

Introduction

Introduction to the Supplement: Controversies and Challenges of Tetralogy Of Fallot and Other Challenges Facing Paediatric Cardiovascular Practitioners and Their Patients

Jeffrey P. Jacobs

The Congenital Heart Institute of Florida (CHIF), Division of Thoracic and Cardiovascular Surgery, All Children's Hospital and Children's Hospital of Tampa, University of South Florida College of Medicine, Cardiac Surgical Associates (CSA), Saint Petersburg and Tampa, Florida, United States of America

THIS SUPPLEMENT TO CARDIOLOGY IN THE YOUNG represents the sixth annual Supplement generated from the two meetings that compose "Heart Week in Florida"^{1–5}. As I have emphasized in previous supplements, Florida is the fourth largest state in the United States of America. The programme for care of children with congenital cardiac malformations at Children's Hospital of Philadelphia is one of the largest, and most prestigious and comprehensive, in the world. The Congenital Heart Institute of Florida, in turn, is the largest and most comprehensive programme providing services for patients with congenital cardiac disease in Florida. "Heart Week in Florida", the joint collaborative project sponsored by the Cardiac Center at the Children's Hospital of Philadelphia, together with All Children's Hospital of Saint Petersburg and The Congenital Heart Institute of Florida, is now recognized as one of the major planks of continuing medical and nursing education for those working in the fields of diagnosis and treatment of heart disease in neonates, infants, children, and adults.

All institutions involved with the organization of the events of "Heart Week in Florida" are very grateful to Bob Anderson, and the team at

Cardiology in the Young, for their support, and for the opportunity to publish this Supplement. On a personal note, I would like to congratulate Bob for his ability to remain massively involved in the academic world of professionals caring for patients with congenitally malformed hearts, even after his official "retirement". I would again like to thank Bob for his support, friendship, mentorship, professional guidance, and advice over the past 11 years. Bob has played a major role in the development of my own career, and I am appreciative for all that he has done for me. He placed an amazingly high level of trust in me when I was very young, and I appreciate this support. Bob has also been a strong supporter and advocate of our programme at All Children's Hospital and The Congenital Heart Institute of Florida for quite some time. In 2009, Bob will be a featured speaker at our annual February meeting for the eighth consecutive year. Every morning for all eight of these years, we have begun our sessions with an anatomy lesson from Bob. On a daily basis, he sets the stage for the rest of the day, and raises the academic level of our meeting.

The Cardiac Center at the Children's Hospital of Philadelphia hosted their 11th Annual Postgraduate Course in Scottsdale, Arizona from February 6–10, 2008. This annual meeting organized by The Cardiac Center at the Children's Hospital of Philadelphia, under the direction of Gil Wernovsky and Tina Mannices, is typically attended by over 750 professionals and exhibitors gathered from around the globe to hear late-breaking research, to

Correspondence to: Jeffrey P. Jacobs, M.D., FACS, FACC, FCCP, Cardiovascular and Thoracic Surgeon, Surgical Director of Heart Transplantation and ECMO, The Congenital Heart Institute of Florida (CHIF), Clinical Associate Professor, University of South Florida (USF), Cardiac Surgical Associates (CSA), 625 Sixth Avenue South, Suite 475, Saint Petersburg, Florida 33701, United States of America, Office Phone: (727) 822-6666; Office Fax: (727) 821-5994; Cell Phone: (727) 235-3100; E-mail: JeffJacobs@msn.com; Web Page: <http://www.heartsurgery-csa.com/>; Web Page: <http://www.CHIF.us/>

Table 1. The Featured Lectures given thus far during the Annual Postgraduate Course in Pediatric Cardiovascular Disease organized by Children's Hospital of Philadelphia.

The "C. Walton Lillehei" Lecture	
2000	Thomas R. Karl
2001	Marc de Leval
2002	Aldo R. Castaneda
2003	Thomas L. Spray
2004	William G. Williams
2005	Edward L. Bove
2006	Martin Elliott
2007	Pedro J. del Nido
2008	Frank L. Hanley
The "William J. Rashkind"	
2002	Thomas P. Graham
2003	Welton M. Gersony
2004	Jane W. Newburger
2005	Norman H. Silverman
2006	Andrew Redington
2007	Philipp Bonhoeffer
2008	Robert Shaddy
The "T. Garrett Rauch" Memorial Nursing Lecture	
2000	Jane Barnsteiner
2001	Nancy Eckle
2002	Catherine K. Madigan
2003	Patricia A. Hickey
2004	Mary Fran Hazinski
2005	Elisabeth C. Smith
2006	Kathleen Mussatto
2007	Martha A. Q. Curley
2008	Cynda Hylton Rushton

discuss controversial topics, to review current practices, and to enjoy each others' company and insight⁶. Physicians make up approximately half of the attendees, and include representation from all disciplines involved in the care of children with cardiac disease, including cardiologists, intensivists, surgeons, anaesthesiologists, neonatologists and maternal fetal specialists. Approximately 50 physicians, or "physicians-to-be", are fellows, residents or medical students. The remaining attendees include advanced practice nurses, as well as nurses from the operating room, catheterization lab and bedside, and sonographers, physician assistants, respiratory therapists, perfusionists, and administrators. A highlight of the meeting organized by Children's Hospital of Philadelphia is the featured lectures in Cardiology, Cardiac Surgery, and Nursing (Table 1). Over the last several years, this meeting has alternated annually between an east coast meeting, usually in Orlando, Florida, and a west coast meeting, usually in Scottsdale, Arizona. In 2009, the Cardiac Center at the Children's Hospital of Philadelphia will host their 12th Annual Update on Pediatric Cardiovascular Disease: New and Evolving Practices, at Atlantis in Paradise Island, Bahamas, from February 4–8, 2009. In February 2010, the 13th Annual PostGraduate Course organized by Children's

Hospital of Philadelphia will be held in Orlando, Florida. To view the entire program and register for the meeting, please visit the following web site: [www.chop.edu/cardiology2009]. For detailed information, please e-mail Tina Mannices at: [mannices@email.chop.edu].

In 2008, the component of the joint programme organized by The Congenital Heart Institute of Florida, along with All Children's Hospital, and representing our own eighth annual International Symposium on Congenital Heart Disease, was held February 16–19, 2008, with a focus on tetralogy of Fallot. The Annual International Symposium on Congenital Heart Disease with Echocardiographic, Anatomic, Surgical, and Pathologic Correlation is held every February and is now entering its ninth year. This meeting is sponsored by All Children's Hospital [www.allkids.org], The Congenital Heart Institute of Florida [www.chif.us], and the University of South Florida. The 2009 meeting will be our ninth annual meeting and, for the first time, will be co-sponsored by The American Association for Thoracic Surgery [http://www.aats.org/CME/Programs.html]. The focus of the 2009 meeting will be Cardiac Septal Defects, with sessions aimed specifically at multidisciplinary issues related to atrial septal defects, ventricular septal defects, and atrioventricular septal defects. The overall emphasis of the meeting is multidisciplinary with involvement of paediatric cardiac surgery, paediatric cardiology, paediatric cardiac critical care, paediatric cardiac anaesthesia, nursing, perfusion, and ultrasonography. Attendance at our meeting is typically 250 to 300 participants. Our 2007 meeting had 269 attendees from 30 states and 14 countries. Attendees were 43% physicians, 41% nurses, perfusionists, and ultrasonographers, and 16% allied health care professionals. Our 2008 meeting had 270 attendees from 32 states and 16 countries. Attendees were 52% physicians, 31% nurses, perfusionists, and ultrasonographers, and 17% allied health care professionals. In Table 2, I highlight the featured topics and speakers from the meeting held in St Petersburg. The true summit of this meeting is the George Daicoff Lecture, given by the featured speaker to honour the founder of our surgical programme in St. Petersburg. Previous and future Daicoff lectures are presented below:

- (2003) Leonard L. Bailey and his wife Nancy from Loma Linda University Medical Center, California
- (2004) Martin J. Elliott from The Great Ormond Street Hospital for Children, London, United Kingdom
- (2005) Marc deLeval from The Great Ormond Street Hospital for Children, London, United Kingdom

Table 2. Featured Topics and Speakers during the Symposiums organized by the Congenital Heart Institute of Florida and All Children's Hospital.

2002:	Second Annual Symposium:
Focus:	Abnormalities of the Ventricular Inlets and Atrioventricular Valves
Day 1:	Echocardiography
Day 2:	Tricuspid valve
Day 3:	Mitral valve
Day 4:	Common atrioventricular valve
Featured Guest Speaker:	Bob Anderson, Great Ormond Street, London, United Kingdom
2003:	Third Annual Symposium
Focus:	Hypoplastic Left Heart Syndrome
Day 1:	Echocardiography
Day 2:	Staged palliation and the Norwood Operation
Day 3:	Replacement therapy and Cardiac Transplantation
Day 4:	Biventricular Repair
Featured Guest Speakers:	Leonard L. Bailey and his wife Nancy: Loma Linda University Medical Center, Loma Linda, California
2004:	Fourth Annual Symposium
Focus:	Controversies concerning the Ventriculo-arterial Junctions
Day 1:	Echocardiography
Day 2:	Pulmonary Valve and Reconstructions of the Right Ventricular Outflow Tract
Day 3:	The Aortic Valve and the Ross Procedure
Day 4:	The Arterial Switch Procedure
Featured Guest Speaker:	Martin J. Elliott, Great Ormond Street, London, United Kingdom
2005:	Fifth Annual Symposium
Focus:	The Functionally Univentricular Heart
Day 1:	Echocardiography
Day 2:	Shunts and Bands
Day 3:	Glenn and Fontan Procedures
Day 4:	Cardiac Transplantation
Featured Guest Speaker:	Marc deLeval, Great Ormond Street, London, United Kingdom
2006:	Sixth Annual Symposium
Focus:	Ventricular inlets and atrioventricular valves
Day 1:	Echocardiography
Day 2:	Tricuspid valve
Day 3:	Mitral valve
Day 4:	Common atrioventricular valve
Day 5:	Discordant Atrioventricular connections
Featured Guest Speakers:	Ross M. Ungerleider, and his wife Jamie Dickey, Doernbecher Children's Hospital, Oregon Health Sciences University, Portland, Oregon
2007:	Seventh Annual Symposium
Focus:	Hypoplastic Left Heart Syndrome
Day 1:	Echocardiography
Day 2:	Staged palliation and the Norwood Operation
Day 3:	Replacement therapy with Cardiac Transplantation, Biventricular Repair and Hybrid Procedures
Day 4:	Adults with Congenital Heart Disease
Featured Guest Speakers:	Constantine Mavroudis and Carl Backer Children's Memorial Hospital, Chicago, Illinois
2008:	Eighth Annual Symposium
Focus:	Tetralogy of Fallot
Day 1:	Echocardiography
Day 2:	Tetralogy of Fallot with pulmonary stenosis
Day 3:	Complex Tetralogy of Fallot
Day 4:	Adults with Congenital Heart Disease – Late problems with TOF Pediatric Cardiac Critical Care
Featured Guest Speaker:	Tom Spray, Children's Hospital of Philadelphia
2009:	Ninth Annual Symposium
Focus:	Cardiac Septal Defects
Day 1:	Critical Care Symposium
Day 2:	Echocardiography
Day 3:	Atrial Septal Defects
Day 4:	Ventricular Septal Defects
Day 5:	Atrioventricular Septal Defects
Featured Guest Speaker:	Roberto Canessa, MD, Montevideo, Uruguay

- (2006) Ross M. Ungerleider and his wife Jamie Dickey from Oregon Health Sciences University, Oregon
- (2007) Constantine Mavroudis and Carl Backer from Children's Memorial Hospital, Chicago
- (2008) Tom Spray from Children's Hospital of Philadelphia, Philadelphia
- (2009) Roberto Canessa from Montevideo, Uruguay
- (2010) Marshall Lewis Jacobs from Drexel University College of Medicine, Philadelphia, Pennsylvania.

The 2009 Daicoff lecture will be given by Roberto Canessa, MD and will be titled: The Value of Life – Lessons from the Andes. Dr Canessa is considered the best paediatric cardiologist in Uruguay and is “one of 16 Uruguayan rugby players, friends, and relatives who survived for two months after their plane crashed in the Andes and are forever bound to one another. The details of their story, made famous in the book and movie *Alive*, are too gruesome to forget: With just the remnants of the plane's contents at their disposal, the group had no choice but to turn to cannibalism. Three of the young men, Roberto Canessa, Nando Parrado, and Antonio Vizintín, made a daring trek through the mountains to reach help. While Vizintín returned to the fuselage, Canessa and Parrado made human contact in Chile after ten days. Their friends back at the wreckage were back home in time for Christmas.” [<http://nationalgeographic.org/adventure/alive/survivors.html>]. At the time of the plane crash, Dr Canessa was a 2nd year medical student. After the plane crash, he continued studying Medicine. He is married to Laura, and has two sons and a daughter. He's considered the best paediatric cardiologist in Uruguay. He ran for the Uruguayan Presidency in the 1994 elections but lost. [<http://members.aol.com/PorkinsR6/now.html>].

In 2009, the Congenital Heart Institute of Florida and All Children's Hospital will host our 9th annual meeting, which will take place from February 13 through 17. The focus will be Cardiac Septal Defects, with additional symposiums about medical and surgical innovation, and paediatric cardiac critical care. To view the entire program and register for the meeting, please visit the following web site: [www.allkids.org/conferences]. For detailed information, please e-mail Melodye Seals at: [SealsM@allkids.org].

We have now reached the situation whereby the proceedings of the meetings held in 2003, 2004, 2005, 2006, 2007, and 2008 were published as supplements to *Cardiology in the Young*.^{1–5} This supplement is the fourth that we have produced jointly with Children's Hospital of Philadelphia, our prior joint efforts gathering together the

written account of the activities of the meetings held in 2004, 2006, 2007, and 2008^{2,4,5}.

The part of the joint programme organized by The Congenital Heart Institute of Florida and All Children's Hospital will continue to take place in St Petersburg, even in the years when the part designed by The Children's Hospital of Philadelphia will be held outside of Florida, as will occur in 2009. Even during these years when the Philadelphia meeting is held outside of Florida, “Heart Week” will continue to be a collaborative project as manifest by the collaborative publication of this Supplement, as well the various shared members of our international faculties. As has been stated on the web site for the programme coordinated by The Children's Hospital of Philadelphia, “Providing optimal care for neonates, children and young adults with heart disease requires a multidisciplinary team approach, including physicians (from cardiology, cardiac surgery, cardiothoracic anesthesia, neonatal and paediatric critical care medicine, and multiple consulting services), nurses, perfusionists, respiratory therapists, social workers and many others. All of these various practitioners must be experts in their own area, but should also be knowledgeable in what the other members of the team provide to the overall care of the patient.” This statement presents the overall rationale for not only the annual part of the meeting emanating from Philadelphia, but also for “Heart Week in Florida”. Both meetings are proud to emphasize collaboration that spans traditional geographic, subspecialty and professional boundaries.

Consistent with our emphasis on collaboration that spans traditional geographic, subspecialty and professional boundaries, we would like to dedicate this Supplement to two physicians who exemplify this spirit of collaboration: Hiromi Kurosawa (Figs 1 and 2) of The Heart Institute of Japan and Tokyo Women's Medical University, Tokyo, Japan, and Norman Silverman (Figs 3, 4 and 5), of Stanford University and Lucile Packard Children's Hospital, Palo Alto, CA.

Hiromi Kurosawa has had a distinguished academic career as a paediatric cardiac surgeon that has spanned several decades. He has authored hundreds of manuscripts and made substantial contributions to our profession. His important publications relating to the anatomy of conduction tissue date back to when I was in high school and college. In addition to the numerous contributions that Hiromi has made to the science of paediatric cardiac surgery, Hiromi has been a true leader of our profession. He has been an advocate for globalization. He has hosted many meetings in Japan including the meeting of The International Society



Figure 1.
Hiromi Kurosawa shown with Francois Lacour-Gayet, Tom Spray, and Dr and Mrs. Ed Bove, at the Sixth Annual International Symposium on Congenital Heart Disease in Saint Petersburg, Florida. Photo taken Sunday, February 19, 2006.



Figure 2.
Hiromi Kurosawa shown with members of The International Society for Nomenclature of Paediatric and Congenital Heart Disease who were in Japan for the Ninth Meeting of The International Working Group for Mapping and Coding of Nomenclatures for Paediatric and Congenital Heart Disease (Nomenclature Working Group) held in Tokyo, Japan and hosted by Hiromi. Photo taken Thursday, July 12, 2007.

for Nomenclature of Paediatric and Congenital Heart Disease held in Tokyo, Japan in July 2007. On many occasions, Hiromi has spent 2 days travelling from Japan to Europe or North America in order to attend a one or two day meeting. Hiromi is the Second Vice President of the World Society for Paediatric and Congenital Heart Surgery [www.wspchs.org]. Although Hiromi is in the latter portion of his career, his strong advocacy for global collaboration and his excellence as a paediatric cardiac surgeon and scientist create a

permanent and lasting legacy. On a personal note, my wife and I, and our children, consider Hiromi and his wife Sakato dear friends and we thank them for all that they have done for us. Domo arigato.

Norm Silverman is one of the true fathers of the profession of paediatric cardiology. He is one of the true developers and innovators of echocardiography. He also has “to numerous to count” publications and academic contributions, with 4 books, 38 book chapters, and over 200 peer-reviewed publications dating back to 1970! His publications relating to echocardiography date back to 1974 when the very concept of echo was in its infancy. Norm exemplifies excellence in patient care, research, and teaching. His mentorship to trainees at University of California San Francisco and then at Stanford will create a legacy of “Silverman trained” echocardiographers. On a larger scale, hundreds of paediatric cardiologists and cardiac surgeons around the world have benefited from his excellence in teaching. Norm has also been a major leader in the evolving collaboration between paediatric cardiologists and paediatric cardiac surgeons. Again, on a personal note, my wife and I, and our children, consider Norm to be a dear friend and we thank him for all that he has done for us.

Norm Silverman and Hiromi Kurosawa have both been loyal and consistent supporters of the meetings that make up Heart Week. They both have been repetitive faculty members and have made important contributions to both the scientific programme and the social programme. Hiromi and Norm also both promote collaboration that spans traditional geographic, subspecialty and professional boundaries. This concept is the very essence of Heart Week! It is our honour to dedicate this Supplement to these two special doctors.

It is gratifying for me, as a representative of The Congenital Heart Institute of Florida and All Children’s Hospital, to confirm our ongoing commitment to continue “Heart Week in Florida”, combining the International Symposium on Congenital Heart Disease organized by All Children’s Hospital, The Congenital Heart Institute of Florida, and The University of South Florida with the annual postgraduate course in Pediatric Cardiovascular Disease organized by The Children’s Hospital of Philadelphia. I thank Gil Wernovsky, Director of the meeting organized by Children’s Hospital of Philadelphia, as well as Tina Mannices, Manager of Continuing Medical Education at the Children’s Hospital of Philadelphia, and also Tom Spray and Bill Gaynor, for their support. The Supplement that you are now about to read, therefore, focuses on “*Controversies and Challenges of Tetralogy Of Fallot and Other Challenges Facing Paediatric Cardiovascular Practitioners and Their Patients*”. It has two sections,



Figure 3.
Norman Silverman, Bob Anderson, and Bill Mable on the way to the Sixth Annual International Symposium on Congenital Heart Disease in Saint Petersburg, Florida. Photo taken Saturday, February 18, 2006.



Figure 5.
Norm Silverman shown with a delicious Snook (*Centropomus undecimalis*), also known as a “Linesider”, caught in Tampa Bay, Florida. Photo taken Thursday, February 14, 2008.



Figure 4.
Norm Silverman shown with a beautiful Sheepshead (*Archosargus probatocephalus*), also known as a “Convict Fish” caught with live shrimp in Tampa Bay, Florida. Photo taken Thursday, February 16, 2006.

which have been prepared so as to give a flavour of the presentations given in Arizona and Florida in February of 2008. The reviews in the first section discuss the history, anatomy, and diagnostic and therapeutic strategies, related to tetralogy of Fallot. The Definitions Working Group of The International Society for Nomenclature of Paediatric and Congenital Heart Disease has proposed the following definition for tetralogy of Fallot:

“Tetralogy of Fallot is defined as a group of malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant,

narrowing or atresia of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta. Hearts with tetralogy of Fallot will always have a ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy.”

The first part of this Supplement, therefore, contains four articles about tetralogy of Fallot. The first article, written by Marshall Jacobs, summarizes the early history of surgery for tetralogy of Fallot and sets the stage for the remainder of this section of the Supplement with the following two concluding sentences:

“So many of the surgical concepts integral to present day surgical management of patients with tetralogy of Fallot, therefore, were conceptualized and validated by visionary surgical pioneers four and five decades ago. Of similar significance is the fact that so many of the basic strategies for cardiac surgery in general were developed by these pioneers while performing surgical procedures in, and caring for, patients with tetralogy of Fallot.”

The remaining three articles in the first section of the Supplement focus on the morphology of tetralogy of Fallot, the echocardiographic evaluation of tetralogy of Fallot, and the surgical management of tetralogy of Fallot with common atrioventricular junction. The second part of the Supplement is titled “Selected Topics in Congenital and Paediatric Cardiac Disease”. Four manuscripts will cover the following topics: double outlet right ventricle, common arterial trunk, paediatric heart failure, and mechanical ventilation.

Over the years, Heart Week in Florida has provided many opportunities for the excellent scientific exchange of ideas, and the development of awesome friendships. I would like to again thank Bob Anderson for all of his help, support, trust, and patience during the preparation of this Supplement. I would also like to thank my good friends and co-editors of this Supplement, Gil Wernovsky, J. William Gaynor, and David S. Cooper. I am especially grateful to Jean Francis and Michael Epstein, Vice Presidents of All Children's Hospital, for facilitating the publication of this Supplement. I would also like to thank several additional members of our team at All Children's Hospital, namely Gary Carnes, President and Chief Executive Officer of All Children's Hospital, Joel Momberg, Cindy Rose, Pat Clark, Melodye Seals, Tina Merola, Kas Sheehan, Jean Wilhelm, and all our cardiac nurses. I would also like to thank the other Directors of our St. Petersburg meeting, namely James C. Huhta, Richard Martinez, David S. Cooper, James S. Tweddell, and my partner James Anthony Quintessenza. Jim Huhta initiated this meeting, and I am grateful that he gave me the opportunity to work with him. The meeting would not have been possible without his leadership and vision. Finally, I would like to thank my current partners, Jim Quintessenza and Paul Chai, and, and my former partners, Victor Morell and Harald Lindberg, for their constant support and guidance, and my wife Stacy, and children Jessica and Joshua, for their understanding and patience. It continues to be an ongoing fact, as I have emphasized in previous

introductions, that all of the family members of the authors of the reviews included in this Supplement are owed a debt of gratitude, because writing manuscripts markedly decreases the time available with them. Unfortunately, even with the passage of time, these periods of writing and editing are showing no signs of disappearance.

References

1. Jacobs JP, Anderson RH (eds). Supplement to Cardiology in the Young: Controversies Relating To The Hypoplastic Left Heart Syndrome. *Cardiology in the Young* 2004; 14 (Suppl 1): 1-130; February 2004.
2. Jacobs JP, Wernovsky G, Gaynor JW, Anderson RH (eds). Supplement to Cardiology in the Young: Controversies of the Ventriculo-Arterial Junctions and Other Topics. *Cardiology in the Young* 2005; 15 (Suppl 1): 1-198; February 2005.
3. Jacobs JP, Wernovsky G, Gaynor JW, Anderson RH (eds). Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart. *Cardiology in the Young* 2006; 16 (Suppl 1): 1-104; February 2006.
4. Jacobs JP, Wernovsky G, Gaynor JW, Anderson RH (eds). Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients. *Cardiology in the Young* 2006; 16 (Suppl 3): 1-156; September 2006.
5. Anderson RH, Jacobs JP, Wernovsky G (eds). Supplement to Cardiology in the Young: Annual Heart Week in Florida Supplement Number 5 – Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients. *Cardiology in the Young* 2007; 17 (Suppl 2): 1-174; September 2007.
6. Wernovsky G. Foreword: *Cardiology 2007 – 10th Annual Update on Pediatric Cardiovascular Disease*. *Cardiol Young* 2007; 17 (E-Suppl 1): 1-9.