's Hospital of Fudan University, China)

[III-JCK06-7] New algorithm for accessory pathway localization in pediatric patients with Wolff-Parkinson-White syndrome

○Seung-Min Baek (Pediatric Cardiology, Department of Pediatrics, Seoul National University Children's Hospital, Seoul National University College of Medicine, Korea)

(Sun. Jul 11, 2021 10:40 AM - 12:10 PM Track5)

[III-JCK06-1] Efficacy and safety of implantable cardioverter-defibrillator implantation in pediatric with cardiac ion channel diseases

○Yiwei Chen, Ji Wei, Zhu Diqi, Li Fen (Department of Cardiology/Heart Center, Shanghai Children's Medical Center Aliated to Shanghai Jiaotong University School of Medicine, China)

Objective To analyze the indication, efficacy, and complications of implantable cardioverter-defibrillator (ICD) implantation in children with cardiac ion channel diseases. **Methods** The retrospective study collected the clinical data of 7 patients who accepted ICD implantation in Shanghai Children's Medical Center from January 2009 to January 2021. The etiologies of tachycardia, procedure of the ICD implantation and the operation associated complications were analyzed. **Results** The 7 patients were aged from 6 years and 5 months to 16 years and 2 months, and their weight were from 15.4 kg to 49.8 kg. Four patients were diagnosed with long QT syndrome, and the remain three were with catecholaminergic polymorphic ventricular tachycardia. All the patients suffered from drug-resistant ventricular tachycardia or ventricular vibration before the operation. After the ICD implantation, 3 patients had electric storm, which were alleviated after analgesics-sedatives treatment with chlorpromazine, dexmedetomidine or midazolam combined with fentanyl, as well as reset of the ICD parameters and support from psychological consultation. The other 4 patients did not undergo any complications as the above comprehensive strategies were given after the operation prophylactically. All patients continued anti-arrhythmic medicine after the operation and all survived at the end of the follow-up period last from 1 month to 7 years. Four patients had ventricular tachycardia (VT) and ventricular vibration, which were successfully recognized and defibrillated by ICD. **Conclusions** ICD implantation is safe and effective in children and adolescent patients. The electric storm may happen after operation, which could be prevented by the comprehensive strategies including appropriate ICD parameter-setting, analgesics-sedatives treatment and psychological support.

(Sun. Jul 11, 2021 10:40 AM - 12:10 PM Track5)

[III-JCK06-2] Non-genetic arrhythmias in pediatric patients

○Ji Eun Ban (Pediatric Cardiology, Ewha University Medical Center, Korea)

Non genetic arrhythmia include supraventricular tachycardia (SVT) and ventricular tachycardia (VT) unrelated to genetic abnormalities. Here, I reviewed the spectrum of this SVT and idiopathic VT in normal structural heart from ECG diagnosis and electrophysiological characteristics to management. SVT is the most common rhythm disturbance in pediatric patients. Several different mechanisms are responsible for SVT. Atrio-ventricular reentry tachycardia and Atrio-ventricular nodal reentry tachycardia are mostly presented in SVT. Infants may present with ectopic atrial tachycardia or atrial flutter.

Idiopathic VT is a rare but relatively well recognized clinical condition. Idiopathic LV fascicular tachycardia (ILVT) has RBBB morphology and superior QRS axis. Verapamil is very effective for acute termination. When ILVT is refractory to medical therapy, radiofrequency catheter ablation is indication.

(Sun. Jul 11, 2021 10:40 AM - 12:10 PM Track5)

[III-JCK06-3] Preexcitation induced cardiomyopathy

○Aya Miyazaki (Department of Transitional Medicine, Division of Congenital Heart Disease, Shizuoka General Hospital, Japan)

(Sun. Jul 11, 2021 10:40 AM - 12:10 PM Track5)

[III-JCK06-4] Arrhythmia in patients with functionally single ventricle

○Eun-Jung Bae (Department of Pediatrics, Seoul National University College of Medicine, Seoul National University Children's Hospital, Korea)

(Sun. Jul 11, 2021 10:40 AM - 12:10 PM Track5)

[III-JCK06-5] Fetal arrhythmias : prenatal evaluation using fetal magnetocardiography

○Yoshiaki Kato (Department of Pediatric Cardiology, National Cerebral and Cardiovascular Center, Japan)

(Sun. Jul 11, 2021 10:40 AM - 12:10 PM Track5)

[III-JCK06-6] Radiofrequency ablation of accessory pathway in infants : a single-center cohort

○Lin Wu, Xuecun Liang (Cardiovascular Center, Children's Hospital of Fudan University, China)

Objective To evaluate the effectiveness and safety of radiofrequency ablation of accessory pathway in infants. **Methods** Infants younger than 1 year old were evaluated retrospectively, who underwent radiofrequency ablation in our institution between January 2015 and June 2019. **Results** A total of eight infants were included, with median age of 6.5 months (2.5 months -12months) and weight of 7.7kg (5.0kg-9.5kg). Indications for RFCA included drug-refractory tachycardia or cardiomyopathy induced by accessory pathway. Electrophysiology study demonstrated 1 accessory pathway each in 7 patients and 2 pathways in 1, including 5 right lateral, 3 left lateral and 1 left posteroseptal pathways. The pathway was manifest in 4 patients with Wolff-Parkinson-White syndrome and concealed in 4. The acute success rate was 100%. After the median follow-up period of 15 months (3months-46 months), no tachycardia recurred after ablation. One patient developed late mitral valve perforation, which was successfully repaired by surgery. No complication occurred in the remaining patients. **Conclusions** Radiofrequency ablation can provide cure for infants with drug-refractory arrhythmias induced by accessory pathway; however, the indications should be seriously considered and proper procedural modifications might be needed to avoid ablation complications as far as possible.

(Sun. Jul 11, 2021 10:40 AM - 12:10 PM Track5)

[III-JCK06-7] New algorithm for accessory pathway localization in pediatric patients with Wolff-Parkinson-White syndrome

○Seung-Min Baek (Pediatric Cardiology, Department of Pediatrics, Seoul National University Children's
Hospital, Seoul National University College of Medicine, Korea)

JCK Session

Session 07 (III-JCK07)

Surgery vs Intervention or Collaboration

Chair: Takaya Hoashi (National Cerebral and Cardiovascular Center, Japan)

Chair: Bin Jia (Pediatric Heart Center, Children's Hospital of Fudan University, China)

Chair: Jinyoung Song (Pediatrics, Samsung Medical Center, Korea)

Sun. Jul 11, 2021 1:40 PM - 3:10 PM Track5 (Web開催会場)

[III-JCK07-1] Systemic to pulmonary artery shunt

○ Chun Soo Park (Division of Pediatric Cardiac Surgery, Asan Medical Center, University of Ulsan College of Medicine, Korea)

[III-JCK07-2] PDA stenting in duct dependent pulmonary circulation– evolving role & limitations

○ Mazeni Alwi (Pediatric & Congenital Heart Centre (PCHC) , Institute Jantung Negara, Malaysia)

[III-JCK07-3] VSD closure : Anatomy & Surgery

○ Masaaki Kawada (Jichi Children's Medical Center Tochigi, Japan)

[III-JCK07-4] TBD

○ Do Tin (Cardiology, Pediatric Cardiology and Congenital Heart Disease Society of Ho Chi Minh City, Vietnam)

[III-JCK07-5] Surgical strategy of truncus arteriosus after flow-adjustable bilateral pulmonary artery banding as the first palliation

○ Norihiko Oka (Jichi Children's Medical Center Tochigi, Jichi Medical University, Japan)

[III-JCK07-6] Percutaneous balloon angioplasty for severe native aortic coarctation in young infants less than six months – medium- to long-term follow-up

○ Fang Liu, Lan He, Lin Wu, Qu-ming Zhao, Lu Zhao, Xue-cun Liang, Chen Chu, Guo-ying Huang (Cardiac Center, Children's Hospital of Fudan University, China)

(Sun. Jul 11, 2021 1:40 PM - 3:10 PM Track5)

[III-JCK07-1] Systemic to pulmonary artery shunt

○Chun Soo Park (Division of Pediatric Cardiac Surgery, Asan Medical Center, University of Ulsan College of Medicine, Korea)

(Sun. Jul 11, 2021 1:40 PM - 3:10 PM Track5)

[III-JCK07-2] PDA stenting in duct dependent pulmonary circulation— evolving role & limitations

○Mazeni Alwi (Pediatric & Congenital Heart Centre (PCHC), Institute Jantung Negara, Malaysia)

(Sun. Jul 11, 2021 1:40 PM - 3:10 PM Track5)

[III-JCK07-3] VSD closure : Anatomy & Surgery

○Masaaki Kawada (Jichi Children's Medical Center Tochigi, Japan)

(Sun. Jul 11, 2021 1:40 PM - 3:10 PM Track5)

[III-JCK07-4] TBD

○Do Tin (Cardiology, Pediatric Cardiology and Congenital Heart Disease Society of Ho Chi Minh City, Vietnam)

(Sun. Jul 11, 2021 1:40 PM - 3:10 PM Track5)

[III-JCK07-5] Surgical strategy of truncus arteriosus after flow- adjustable bilateral pulmonary artery banding as the first palliation

○Norihiko Oka (Jichi Children's Medical Center Tochigi, Jichi Medical University, Japan)

(Sun. Jul 11, 2021 1:40 PM - 3:10 PM Track5)

[III-JCK07-6] Percutaneous balloon angioplasty for severe native aortic coarctation in young infants less than six months —medium- to long-term follow-up

○Fang Liu, Lan He, Lin Wu, Qu-ming Zhao, Lu Zhao, Xue-cun Liang, Chen Chu, Guo-ying Huang (Cardiac Center, Children's Hospital of Fudan University, China)

By assessing the immediate successful dilation effect, medium and long-term outcome, intraoperative and follow-up complications and re-dilation rate in 102 patients less than six months with severe coarctation of the aorta, we conclude that percutaneous balloon angioplasty is a relatively safe and effective treatment for severe native aortic coarctation in young infants and should be considered a valid alternative to surgery because of its good effects and because it causes less trauma and fewer complications than surgery.

JCK Session

Session 08 (III-JCK08)

Fontan

Chair:Hideo Ohuchi (National Cerebral and Cardiovascular Center, Japan)

Chair:Qiang Shu (Pediatric Heart Center, The Children's Hospital of Zhejiang University School of Medicine, China)

Chair:Jeong Jin Yu (Pediatric Cardiology Division, Asan Medical Center, Korea)

Sun. Jul 11, 2021 3:20 PM - 5:05 PM Track5 (Web開催会場)

[III-JCK08-1] Mechanism of heart failure and evaluation of hemodynamics in the patients long-term after Fontan operation

○Satoshi Masutani (Saitama Medical Center Saitama Medical University, Japan)

[III-JCK08-2] Fontan associated liver disease

○So Ick Jang (Department of Pediatrics, Sejong General Hospital, Korea)

[III-JCK08-3] Catheter intervention for Fontan patients

○Atsuko Kato (Department of pediatric cardiology / National cerebral and cardiovascular center, Suita, Japan)

[III-JCK08-4] Atrioventricular valve repair in single ventricle patients

○Chang Ha Lee (Cardiovascular Surgery, Sejong General Hospital, Korea)

[III-JCK08-5] The effect of Fontan conversion on hemodynamics and exercise tolerance

○Akihiko Higashida (Toyama University Hospital, Japan)

[III-JCK08-6] Identification of high-risk Fontan candidates by intraoperative pulmonary flow study

○Jae Suk Baek (Pediatrics, Asan Medical Center, University of Ulsan College of Medicine, Korea)

(Sun. Jul 11, 2021 3:20 PM - 5:05 PM Track5)

[III-JCK08-1] Mechanism of heart failure and evaluation of hemodynamics in the patients long-term after Fontan operation

○Satoshi Masutani (Saitama Medical Center Saitama Medical University, Japan)

(Sun. Jul 11, 2021 3:20 PM - 5:05 PM Track5)

[III-JCK08-2] Fontan associated liver disease

○So Ick Jang (Department of Pediatrics, Sejong General Hospital, Korea)

(Sun. Jul 11, 2021 3:20 PM - 5:05 PM Track5)

[III-JCK08-3] Catheter intervention for Fontan patients

○Atsuko Kato (Department of pediatric cardiology / National cerebral and cardiovascular center, Suita, Japan)

Fontan surgery is a palliative but ultimate surgical procedure for patients with univentricular hearts, which was invented more than 50 years ago. This procedure has saved so many children's lives, but now we know all the patients are substantially affected by this unusual hemodynamics. They have multiorgan congestion and low perfusion pressure due to high central venous pressure. Because of low cardiac output, patients develop chronic heart failure. Hypoxia often occurs. To overcome these problems, our strategy is determined to decrease central venous pressure, increase cardiac output, increase systemic arterial pressure, and increase systemic oxygen saturation. As pediatric cardiac interventionalists, what can we do to achieve better Fontan circulation? In the talk, I would like to share our own experiences and strategies.

(Sun. Jul 11, 2021 3:20 PM - 5:05 PM Track5)

[III-JCK08-4] Atrioventricular valve repair in single ventricle patients

○Chang Ha Lee (Cardiovascular Surgery, Sejong General Hospital, Korea)

(Sun. Jul 11, 2021 3:20 PM - 5:05 PM Track5)

[III-JCK08-5] The effect of Fontan conversion on hemodynamics and exercise tolerance

○Akihiko Higashida (Toyama University Hospital, Japan)

(Sun. Jul 11, 2021 3:20 PM - 5:05 PM Track5)

[III-JCK08-6] Identification of high-risk Fontan candidates by intraoperative pulmonary flow study

○Jae Suk Baek (Pediatrics, Asan Medical Center, University of Ulsan College of Medicine, Korea)