

CONGENITAL CARDIOLOGY TODAY

News and Information for Pediatric and Congenital Cardiovascular Physicians and Surgeons

Vol. 5 / Issue 9
September 2007
North American Edition

WWW.CONGENITALCARDIOLOGYTODAY.COM

INSIDE THIS ISSUE

AMPLATZER Duct Occluder® vs Coils in Mongolia
by Hideshi Tomita, MD; Noriyuki Haneda, MD; Kenji Kuroe, MD; Shunji Nogi, MD; Hideaki Ueda, MD; Kenji Kishida, MD; Takashi Higaki, MD; Yasunori Horiguchi, MD; Jun Furui, MD; Masamichi Tamura, MD; Hidemi Takada, MD; Fumitoshi Tsurumi, MD; Shinichiro Tanaka, MD; Hiroshi Yano, MD
-Page 1

Highlights from the 43rd Annual Meeting of the Japanese Society of Pediatric Cardiology and Cardiac Surgery
by Professor Toshio Nakanishi, MD and Virginia Dematatis, Congenital Cardiology Today, Staff Editor
-Page 8

Highlights from the 2007 International Symposium on the Hybrid Approach to Congenital Heart Disease (ISHAC)
by John P. Cheatham, MD and Mark E. Galowitz, MD
-Page 10

DEPARTMENTS

October Symposium Focus
-Page 2

October Webcast Focus
-Page 12

CONGENITAL CARDIOLOGY TODAY

Editorial and Subscription Offices:
16 Cove Road, Ste. 200
Westerly, RI 02891 USA

Corporate Offices:
9008 Copenhaver Dr., Ste. M
Potomac, MD 20854 USA
www.CongenitalCardiologyToday.com
www.CHDVideo.com

© 2007 by Congenital Cardiology Today (ISSN 1554-7787-print; ISSN 1554-0499-online). Published monthly. All rights reserved. Congenital Cardiology provides timely news and information for pediatric and congenital cardiologists. Statements or opinions expressed in Congenital Cardiology Today reflect the views of the authors and sponsors, and are not necessarily the views of Congenital Cardiology Today.

See Recruitment Ads on
pages: 2, 4, 5, 6, 7, 9, 11, 12,
13, 14 and 15

AMPLATZER DUCT OCCLUDER® VS COILS IN MONGOLIA

By Hideshi Tomita, MD; Noriyuki Haneda, MD; Kenji Kuroe, MD; Shunji Nogi, MD; Hideaki Ueda, MD; Kenji Kishida, MD; Takashi Higaki, MD; Yasunori Horiguchi, MD; Jun Furui, MD; Masamichi Tamura, MD; Hidemi Takada, MD; Fumitoshi Tsurumi, MD; Shinichiro Tanaka, MD; Hiroshi Yano, MD

AMPLATZER Duct Occluder® or Coils for transcatheter occlusion of patent arterial duct; a cost comparison of devices used by a volunteer team of Japanese physicians in the setting of a humanitarian, heart-saving project in Mongolia.

Introduction

Since October 2001, members of a group of Japanese pediatric cardiologists have visited Mongolia once or twice a year to do diagnostic and interventional catheterizations.[1] Considering the limited medical resources available in Japan for this project and the limited resources in Mongolia, as well as cost, risk and benefit, we focused our activities on screening by echocardiography, transcatheter closure of patent arterial duct, balloon dilation of pulmonary stenosis and coarctation, and diagnostic catheterization. For the first two visits, there was no cine, no video, nor any other X-ray recording or replaying equipment; consequently, we judged the size and morphology of the patent arterial duct by rapid hand injection. For the third visit, we moved to the Shastin

Central Clinical Hospital, an adult cardiology and cardiovascular surgery center, has the only cine angiography machine in Mongolia, to do catheterizations. Until the fifth visit, we used only coils; 0.038 or 0.052 inch Gianturco coils, Flipper coils, or Platinum coils (Cook Inc., Bloomington, IN, USA), for patent arterial duct closure, as coils are the only devices available in Japan for this procedure. On the sixth visit, in 2005, we introduced the AMPLATZER Duct Occluder® (AGA Medical Co, MN, USA) for the first time.

We analyzed the cost effectiveness of introducing the AMPLATZER Duct Occluder® for transcatheter occlusion of patent arterial duct in this voluntary humanitarian heart-saving project.

Subjects

Sixty-one Mongolian patients with patent arterial duct, who underwent attempted transcatheter occlusion in the four visits from 2002 to 2005 at the same hospital and by the same team, were included in this study. During this period, coils (0.052 and 0.038 inch Gianturco coil, Flipper coil, Platinum coils) were used in 41 patients (Coil group), while the AMPLATZER Duct Occluder® was first used in 2005 and applied in 20 patients (AMPLATZER group), whose minimum ductus diameter was estimated to be greater than 2.5 millimeters by Doppler echocardiography.

Do you or your colleagues have interesting research results, observations, human interest stories, reports of meetings, etc. that you would like to share with the congenital cardiology community?

If so, submit a brief summary of your proposed article to
Congenital Cardiology Today at: Article-SEP@CCT.bz
The manuscript may be between 400-3,500 words, contain
pictures, graphs, charts and tables.



Director of Pediatric Cardiovascular Critical Care

Major Medical Center in Dallas seeks a Pediatric Cardiovascular Critical Care Director. Preferred candidate will possess a charismatic personality, leadership attributes with evidenced experience, strong clinical skill set for a complex patient population and board certification in Pediatric Cardiology and Critical Care. Candidates with board certification in one discipline and solid experience in the alternate subspecialty should also apply. The incoming Director will serve as the Medical Director of the existing 10 bed Pediatric Cardiovascular ICU and the new, state-of-the-art unit due for completion in late 2008. Additional responsibility includes coordinating a collegial collaboration with pediatric cardiology physicians/subspecialists and nursing staff. Incoming physician will be provided an outstanding financial package and the opportunity to advance their medical and/or research career.

The Congenital Heart Surgery program performs more than 300 surgeries each year. Two thirds of the surgeries are pump cases. The program provides care to neonates (approximately 30%) and children under 2 yrs of age (approximately 70%).

A team of nine pediatric intensivists and eleven pediatric cardiologists cover the congenital heart surgery unit. A dedicated 10-bed pediatric cardiovascular intensive care unit opened in 2004. Construction has begun on a newer unit with a completion date in late 2008.

The program participates extensively in research initiatives and i-Rounds, a web based informatics system allowing second to second tracking of clinical data and shares information with outside referring physicians. The center employs all of the latest technologies for monitoring patients and performing point of care testing. The Medical Center operates a very busy research entity in which the Pediatric Cardiovascular Surgery Director, actively participates.

Call or inquire by email today:
Kathleen Kyer, Manager,
Pediatric Subspecialty Recruitment,
888-933-1433 or
Kathleen.Kyer@HCAHealthcare.com

OCTOBER SYMPOSIUM FOCUS

Evolving Concepts in the Management of Complex Congenital Heart Disease

October 5-6, 2007; San Diego, CA USA

www.chsd.org/cme/

Program Coordinators: John J. Lamberti, MD, Eugene and Joyce Klein Director of the Children's Heart Institute Rady Children's Hospital - San Diego Professor of Surgery - University of California, San Diego, School of Medicine - San Diego, CA; John W. Moore, MD, MPH, Director, Division of Cardiology - Rady Children's Hospital - San Diego Professor of Clinical Pediatrics Chief, Section of Cardiology - Department of Pediatrics University of California, San Diego, School of Medicine - San Diego, CA; Anthony C. Chang, MD, Medical Director, Heart Institute - Children's Hospital of Orange County Orange, CA

Program Monitor: Rayburn R. Skoglund, MD, Director, Continuing Medical Education Rady Children's Hospital - San Diego, CA.

Course Co-Directors: Drs. Emile Bacha, Dr. Peter Block, Mario Carminati, John Cheatham, Ted Feldman, Carlos Pedra, Mark Reisman, and Robert Sommer.

Guest Faculty Includes: Daniel Bernstein, MD; Alfred Woodley; Edward L. Bove, MD Ronald Bronicki, MD; Christopher Caldarone, MD; John P. Cheatham, MD; Paul A. Checchia, MD; Anne Dubin, MD Jeffrey R. Fineman, MD; Mark Galantowicz, MD; Nancy S. Ghanayem, MD; Frank L. Hanley, MD; Jeffrey P. Jacobs, MD; Marshall L. Jacobs, MD; James Lock, MD; Constantine Mavroudis, MD; Ralph S. Mosca, MD; James C. Perry, MD; Vaughn A. Starnes, MD; Sarah Tabbutt, MD, PhD; James S. Tweddell, MD; and William G. Williams, MD.

The program examines the early surgical management of the most complex defects and the late surgical management of previously repaired complex congenital heart disease. Internationally renowned authorities in cardiovascular surgery, cardiology and critical care medicine have been invited to participate in the program.

Objectives: ♥Evaluate contemporaneous management strategies for HLHS by comparing early, mid-term and late morbidity and mortality, including Late Neurodevelopmental Assessment. ♥Understand the role of the stage I Hybrid Procedure in the modern management of HJHS. ♥Understand the management options for older patients with late onset complications of the Fontan circulation. ♥Understand the latest concepts in the management of Tetralogy of Fallot with MAPCAS. ♥Understand the timing and role of surgery in the management of right ventricular dysfunction occurring long after the surgical treatment of Tetralogy of Fallot or Transposition of the Great Vessels. ♥Understand modern concepts of critical care management including the use of the newest pharmacologic agents and mechanical assist devices.



www.5StarMedEd.org/pda

INNOVATIONS IN MANAGING

Patent
Ductus
Arteriosus

SPONSORED BY

Annenberg Center for Health Sciences

Akita Biomedical Consulting

SUPPORTED BY AN INDEPENDENT EDUCATIONAL GRANT FROM

Ovation Pharmaceuticals, Inc.

October 2, 9 & 11, 2007

Join us for a free live webcast

specifically designed for clinicians treating patients with patent ductus arteriosus.

Devices	Cost (US \$)
Sheath	51.2
Long sheath (6, 8 French)	40.2
Long sheath (6, 8 French)	188.0
Guiding catheter for PCI	341.9
Balloon angiographic catheter	170.9
Catheter (JR, Multipurpose, Pig-tail)	54.74
Guidewire	41.9
Contrast (50 milliliters)	179.9
0.052" Gianturco coil (2 in one package)	129.1
Flipper coil, Platinum coil	568.4
Delivery system (Flipper coil, Platinum Coil)	180.3
Biopptome (3 French)	726.5
Goose neck snare	486.3

Methods

For small patent arterial ducts, we principally used a Flipper coil, introduced retro- or pro-gradely, while for medium-sized patent arterial duct, our first choice was prograde deployment of a 0.052 inch Gianturco coil using a biopptome as reported by Grifka et al.[2] We occasionally used a 0.038 inch Gianturco coil or a Platinum coil, depending on the availability of coils, which varied with the budget in each year. The AMPLATZER Duct Occluder® was deployed as reported previously.[3, 4]

We usually used the following devices for the diagnostic catheter prior to the transcatheter closure: two sheaths, one for femoral vein and the other one for the femoral artery, one each of the following: a balloon angiographic catheter, a pig-tail catheter, and a guidewire, and contrast of 50-100 milliliters. Cost for these devices were excluded from the cost for transcatheter closure. As our project is staffed by volunteers, we only compiled the cost of devices for transcatheter occlusion of a patent arterial duct, while hospital charges, such as catheterization fees, anesthesia,

	Coil (n=41)		AMPLATZER® (n=20)		P
	Range	Median	Range	Median	
Age	7m-29y	3y	11m-16y	2y6m	ns
Weight (kg)	5.0-7.0	13	6.8-51.0	13.6	ns
Minimum diameter (mm)	0.8-8.0	3.3	2.5-10		< 0.05
Less than 2.5	7 cases	2 cases			
2.5-2.9	7 cases	3 cases			
3.0-3.4	9 cases	4 cases			
Greater than or equal to 3.5	18 cases	11 cases			

Number of coils	n	Cost (US \$)		
		Range	Mean	SD
1	8	183.8-995.7	798.1	265.8
2	15	970.9-2042.7	1756.5	273.2
3	8	1940.2-3285.5	2582.2	446.7
Greater than or equal to 4	6	2300.9-3965.4	3276.1	614.4

Minimum diameter (mm)	n	Cost (US \$)		
		Range	Mean	SD
Less than 2.5	7	183.8-1552.1	849.3	401.4
2.5-2.9	7	995.7-2367.5	1677.7	425.8
3.0-3.4	7	970.9-4679.5	2329.7	1172.3
Greater than or equal to 3.5	17	1673.5-10281.2	3067.6	2004.5

Complications	Cost (US\$)
Migration, successful retrieval, and successful re-deployment (2 patients)	3354.7, 4679.5
Migration, unsuccessful retrieval, and surgery	1986.3 plus surgery
Two additional sessions following severe hemolysis after the 1st session	10281.2

pharmacy, and physician's charges were not included. Coils and all other medical resources, except for the AMPLATZER Duct Occluder®, were supplied by the Japanese distributor, while the AMPLATZER Duct Occluder® was provided by China. Prices for medical resources from Japan were listed in Table 1, while

the AMPLATZER Duct Occluder® and its delivery system was supplied for 1500 US\$/device and 150 US\$/ one system, respectively. Although some devices were supplied at a discount price, we retrospectively calculated the cost based on the normal price in each country at the rate of 117 yen to the U.S. dollar.



For information, please call 1-800-BRAUN2 (227-2862)

www.bbraunusa.com



Working Together to Develop a Better Tomorrow

The leader of our team, Noriyuki Haneda, was given a temporary medical license from the Ministry of Health for Mongolia, while the other doctors were permitted to do any medical activities in Mongolia under his supervision. The AMPLATZER Duct Occluder® was approved also from the Ministry of Health for Mongolia, while its implantation was performed with an official distributor and proctor of AGA Medical Co., Larry Meng. Informed consent for transcatheter occlusion of a patent arterial duct either with coils or the AMPLATZER Duct Occluder® was obtained from the patients or patient's parents by not only Mongolian but also Japanese doctors.

CONTEGRA®

Pulmonary Valved Conduit



A natural tissue conduit worthy of your pediatric RVOT needs

CONTEGRA® Pulmonary Valved Conduit

Indications: See "Humanitarian Use Device" section below.

Contraindications: None known. **Warnings/Precautions/Side Effects:** Acceptable clinical performance has been established for the CONTEGRA conduit in pediatric patients under the age of 10. Because of the possibility that complications of the device could become apparent only after extended use, a benefit-risk consideration of the long-term use of the CONTEGRA conduit in pediatric patients over 10 years of age is particularly important. General complications reported with valved conduits and biological tissue valves implanted in the heart include hemorrhage, bleeding diathesis due to use of anticoagulants, residual or increasing transvalvular gradients, progressive neointimal thickening and peeling, progressive stenosis and obstruction, progressive pulmonary hypertension, graft infection, endocarditis, regurgitation, hemolysis, valve malfunction, physical or chemical deterioration, thromboembolism, thrombus, conduit dilatation. For additional information, please refer to the Instructions For Use provided with the product. **CAUTION:** Federal law (USA) restricts this device to sale by or on the order of a physician.

Humanitarian Use Device:

Authorized by Federal law for use in patients under 18 years of age for correction or reconstruction of the Right Ventricular Outflow Tract (RVOT) in the following congenital heart malformations: Pulmonary Stenosis, Tetralogy of Fallot, Truncus Arteriosus, Transposition with Ventricular Septal Defect (VSD), Pulmonary Atresia. In addition, the CONTEGRA Pulmonary Valved Conduit is indicated for the replacement of previously implanted but dysfunctional pulmonary homografts or valved conduits. The effectiveness of this device for these uses has not been demonstrated.

UC200801935 EN © Medtronic, Inc. 2007



Medtronic

Alleviating Pain · Restoring Health · Extending Life

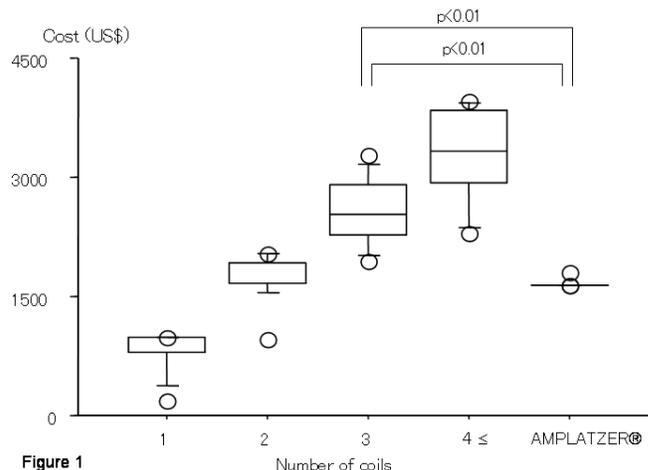


Figure 1: Cost comparison between coils and AMPLATZER Duct Occluder® depending on the number of coils used for occlusion. When we used 3 or more coils, the cost for devices was more expensive in the Coil group than in the AMPLATZER group.

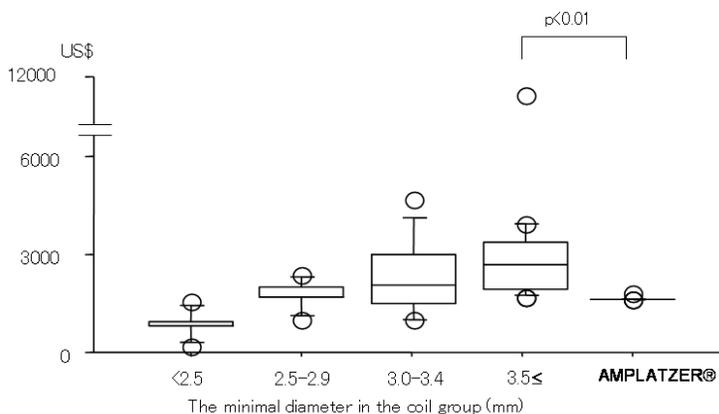


Figure 2: Cost comparison between coils and AMPLATZER Duct Occluder® depending on the minimum diameter of the patent arterial duct. The average cost for patent arterial duct greater than or equal to 3.5 millimeters was more expensive in the Coil group than in the AMPLATZER group.

Significant differences among the groups were detected by qui-square test of analysis of variance. A post-hoc test was done by Fisher's PLSD using STATView version 5.0 (SAS Institute Inc. Cary, USA). A probability-value less than 0.05 was taken as statistically significant.

Results

There was no significant difference in age and body weight between the two groups, while the minimum diameter in the AMPLATZER group (median, 4 millimeters) was larger than in the Coil group (median, 3.3 millimeters, probability-value less than 0.05, Table 2).

In the AMPLATZER group, all patent arterial ducts were closed without any complications. In the Coil group, the patent arte-

rial duct was closed in a single session in 37 patients. Three patients had complications caused by migration, and one patient had a complication with hemolysis.

Migrated coils were retrieved and the patent arterial duct was closed in a second session in 2 patients, while one patient needed surgical retrieval and patent arterial duct ligation. Hemolysis was abolished in an additional two sessions with 14 coils total. In all, the patent arterial duct was closed with coils in 40 patients. All the patients, other than those who needed an additional session because of migration or hemolysis, were discharged on the day after the procedure. There was no statistically significant difference in the frequency of complications and the complete closure ratio, between two groups.

As we used 20 AMPLATZER Duct Occluder® devices (1500 US\$/device) and 21 delivery systems (150 US\$/one system) in 20 patients, the cost for AMPLATZER Duct Occluder® closure was 1657.5 US\$/patient.

The average cost for coil occlusion depends on the number of coils used. The actual average cost for a single, 2, 3, and 4 or more coils was 798.1, 1756.5, 2582.2, and 3276.1 US\$, respectively (Table 3). When we used 3 or more coils, the cost for devices was more expensive in the Coil group (Figure 1). The actual average cost for transcatheter occlusion of patent arterial duct with a minimum diameter of less than 2.5 millimeters, 2.5-2.9 millimeters, 3.0-3.4 millimeters, and greater than or equal to 3.5 millimeters was 849.3, 1677.7, 2329.7, and 3067.6 US\$, respectively (Table 4). The average cost for a patent arterial duct greater than or equal to 3.5 millimeters was more expensive in the Coil group than in the AMPLATZER group (Figure 2). As the medical cost for patent arterial duct ligation is only 10 US\$ in Mongolia, it is meaningless to calculate

the total cost in the patient who needed surgical retrieval of coils and patent arterial duct ligation. However, in the four patients, who were complicated by migration of coils or hemolysis, the cost for coil occlusion was double or more than AMPLATZER Duct Occluder® (Table 5). The minimum diameter of the patent arterial duct in these patients was greater than or equal to 3 millimeters.

Discussion

Patent arterial duct is a common problem in Mongolia because of the high altitude. Prior to 2005, we had visited Mongolia six times, and had attempted coil occlusion of a patent arterial duct in 49 patients. In this project, both transportation and the cost of medical supplies depended on donations by the Japanese people, making the budget quite limited. For the first two visits, all catheterizations were done at a hospital which had no cine angiography machine, but only had a portable X-ray fluoroscopy machine for the gastrointestinal tract. As this machine had no recording system for graphic data, we only had poor data on the minimum diameter and angiographic morphology of the patent arterial duct. [1] Consequently, we analyzed the data of the 41 patients treated in the last four visits. We used mainly 0.052 inch Gianturco coils for a moderate-sized patent arterial duct until the fifth visit, because the coil was still the only device for transcatheter occlusion of patent arterial duct approved in Japan. Multiple coils were frequently needed, and one patient who had complications due to migration of multiple 0.052 inch Gianturco coils needed surgery. Considering cost effectiveness and the safety of using a single AMPLATZER Duct Occluder® rather than multiple coils, we decided to introduce the AMPLATZER Duct Occluder® to our project. Thanks to the AGA Medical Co., 20 AMPLATZER Duct Occluders were provided at a discount price in 2005 from



**Asheville Cardiology Associates
Recruiting BC/BE Pediatric
Non-Invasive Cardiologist**

Known for clinical excellence, Asheville Cardiology Associates is seeking a third pediatric cardiologist with advanced skills in both inpatient and outpatient arenas. Those with expertise in new modality imaging, adult-congenital cardiology, or interest in exercise physiology or electrophysiology, are encouraged to contact us. Development of new programs within the practice is encouraged.

The Peds Division has a complex patient base, with active fetal and adult-congenital programs. Outpatient practice encounters ~3,000 clinic visits, ~2,000 echoes per year, with a growth rate of 5-7% annually. Inpatient is performed at Mission Hospitals, consistently rated in Top 100 Heart Hospitals in last six years. Its new children's outpatient facility is well represented by subspecialists and ancillary services.

Asheville is a beautiful city of 70,000 (county has 200,000 plus MSA of 391,000). Located in the Blue Ridge Mts. of North Carolina, it offers excellent public and private schools, universities and colleges. Amenities such as great restaurants, arts, music, & theater put it on the list of best places to live in many publications. A mild four season climate gives opportunities for mountain biking, hiking, camping, fishing, golf, whitewater activities and skiing.

Visit our website, www.avlcard.com for more information.

All inquiries remain confidential. Please send CV to:

James J. McGovern, MD, FACC
 Fax: (828) 277-6350
 Email: jimm@avlcard.com

MyLab® Ultrasound Series
 Performance and Portability without Compromise.
www.biosound.com • 877.US.MYLAB

biosound
 @saote

©2007 Biosound Esaote, Inc.

CHICAGO - Rush University Medical Center

The Department of Pediatrics in conjunction with the Center for Congenital and Structural Heart Disease at Rush University Medical Center, located in downtown Chicago, is seeking to recruit mid-senior level candidates for the following positions:

Electrophysiology: We are seeking a cardiologist with fellowship training in pediatric and congenital/structural electrophysiology. The candidate should have expertise in invasive and non-invasive electrophysiology and skills and expertise in diagnosis and management of complex arrhythmias.

Director of Echocardiography for the Center: We are seeking board certified physician candidates with experience in advanced echocardiography. Additional experience in other non-invasive imaging modalities would be advantageous to the candidate's application.

Director of Pediatric Heart Transplant: We are seeking a pediatric cardiologist with a strong clinical background in heart transplant and heart failure.

Pediatric Cardiologist: Board eligible/certified in pediatric cardiology with interest in outpatient and inpatient aspects of their field, including attending satellite clinics in the Chicago metro area. For this position recent fellowship graduates are encouraged to apply.

These recruitments are part of a key strategic growth initiative in a multidisciplinary advanced congenital/structural cardiology program with state of the art mechanical support and clinical trials. Experience in clinical research is desirable. Candidates should be eligible for faculty appointment at the Associate Professor or Professor level. Rush is home to one of the first medical colleges in the Midwest and one of the nation's top-ranked nursing colleges, as well as graduate programs in allied health, health systems management and biomedical research. Rush is an Equal Opportunity Employer.

Please contact:
Courtney Kammer
 Director, Faculty Recruitment
 Rush University Medical Center
 312-942-7376
 Courtney_Kammer@rush.edu



China, while coils were supplied by the Japanese distributor. Consequently, we compared cost effectiveness between the coil and the AMPLATZER Duct Occluder® based on the assumption that we had bought these devices for the normal price in each country.

Because of the limited number of devices, we used AMPLATZER Duct Occluder® for selected patients with a patent arterial duct of a minimum diameter of 2.5 millimeters. Consequently, this study has the limitation of being a non-randomized retrospective study. The minimum diameter of the patent arterial duct was slightly larger in the AMPLATZER group, however, age and body weight were comparable in the two groups. We mainly used a 0.052 inch Gianturco coil, however, we occasionally used other types of coils depending on availability of coils which was determined by the limited budget. The actual normal price of a Flipper coil and a Platinum coil was more expensive than ordinary Gianturco coils, but they were supplied at a discount price. Use of such coils obviously makes the actual procedure cost more expensive. Despite these limitations, the AMPLATZER Duct Occluder® was more cost effective when we used 3 or more coils, and when the minimum diameter of a patent arterial duct was greater than or equal to 3.5 millimeters. Kumar, RK recommended using an AMPLATZER Duct Occluder® or surgery for any patent arterial duct greater than 6 millimeters in small children (greater than 4 millimeters for children less than 5 kilograms), as coils larger than 10 millimeters tend to be too large for the descending aorta.[5] In our previous study, the maximum diameter of patent arterial duct which could be closed with coils was 5.6 millimeters.[6] Therefore, around 6 millimeters will be the minimum diameter limit which can be closed even by using multiple 0.052 inch Gianturco coils. The cost for the 4 patients with complications caused by migration of coils or hemolysis was far more expensive, while one patient needed surgery. As the cost of coil occlusion for the 3.0-3.4 millimeters patent arterial duct was comparable to the AMPLATZER Duct Occluder®, we believe the AMPLATZER Duct Occluder® should be used for smaller patent arterial ducts, around 3 millimeters, in the unique setting of our voluntary activity.

Cost effectiveness of medical resources may not be the same from country to country, because the system which determines their prices is different. In this study, medical resources other than the AMPLATZER Duct Occluder®, were distributed from Japan, while the AMPLATZER Duct Occluder® came from China. Consequently, we could not compare the cost of devices to normal Japanese prices. As our project is volunteer-based, we did not analyze hospital and

Evolving Concepts in Management of Complex Congenital Heart Disease

A CME Course sponsored by Rady Children's Hospital and University of California, San Diego

Course Moderators: John Lamberti, MD; John Moore, MD; and Anthony Chang, MD
 Faculty consists of 20 of the finest lecturers in the field

Attend the conference in San Diego, October 5-6, 2007

For a brochure: www.chsd.org/cme or call Donna Salas at (858) 966-4072; (858) 966-8587 FAX CMA accredited - 13.75 AMA PRA Category™ 1 credits



physicians charges in the cost. Hospital stay after the procedure was similar in 2 groups except for patients who needed the second session or surgery. We believe these fees are negligible in Mongolia compared to the cost of devices for transcatheter occlusion of a patent arterial duct, considering the fact that the total medical cost for patent arterial duct ligation is only 10 US\$ in Mongolia.

In conclusion, transcatheter occlusion of a patent arterial duct using an AMPLATZER Duct Occluder® was more cost effective for a patent arterial duct greater than or equal to 3.5 millimeters, or for a patent arterial duct which needed 3 or more coils to close than the use of coils, in the situation of a heart saving project in Mongolia, where an AMPLATZER Duct Occluder® was distributed from China, with other medical resources from Japan.

Acknowledgements

The AMPLATZER Duct Occluder® could not have been introduced to this project without support from AGA Medical Corporation and Dr. Larry Meng from Beijing Since Medical Scientific Co.

We thank Dr. Peter M. Olley, Professor Emeritus of Pediatrics, University of Alberta, and Dr. Setsuko Olley for language consultation.

References

1. Haneda N, Tomita H. Heart Saving Project: Catheter Intervention in Mongolia. *Congenital Cardiology Today* 2005;3:8-10.
2. Grifka MD RG, Jones TK. Transcatheter closure of large patent arterial duct using 0.052" Gianturco coils: controlled delivery using a biptome catheter through a 4 French sheath. *Catheter Cardiovasc Interv* 2000;49:301-306.
3. Masura J, Walsh KP, Thanopoulos B, et al. Catheter closure of moderate-to-large-sized patent ductus arteriosus using new Amplatzer Duct Occluder; immediate and short-term results. *J Am Coll Cardiol* 1998;31:820-826.
4. Pass RH, Hijazi Z, Hsu DT, et al. Multicenter USA Amplatzer patent ductus arteriosus occlusion device trial: initial and One-year results. *J Am Coll Cardiol* 2004; 44:513-519.

5. Kumar RK, Anil SR, Kannan BRJ, et al. Biotome-assisted coil occlusion of moderate-large patent ductus arteriosus in infants and small children. *Catheter Cardiovasc Interv* 2004;62:266-271.

6. Tomita H, Takamuro M, Fuse S, et al. Coil occlusion of patent ductus arteriosus-Impact of 0.052-Inch Gianturco coil without Amplatzer Duct Occluder-.*Circ J* 2006;70:28-30.

~CCT~



Corresponding Author

*Hideshi Tomita, MD
Cardiovascular Center,
Showa University Northern Yokohama
Hospital
35-1 Chigasakichuo
Tsuzuki-ku
Yokohama-shi
Kanagawa 224-8503, JAPAN
Phone: +81-45-949-7000
Fax: +81-45-949-7117*

tomitah@med.showa-u.ac.jp

*Noriyuki Haneda, MD
Kenji Kuroe, MD;
Shunji Nogi, MD;
Hideaki Ueda, MD;
Kenji Kishida, MD;
Takashi Higaki, MD;
Yasunori Horiguchi, MD;
Jun Furui, MD;
Masamichi Tamura, MD;
Hidemi Takada, MD;
Fumitoshi Tsurumi, MD;
Shinichiro Tanaka, MD;
Hiroshi Yano, MD;
Pediatric Cardiology
Shimane Institute of Health Science
Enya-cho 223-7, Izumo, Shimane,
693-0021, JAPAN*



Outstanding BC/BE Pediatric Cardiology Opportunity in Beautiful Southern California

Busy private practice group in Orange County seeks additional associate. We are thriving and expanding and are associated with a major tertiary cardiothoracic surgical program with over 200 cases per year. We work closely with surgeons and multiple sub specialists. Non-invasive imaging skills are desirable, but not mandatory. We offer a competitive private practice salary with excellent benefits commensurate with experience. We will be moving into a brand new office building in the next few months. Orange County offers fantastic recreational opportunities with pristine beaches, year round sunshine, as well as award winning schools.

Please send CV, and contact:

Farhouch Berdjis
fberdjis@cox.net
or James Chu
jchu147@yahoo.com
714-547-0900
www.childrensheartspecialists.com

James Chu, MD
Farhouch Berdjis, MD
Childrens Heart Specialists
1120 West La Veta, Suite 100
Orange, CA 92868

Do You Want to Recruit a Pediatric Cardiologist?

Advertise in the only monthly publication totally dedicated to pediatric and congenital cardiology. For more information: call +1.301.279.2005, or send an email to: **TCarlsonmd@gmail.com**

HIGHLIGHTS FROM THE 43RD ANNUAL MEETING OF THE JAPANESE SOCIETY OF PEDIATRIC CARDIOLOGY AND CARDIAC SURGERY

By Professor Toshio Nakanishi, MD and Virginia Dematatis, Congenital Cardiology Today, Staff Editor

The 43rd Annual Meeting of the Japanese Society of Pediatric Cardiology and Cardiac Surgery (JSPCCS) was held at the Keio Plaza Hotel in Shinjuku, Tokyo, Japan on July 3-7, 2007. The meeting was attended by over 1400 pediatric cardiologists, cardiac surgeons, pathologists, nurse-practitioners and others from Japan, Canada, England, Scotland, Brazil, Italy, Germany, Poland, the Netherlands and the United States. The size, quality and scope of the meeting were very impressive. The majority of the meeting was in Japanese and included talks on a wide range of topics given by distinguished faculty from major cardiac centers in Japan including: The Heart Institute, Tokyo Women's Medical University; National Cardiovascular Center, Osaka and Fukuoka Children's Hospital, Fukuoka. "Long-term Problems in Complex Congenital Heart Disease," "Management of Arrhythmia in Congenital Heart Disease," and "20 Years After Fontan Operation" were some of the topics discussed. The English language sessions covered a broad range of topics such as: "Long Term Outcome of Hypoplastic Left Heart Syndrome," "What Every Ablationist Needs to Know about Cardiac Anatomy," "Surgery without Heart Block," "Medical Management of Dilated Cardiomyopathy in Children," "Hybrid Approach to Congenital Heart Disease," "How to Set up a Hybrid Catheterization Laboratory in a Small Space," "ASD Closure by Catheter Intervention," to name a few.

The fact that this meeting is the 43rd joint meeting of a society that includes over 2000 members (both pediatric cardiologists and cardiac surgeons) is of particular note, as it is only recently in the United States and other countries that joint meetings have begun to be held. The Japanese understood early on the advantages of having these two groups meet together to discuss topics concerning congenital heart disease and issues unique to the pediatric population.



Left to right: Drs. Edward L. Bove, Robert H. Anderson, Prof. Hiromi Kurosawa and Yasuharu Imai

The meeting was planned by Prof. Hiromi Kurosawa, President of the Organizing Committee, Prof. Kazuaki Ishihara, Secretary General and Prof. Toshio Nakanishi, Chief of the Department of Pediatric Cardiology of the Tokyo Women's Medical University. These gentlemen organized and hosted a comprehensive and interesting program, as well as a variety of congenial social events. Japanese pediatric car-

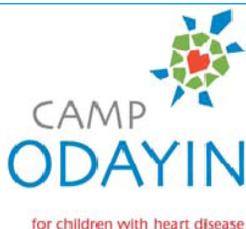


Left to right: Drs. John Cheatham, Toshio Nakanishi, Prof. Hiromi Kurosawa, and Gil Wernovsky .



Left to right: Drs. Hideshi Tomita and Toshio Nakanishi.

diologists and surgeons, foreign faculty and guests gathered at both formal and informal events where they were treated to traditional Japanese cuisine and enjoyed the opportunity to get to know one another. One social highlight was the Welcoming Dinner, which included both Japanese and foreign faculty. It began with warm greetings from Prof. Kurosawa and Prof. Nakanishi and was followed by a number of toasts and brief speeches



kids play.

worries rest.

fun happens!

Camp Odayin provides residential, day and family camp experiences for children with heart disease from all around the world. The camp offers the opportunity to strengthen self-confidence, gain independence, develop life skills, and meet other young people with similar health, emotional and social concerns.

www.campodayin.org

from some of the English-speaking faculty, including: Drs. Edward L. Bove, Anton E. Becker, Robert H. Anderson, John Cheatham, Zahid Amin and John Moore. One highlight of the dinner was the presentation of flowers from Masataka Nakayama, the grandson of Dr. Toshiko Nakayama, Executive Trustee of the Alumni Association, Tokyo Women's Medical University, to Prof. Kurosawa, who had successfully performed heart surgery on the young boy. The room erupted into warm applause as Prof. Kurosawa accepted the flowers.

The 44th Annual Meeting (JSPCCS 2008) will be held on July 2-4, 2008 in Koriyama City, Fukushima Prefecture, Japan. Abstract submission is welcome from all over the world. All inquiries should be sent to the homepage of the JSPCCS (<http://JSPCCS.umin.ac.jp/>).

~CCT~

Corresponding Author

Professor Toshio Nakanishi, MD
 Chief, Department of Pediatric
 Cardiology
 Heart Institute
 Tokyo Women's Medical University
 8-1 Kawada-cho, Shinjuku
 Tokyo, Japan
 TEL (81-3) 3353-8111
 TAX (81-3)3356-0441

pnakanis@hij.twmu.ac.jp

Virginia E. Dematatis, Staff Editor
 Congenital Cardiology Today

VDematatis@CCT.bz

**MICHIGAN STATE
 UNIVERSITY**

**Non-Invasive Pediatric Cardiologist
 Michigan State University**

This is an Assistant/Associate Professor position with a tenure or non-tenure track.

Located in East Lansing, Michigan, this position offers a flexible and stimulating balance between clinical practice, teaching and research in an area that offers all of the amenities of a Big Ten University in a friendly and livable community.

The Division of Pediatric Cardiology offers a wide-range of non-invasive cardiology services throughout the mid-Michigan region. This is a well-respected program featuring a preventive care focus.

The ideal candidate must be Board Certified/Eligible in pediatric cardiology and have an interest teaching. Expertise in echocardiography and fetal echocardiography is preferred. This opportunity offers schedule flexibility and is ideal for those with an interest in academics. There are also excellent research opportunities in conjunction with the clinical, epidemiology and basic science departments.

To apply or recommend a candidate, please contact:

**Kenyea Zimmermann,
 Search Consultant
 Aegis Group Search Consultants, LLC
 41451 W. 11 Mile Rd., Novi, MI 48375
 Phone (248) 344-1450
 FAX (248) 347-2231
kzimmermann@aegis-group.com**

MSU is strongly committed to achieving excellence through cultural diversity. The University actively encourages applications and nominations of women, minorities, veterans, and persons with disabilities

**Attention
 Pediatric Cardiology
 Fellows**

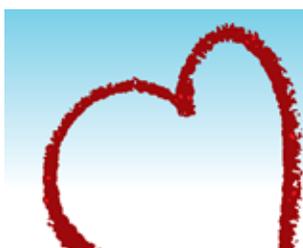
**Just finishing your fellowship
 and looking for a great job
 opportunity?**

We are looking for a non-invasive Pediatric Cardiologist (BC/BE) with experience in Pediatric and Fetal Echocardiography to join our established Pediatric Cardiology Private Practice Group. We have offices located in the suburbs of a major metropolitan area in the Midwest.

This position offers the opportunity to admit and manage your own patients in a large Pediatric Cardiology Center with participation in weekly Cardiovascular Conferences among Cardiac Surgeons, Pediatric Interventionists and Pediatric Cardiologists.

Attractive salary and benefits.

If you are interested, please email your CV to: **PC1@CCT.bz**



Pediatric cardiology patient education materials from Pritchett & Hull

visit **www.p-h.com/pedcard**
 for a demo of P&H's animated Pediatric Cardiology CD
 visit us at **www.p-h.com** or call **800-241-4925**



HIGHLIGHTS FROM THE 2007 INTERNATIONAL SYMPOSIUM ON THE HYBRID APPROACH TO CONGENITAL HEART DISEASE (ISHAC)

By John P. Cheatham, MD and Mark E. Galantowicz, MD

The International Symposium on the Hybrid Approach to Congenital Heart Disease (ISHAC) held its second annual meeting on June 27 – 29, 2007 at the Hilton Easton Town Center in Columbus, Ohio. Two hundred fifty congenital heart surgeons, interventional cardiologists, nurse practitioners, and other healthcare professionals from 25 states and 17 countries on five continents attended. Over one third of the attendees traveled over 2500 miles to attend ISHAC, while a post meeting survey indicated that 95% plan to return to another ISHAC meeting.

ISHAC brings together many of the leaders in Hybrid therapy to discuss how collaboration between interventional cardiology and cardiothoracic surgery can enhance care to pediatric and adult patients with complex congenital heart disease. The Hybrid ap-



proach strives to improve clinical outcomes by marrying transcatheter therapies of the interventional cardiologist with the operative advances of the cardiac surgeon, thereby reducing the risks associated with each individual approach. It may also be possible to reduce the accumulated risks over time for patients with complex congenital heart disease (CHD) by using Hybrid therapies.

Forty invited speakers discussed how to begin a hybrid program, outlined current perspectives and challenges with Hypoplastic Left Heart Syndrome, muscular VSD treatment, complex stent therapy, and non-surgical implantation of cardiac valves with highlighted dis-

cussions of fetal cardiac therapy and new device designs and techniques. ISHAC concluded with a far-reaching view of the future. Nine live cases were performed from Columbus Children's Hospital Hybrid Cardiac Catheterization Suites and the University Laboratory Animal Resources, Experimental Surgi-



“The importance of a global approach to congenital heart disease was highlighted with the announcement of the Fung/Wexner Endowment to foster international exchange in congenital heart disease.”



MyLab® Ultrasound Series
Performance and Portability without Compromise.
www.biosound.com • 877.US.MYLAB

©2007 Biosound Esaote, Inc.



Director of Cardiac Intensive Care Program

Florida - The Department of Pediatrics at the University of Florida College of Medicine – Jacksonville is recruiting an academically oriented, full-time faculty member to develop and direct the Cardiac Intensive Care program. This position is in the Division of Pediatric Cardiology with a joint appointment in Pediatric Critical Care Medicine (# 00024069). The successful candidate is expected to set up a unit dedicated to the care of children with cardiovascular disease and to work in close collaboration with the cardiothoracic surgeons, cardiologists and the pediatric intensivists. This unit will initially be located within the current 20 bed Pediatric Intensive Care Unit at Wolfson Children’s Hospital. The successful candidate will have direct input in the design of the Pediatric Cardiac Intensive Care Unit that will be located in the new tower of Wolfson Children’s Hospital. The Pediatric Cardiovascular Center of the University of Florida in Jacksonville is growing rapidly and currently has 7 full time pediatric cardiologists and 2 dedicated pediatric cardiac surgeons. We are performing approximately 200 surgeries annually and have recently started in ECMO program. This position requires a MD/DO degree, Florida medical license eligibility, BE/BC in Pediatric Critical Care and/or Pediatric Cardiology with experience in postoperative cardiac care. Appointment will be at the non-tenure accruing level of Assistant Professor/Associate Professor/Professor.

Deadline for accepting applications will be January 1, 2008 an anticipated negotiable start date of February 1, 2008. Academic rank will be commensurate with qualifications and experience. Salary is negotiable.

Interested applicants should forward letter of intent, curriculum vitae, and three letters of recommendation to:

Mobeen H. Rathore, MD, Professor and Assistant Chairman, Chair Search Committee, Department of Pediatrics, University of Florida College of Medicine - Jacksonville, 653-1 West Eighth Street, Jacksonville, FL 32209. Phone 904-244-3050 and/or fax 904-244-3028 and/or e-mail: Mobeen.Rathore@jax.ufl.edu

The University of Florida is an Equal Opportunity Institution. Visit our website at www.hscj.ufl.edu/peds.



Rainbow Babies and Children’s Hospital / University Hospitals/Case Medical Center

The Division of Pediatric Cardiology seeks interested faculty candidates for:

Pediatric Electrophysiology – responsibilities would include directing and developing the Pediatric Electrophysiology Program at UHCMC / Rainbow Babies and Children’s Hospital. This person would be expected to foster and develop an invasive EP program in the northeast Ohio region. Clinical and academic collaboration with two busy affiliated adult EP divisions is available and encouraged.

Non-invasive Cardiology / ECHO Lab Director – cardiologist with imaging interest and expertise to help develop comprehensive imaging services to include fetal, MRI, TEE, 3-D, and regional telemedicine program. Would join three other full time non-invasive cardiologists in providing clinical services at Rainbow Babies and affiliated institutions.

Critical Care Cardiology / Director – responsibilities will include establishing, developing, and directing cardiovascular critical care services in collaboration with the Divisions of Cardiothoracic Surgery / Cardiology and Pediatric Intensive Care.

The Pediatric Cardiovascular Program at UHCMC/ Rainbow’s is provides full-service congenital cardiovascular care to the Northeast Ohio region, and currently consists of 6 full time cardiologists, 2 cardiothoracic surgeons, 3 certified NPs, 2 full-time investigators and comprehensive subspecialty and fellowship programs. We are academically affiliated with Case Western Reserve University, and interest in clinical and/or basic research is encouraged. Rainbow Babies and Children’s Hospital is consistently ranked among the top children’s hospitals nationally.

Interested applicants should forward cover letter and CV to:

Ernest S. Siwik, MD
Interim Director, Pediatric Cardiology
RBC 380C – 11100 Euclid Avenue, Cleveland, OH 44106
ernest.siwik@uhhospitals.org

“In Employment, as in education, UHCMC/CWRU are committed to Equal Opportunity and world class diversity. Applications from qualified women and minorities are encouraged.”



Healing hearts. Training minds. Bringing hope.

5075 Arcadia Avenue Minneapolis, MN 55436 U.S.A.
Toll Free: 888.928.6678; Phone: 952.928.4860; Fax: 952.928.4859

www.childrensheartlink.org



cal Suites (ULAR). Dr. Jeffrey Feinstein, utilizing the audience response system, documented significant differences in

current practice in the preferred treatment in these cases. For example, the initial approach to a 5 kg patient with multiple mid-muscular VSD was identified as surgery – complete repair (33%), surgery – PA Band (29%), transcatheter device (7%), and perventricular device (29%) before the live cases demonstrated the ease and advantages of a Hybrid perventricular approach in selected individuals.

Drs. Dietmar Schranz (Giessen, Germany) and Mark Galantowicz (Columbus, OH)

OCTOBER WEBCAST
FOCUS

Innovations in Patent Ductus Arteriosus

A free cme live webcast

Offered on 3 dates: Oct 2, 9 and 11, 2007

www.5starmeded.org/pda/

To participate, you will need access to a computer with sound capability and Internet access. Registrants will be sent the Web site address so they can access the program online and download all course materials.

Faculty: J.V. Aranda, MD, PhD, FRCPC, FAAP, Medical Director, Clinical Research Center, Children's Hospital of Michigan Detroit, MI; Lance A. Parton, MD, Division of Newborn Medicine, NICU, Maria Fareri Children's Hospital at Westchester Medical Center Valhalla, NY; and C. Michael Cotten, MD Assist. Clinical Professor of Pediatrics Neonatal-Perinatal Medicine, Duke University Medical Center, Durham, NC.

In this live program, the expert faculty will review key epidemiologic and clinical issues involved with PDA; discuss the benefits and risks of surgical and medical therapies; compare drug therapies including indomethacin and intravenous ibuprofen; describe the role of prostaglandin inhibitors; and discuss pharmacologic options and pharmacoeconomic issues.

Learning Objectives: Upon completion of this activity, participants should be able to: Review key epidemiologic, pathophysiologic, and clinical issues involving PDA; Examine various PDA treatment options; Evaluate clinical pharmacology, experience and considerations involved with the pharmacologic options used in treating PDA; and Discuss the role of IV cyclooxygenase (COX) inhibitor therapy in PDA

Accreditation and Certification: This activity has been planned and implemented in accordance with the Essential Areas and policies of the ACCME through the joint sponsorship of the Annenberg Center for Health Sciences at Eisenhower and Akita Biomedical Consulting. The Annenberg Center is accredited by the ACCME to provide continuing medical education for physicians.

B | BRAUN

For information, please call 1-800-BRAUN2 (227-2862)

www.bbraunusa.com



Working Together to Develop a Better Tomorrow



PEDIATRIC CARDIOLOGIST WANTED

The Division of Pediatric Cardiology of Sanger Clinic and Levine Children's Hospital in Charlotte, NC is recruiting a board certified/eligible pediatric cardiologist to permanently service one of its busy satellites in Hickory, N.C. The successful candidate should have excellent interpersonal skills to work well with families, primary care physicians, neonatologists and adult cardiologists in a busy outpatient setting. There are also two level three nurseries in Hickory providing in-patient consultations and interpretation of echocardiograms. Hickory is less than one hour north of Charlotte so there is ample opportunity to practice one day per week in Charlotte with coverage in Hickory as needed. The position comes with a generous package of guaranteed salary of greater than \$200,000 annually, incentive pay, vacation time and exceptional retirement benefits including pension once fully vested. The successful applicant will join a rapidly growing practice of seven pediatric cardiologists and two cardiothoracic surgeons.

The Sanger Clinic is the premier congenital heart center in North Carolina performing over three hundred surgeries and cardiac catheterizations per year. The practice is affiliated with Carolinas Healthcare System, the fourth largest hospital authority in the country. The hospital authority is poised to open Levine Children's Hospital in the fall of 2007, an eighty-five million dollar state-of-the-art facility. Interested applicants should fax or e-mail their CVs to Dr. Stern.

Herbert J. Stern MD, FACC
Director, Division of Pediatric Cardiology
Sanger Clinic and Levine Children's Hospital

hstern@sanger-clinic.com

fax # 704-543-0018



outlined their institutions' experiences with HLHS to date. These results were discussed along with the traditional Norwood and Sano procedures and compared quite favorably. Many centers are beginning to implement new Hybrid management strategies and report their early results. The experiences from Dante Pazzanese (Sao Paulo, Brazil) were outlined by Dr. Carlos Pedra along with those from Evelina Children's Hospital (London, UK) by Dr. Shakeel Qureshi and the Cardiovascular Institute & Fuwai Hospital (Beijing, China) by Dr. Shengshou Hu. Each presenter described an improved outcome at their respective institution with the initiation of Hybrid programs learned from the 1st ISHAC Symposium and Workshop in 2006.

A session on the Hybrid approach to complex muscular VSD was highlighted with lectures from Dr. Mario Carminati (Milano) and Dr. Zahid Amin (Omaha). Dr. Ziyad Hijazi (Chicago), with the assistance of Dr. Emile Bacha (Boston) and Dr. Dan Rowland

Evolving Concepts in Management of Complex Congenital Heart Disease

A CME Course sponsored by Rady Children's Hospital and University of California, San Diego

Course Moderators: John Lamberti, MD; John Moore, MD; and Anthony Chang, MD
 Faculty consists of 20 of the finest lecturers in the field

Attend the conference in San Diego, October 5-6, 2007

For a brochure: **www.rcshd.org/cme** or call Donna Salas at (858) 966-4072;
 (858) 966-8587 FAX *CMA accredited - 13.75 AMA PRA Category™ 1 credits*





UNIVERSITY OF
ROCHESTER
MEDICAL CENTER

**Golisano Children's Hospital at Strong
Division of Pediatric Cardiology**

Golisano Children's Hospital at Strong is the teaching hospital of the University of Rochester School of Medicine and Dentistry. As the area's regional referral center for pediatric heart surgery, additional faculty are needed for our increasing referral population.

Pediatric Cardiologist

We are seeking a board certified/ board eligible non-interventional pediatric cardiologist. Opportunities are available for patient care in many areas including exercise testing, echocardiography, congenital heart disease in adults, and preventive cardiology. An interest in clinical and/or basic research is encouraged.

Staff Electrophysiologist

We are seeking to recruit a pediatric cardiologist with fellowship training in cardiac electrophysiology. The candidate should have training and experience in all aspects of clinical electrophysiology including ablation, pacemakers, defibrillators, and biventricular devices. The successful candidate will establish an interventional pediatric E-P program. An interest in clinical and/or basic research is encouraged.

Interested applicants should forward letter of intent, curriculum vitae, and three references to:

Winston E. Gaum, MD
Division Chief, Pediatric Cardiology
Golisano Children's Hospital at Strong
601 Elmwood Avenue, Box 631
Rochester, NY 14642

(Columbus), demonstrated a live case of periventricular closure of muscular VSD, while Drs. Amin, Hakan Akintuerk (Giessen), and Qi-Ling Cao (Chicago) demonstrated a novel way to treat membranous VSD using a Hybrid approach. A comprehensive afternoon session on the Hybrid approach to HLHS included different techniques to control pulmonary blood flow, creation of an adequate-size ASD, and treatment of retrograde aortic arch obstruction were presented by 15 faculty members from South America, Europe, and North America. Live transmission of Hybrid Stage I palliation in a baby with HLHS was demonstrated by Drs. Cheatham, Galantowicz, and Sharon Hill, ACNP, with a lively discussion amongst attendees and other faculty members.

On the 2nd day of the Symposium, the Hybrid approach to delivery of stents in the aorta, pulmonary artery, and other unusual locations were discussed by Drs. Evan Zahn (Miami), Audrey Marshall (Boston), Redmond Burke (Miami), Frank Ing



www.5StarMedEd.org/pda

INNOVATIONS IN MANAGING

**Patent
Ductus
Arteriosus**

SPONSORED BY

Arnnenberg Center for Health Sciences
Akita Biomedical Consulting

SUPPORTED BY AN INDEPENDENT EDUCATIONAL GRANT FROM

Ovation Pharmaceuticals, Inc.

October 2, 9 & 11, 2007

Join us for a free live webcast
specifically designed for clinicians treating
patients with patent ductus arteriosus.



PEDIATRIX
MEDICAL GROUP

PEDIATRIC CARDIOLOGISTS

Central and South Florida

Central and South Florida offer a world-class lifestyle, great schools and enviable year round activities. Because of exceptional growth, we have openings for three BC/BE Pediatric Cardiologists that are seeking to make a difference. Our practices are mature and established and are all located in growing, family-friendly communities. As part of a national company, both research and leadership opportunities are available.

Pediatrix offers physicians competitive salaries and excellent benefits, including professional liability insurance, CME allowance, comprehensive health/life benefits, stock purchase plan and 401(k).

**For more information, please contact
Jenifer Krutchik, Physician Relations Specialist,
jenifer_krutchik@pediatrix.com**

**Pediatrix Medical Group
1301 Concord Terrace, Sunrise, FL 33323**

**800.243.3839.ext. 5165
www.pediatrix.com**

(Houston), and Emile Bacha. Live case transmissions of these techniques were performed by the Miami team and Drs. Ralf Holzer and Alistair Phillips from Columbus. Drs. Philipp Bonhoeffer (London) and Ziyad Hijazi discussed possible Hybrid approaches for implantation of a valve stent in the pulmonary and aortic positions, with a highlight of Dr. Hijazi using a 33 French sheath to deliver the Edward's valve stent perventricularly during a live case demonstration from ULAR. The 2nd day culminated with two very unique demonstrations: (1) the use of real time 3-D Echo guidance for closure of VSD by Dr. Nikolay Vasilyev (Boston), and (2) the use of "Histotripsy" High Intensity Focused Ultrasound to create an ASD by Drs. Achi Ludomirsky (St. Louis) and Zhen Xu (Ann Arbor). A discussion of present and future fetal therapy by Dr. Wayne Tworetzky (Boston) and advanced imaging for Hybrid therapies by Dr. Craig Fleishman (Orlando) followed Dr. Chris Caldarone's stimulating update of transcatheter Fontan completion at Sick Children's Hospital, Toronto.

One of the many highlights of ISHAC was the keynote presentations by pioneers in the field, Dr. Michael J. Tynan and Dr. Aldo R. Castañeda. Each addressed the question, "How do you safely perform procedures that have never been performed before?" Both speakers gave unique perspectives as to how they performed procedures for the 1st time, taking care to insure safety but to go "where no man before has gone". The lectures were thought-provoking to all who attended and gave everyone aspirations of greatness.

On the 3rd day, a unique offering of ISHAC is the optional Skills Workshop, which has become the trademark of ISHAC and distinguishes it from all other meetings. Participants gain practical exposure to common Hybrid procedures through animal models developed by Workshop Directors, Drs. Ralf Holzer & Alistair Phillips, and Valerie Bergdall, DVM, along with her spectacular staff. The chosen animal models simulate human anatomy and facilitate hands-on learning of perventricular closure of muscular VSDs, intraoperative stent placement into branch pulmonary arteries, and placement of pulmonary artery bands and/or flow restrictors followed by placement of a PDA stent (for Hybrid Stage I palliation of HLHS). Other Hybrid materials and "wet labs" were also available for all who attended. The Workshop is the true highlight of ISHAC; just ask the attendees and faculty!

The importance of a global approach to congenital heart disease was highlighted with the announcement of the Fung/Wexner Endowment to foster international exchange in congenital heart disease. Mrs. Abigail Wexner, Chair of the Board of Trustees at Columbus Children's Hospital, successfully completed the London Marathon. In recognition of this accomplishment, Mr. and Mrs. William Fung of Hong Kong donated the start-up funds that



Pediatric cardiology patient education materials from Pritchett & Hull

visit **www.p-h.com/pedcard**
for a demo of P&H's animated Pediatric Cardiology CD
visit us at **www.p-h.com** or call **800-241-4925**



were matched by Mr. and Mrs. Wexner. Specific projects supported by the endowment will be determined by Drs. John P. Cheatham, Timothy Feltes, and Mark Galantowicz, Co-Directors of The Heart Center.

Tours of the Hybrid Cardiac Catheterization and Operating Suites at Columbus Children's Hospital were available to participants and extremely well received. These suites are equipped with technology that allows point-to-point connectivity within the campus using the Teleconference Center and to any site inside or outside the United States. A prototype 5 Axis Flat Panel Detector C-arm (Toshiba CF-i/BP) was designed, tested, and installed in the Hybrid Catheterization Suites, allowing unparalleled patient accessibility to all members of the team. In addition, a prototype Hybrid Cardiothoracic Operative Suite was being built and design plans were made available for participants to review.

While ISHAC is an intellectually stimulating, professionally challenging forum to discuss the latest developments in congenital heart disease, it is also a place to relax and renew the fellowship of old friends, while enjoying the opportunity to make new acquaintances. The Gala Dinner was held at the historical Rotunda and Capitol Atrium of The Ohio Statehouse where President Abraham Lincoln made a public address. The evening of fellowship was topped off with a performance by Dr. Philip Bonhoeffer, who was accompanied by Casey Westfall of the Columbus Symphony Orchestra, and The Children's Choir of Columbus.

ISHAC is an extremely resource-intensive symposium that would not be possible without the generous support of corporate sponsors, our hospital administrative leaders, Board of Trustees, and Foundation. Columbus Children's Hospital would like to gratefully acknowledge the major contributions of AGA Medical Corporation &

Toshiba Medical Systems (Platinum); Cook, Inc. (Gold); Beijing Zenomed Scientific Corporation, Cordis, ev3, and Stryker (Silver); Gore, Medtronic, and Edwards (Bronze); BBraun Medical, Boston Scientific, Mobile Aspects, NuMED, pfm of Germany, Phillips, and Scientific Software Systems (Contributing).

We look forward to seeing everyone at ISHAC 2008, scheduled for June 16-18th in Columbus, Ohio. Dr. Edward L. Bove and Dr. Terry D. King will be our Keynote speakers. So, mark your calendars now!

~CCT~

Corresponding Author

*John P. Cheatham, MD
Director, Cardiac Catheterization & Interventional Therapy
Columbus Children's Hospital
Professor of Pediatrics and Internal Medicine, Cardiology
The Ohio State University College of Medicine
The Heart Center, Columbus Children's Hospital
700 Children's Drive
Columbus, OH, 43205 USA*

CheathamJ@pediatrics.ohio-state.edu

*Mark E. Galantowicz, MD
Co-Director and Chief, Cardiothoracic Surgery
Associate Professor of Surgery
Columbus Children's Hospital
The Ohio State University, College of Medicine
The Heart Center, Columbus Children's Hospital
700 Children's Drive
Columbus, OH, 43205 USA*

© 2007 by Congenital Cardiology Today
(ISSN 1554-7787-print; ISSN 1554-0499-online)
Published monthly. All rights reserved

Headquarters

9008 Copenhaver Dr. Ste. M
Potomac, MD 20854 USA

Publishing Management

Tony Carlson, Founder & Editor

TCarlsonmd@gmail.com

Richard Koulbanis, Publisher & Editor-in-Chief

RichardK@CCT.bz

John W. Moore, MD, MPH, Medical Editor/
Editorial Board

JMoore@RCHSD.org

Jeffrey Green, Contributing Editor

Editorial Board

Teiji Akagi, MD

Zohair Al Halees, MD

Mazeni Alwi, MD

Felix Berger, MD

Fadi Bitar, MD

Jacek Bialkowski, MD

Philipp Bonhoeffer, MD

Mario Carminati, MD

Anthony C. Chang, MD, MBA

John P. Cheatham, MD

Bharat Dalvi, MD, MBBS, DM

Horacio Faella, MD

Yun-Ching Fu, MD

Felipe Heusser, MD

Ziyad M. Hijazi, MD, MPH

Ralf Holzer, MD

Marshall Jacobs, MD

R. Krishna Kumar, MD, DM, MBBS

Gerald Ross Marx, MD

Tarek S. Momenah, MBBS, DCH

Toshio Nakanishi, MD, PhD

Carlos A. C. Pedra, MD

Daniel Penny, MD

James C. Perry, MD

P. Syamasundar Rao, MD

Shakeel A. Qureshi, MD

Andrew Redington, MD

Carlos E. Ruiz, MD, PhD

Girish S. Shirali, MD

Horst Sievert, MD

Hideshi Tomita, MD

Gil Wernovsky, MD

Zhuoming Xu, MD, PhD

William C. L. Yip, MD

Carlos Zabal, MD

FREE Subscription

Congenital Cardiology Today is available free to qualified professionals worldwide in pediatric and congenital cardiology. International editions available in electronic PDF file only; North American edition available in print. Send an email to Subs@CCT.bz. Include your name, title, organization, address, phone and email.

Contacts and Other Information

For detailed information on author submission, sponsorships, editorial, production and sales contact, current and back issues, see website: www.CongenitalCardiologyToday.com

Would You Like to Receive Your Issue of CONGENITAL CARDIOLOGY TODAY on your computer in a PDF file?

If Yes, then simply send an email to us at ONLINE@CCT.bz