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Cardiology in the Young

ABSTRACTS



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Association Européene pour la Cardiologie Pédiatrique
XXXVII Annual General Meeting

Porto, 15–18 May 2002

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Cardiology in the Young

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XXXVII Annual Meeting of
The Association for European Paediatric Cardiology
Porto, 15–18 May, 2002

SCIENTIFIC PROGRAMME

PREORGANIZED SESSIONS

Wednesday, May 15 2002

Teaching session of the **AEPC Working Group on Dysrhythmias and Pacing**
Supported by an unrestricted educational grant from Medtronic
Chair: J. Janousek (Prague, CZ)

8:15 **Differential diagnosis of supraventricular tachycardia**
C. Wren (Newcastle, UK)

9:20 **Drug and ablation therapy for regular SVT**
M. Bink-Boelkens (Groningen, NL)

10:25 **Management of incisional atrial reentrant tachycardia**
T. Paul (Charleston, USA)

11:20–11:50 Break, lunch

Chair: Th. Paul (Charleston, USA)

11:50 **Current practice of pediatric cardiac pacing**
E. Villain (Paris, FR)

12:55 **Pacing for acute arrhythmias & heart failure in the postoperative setting**
J. Janousek (Prague, CZ)

MANNHEIMER LECTURE

15:30 **The Quintessence of the Making of the Heart**
A.C. Gittenberger-de Groot (Leiden, NL)

Thursday, May 16 2002

8:15–9:45 **AEPC Working Group Basic Sciences: Pulmonary Hypertension**
Supported by an unrestricted educational grant from Actelion and Shering
Chair: M.-C. Seghaye (Munich, DE), M. Beghetti (Geneva, CH)

8:15 **Pathobiology of pulmonary hypertension**
S. Haworth (London, UK)

8:37 **Genetics of pulmonary hypertension**
R.C. Trembath (Leicester, UK)

9:00 **Congenital heart disease and PHT: Pre and post operative problems**
I. Shulze-Neick (Berlin, DE)

9:22 **New therapeutical approach of pulmonary hypertension**
D. Schranz (Giessen, DE)

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10:30–12:00 **AEPC Psychosocial WG**
Chair: G. Björkhem (Lund, SE), H. Verhaaren (Gent, BE)

10:30 **Honorary lecture: Development of psychosocial work in paediatric cardiology during the last 30 years – personal experiences**
F. Stocker (Bern, CH)

10:55 **Defining and determining quality of life in patients with CHD**
J. Ottenkamp (Leiden, NL)

11:08 **Psychosocial aspects of prenatal cardiac diagnosis**
G. Björkhem (Lund, SE)

11:21 **Psychosocial aspects of congenital cardiac surgery**
A. Corno (Lausanne, CH)

11:33 **Informed consent; medico-legal aspects**
H. Verhaaren (Gent, BE)

11:46 **The interdisciplinary team approach in paediatric cardiology**
U. Salzer (Vienna, AT)

10:30–12:00 **AEPC WG Imaging: Tissue Doppler**
Chair: A. Bozio (Lyon, Fr), E. Pesonen (Lund, SE)

10:30 **Tissue Doppler: basic physics**
B. Olstad (Horten, NO)

10:53 **Tissue velocities in pediatric heart disease**
L. Kapusta (Nijmegen, NL)

11:16 **Strain rate and strain imaging in congenital heart disease**
L. Mertens (Leuven, BE)

11:39 **Clinical applications of tissue Doppler for evaluation of cardiac function**
M. Vogel (London, UK)

14:00–15:00 **State of the Art Lecture**
Aortic valve conservation
A. Nijveld (Nijmegen, NL)

16:15–17:45 **AEPC Working Group Surgery: Arterial switch**
Arterial switch: technical details affecting short and long term results
Video demonstrations
Chair: W. Brawn (Birmingham, UK), A. Serraf (Paris, FR)

18:15–19:45 **Industry Sponsored symposium:** AGA meeting

Friday, May 17 2002

8:15–9:45 **AEPC Working Group Intervention: How to do Session?**
Chair: A. van Oort (Nijmegen, NL), F. Berger (Zurich, CH)

8:15 **Creating and closing atrial fenestrations**
J. DeGiovanni (Birmingham, UK)

8:37 **Preventing air embolisation during intervention**
M. Gewillig (Leuven, BE)

9:00 **How to avoid pitfalls in measurements?**
J. Weil (Hamburg, DE)

9:22 **Closure of muscular and perimembranous VSDs**
M. Carminati (Milano, It)

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8.15–9:45 **AEPC & ESC WG Morphology & Developmental Anatomy: Left heart obstructions**
Chair: A. Gittenberg de Groot (Leiden, NL), J. Ottenkamp (Amsterdam, NL)

8:15 **Left ventricular hypoplasia**
A. Wenink (Leiden, NL)
8:35 **Aortic stenosis**
A. Angelini (Padua, It)
8:55 **Aortic arch obstructions**
Y. Ho (London, UK)
9:10 **Live specimens video demonstration**
G. Thiene (Padua, It)

10:30–11:30 **State of the Art Lecture**
Impact of the inflammatory reaction on organ dysfunction after cardiac surgery
M.-C. Seghaye (München, DE)

14:00–15:30 **AEPC WG Intervention: Complications in the Catheterization Laboratory**
Panel: A. Szatmari (Budapest, HU), J. Gibbs (Leeds, UK)

14:00 **Contest "I blew it"**
14:30 **Slipping and Embolising stents**
N. Wilson (Glasgow, UK)
14:50 **Complications during retrievals**
J.F. Piechaud (Paris, FR)
15:10 **Complications of ASD closure**
M. Tynan (London, UK)

14:00–15:30 **AEPC WG Morphology: Hypertrophic Cardiomyopathy**
Chair: G. Thiene (Padua, It), F. Picchio (Bologna, It)

14:00 **Pathology spectrum and natural history**
C. Basso (Padua, It)
14:20 **Molecular genetics**
W.J. Mckenna (London, UK)
14:40 **Risk stratification, familial clinical genetics and individual therapy**
F. Cecchi (Florence, It)
15:00 **Live specimens video demonstration**
G. Thiene (Padua, It)

16:15–17:45 **AEPC WG Imaging: Current Clinical Utility of MRI for the Assessment of CHD**
Chair: W. Helbing (Rotterdam, NL), O. Reich (Prague, CZ)

16:15 **Assessment of cardiac morphology by MRI**
E. Baker (London, UK)
16:45 **Cardiac mechanics assessed by MR tagging**
T. Delhaas (Maastricht, NL)
17:15 **Haemodynamic assessment of congenital heart defects by MRI**
L. Sondergaard (Copenhagen, DK)

18:15–17:45 **Industry Sponsored Symposium:** GORE meeting

Saturday, May 18 2002

8:15–9:45 **AEPC WG Fetal: Nuchal translucency**
Chair: J. Areias (Porto, PT), J.-C. Fouron (Montréal, CA)

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8:15	**What can we learn about nuchal translucency from embryological studies?** *A.C. Gittenberg de Groot (Leiden, NL)*
8:45	**Fetal heart failure: what can we expect from NT and DV flow at 10–14 weeks of gestation** *K. Nicolaides, A. Matias*
9:15	**Clinical implications of a raised nuchal translucency measurement for the cardiologist** *J. Simpson (London, UK)*

8:15–9:45	**ESC WG 22 GUCH: Congenital Heart Disease: Transition from Child to Adult** Chair: J. Deanfield (London, UK), J. Hess (München, DE)
8:15	**Overview of the problem** *H. Kaemmerer (München, DE)*
8:37	**The clinical impact of secondary disorders in cyanotic adults** *E. Oechslin (Zurich, CH)*
9:00	**Specific surgical problems in adults** *V. Tsang (London, UK)*
9:22	**Psycho-social aspects of the transition period for doctors and patients** *E. Thilen (Lund, SE)*

10:30–12:00	**AEPC WG Fetal: Difficulties faced by the Fetal Cardiologist** Chair: G. Tulzer (Linz, AT), K. Schmidt (Düsseldorf, DE)
10:30	**Cardiac disproportion – what can it mean?** *A. Azancot (Paris, FR)*
10:50	**Progression of lesions in utero?** *J. Marek (Prague, CZ)*
11:10	**Counselling after prenatal diagnosis** *L. Allan (London, UK)*
11:30	**Bring your difficult cases for panel discussion. Panel**

10:30–12:00	**Coronary Endothelium** Chair: L. Blieden (Petah, IL), E. Pesonen (Lund, SE)
10:30	**Intrauterine risk factors. Barker's hypothesis** *D. Baker (Southampton, UK)*
10:45	**Endothelial dysfunction** *J. Deanfield (London, UK)*
11:00	**How to and when to measure serum lipid levels?** *E. Jokinen (Helsinki, FI)*
11:15	**Beyond cholesterol. New risk factors** *L. Blieden (Petah, IL)*
11:30	**Infection associated coronary artery morphological and functional changes** *E. Pesonen (Lund, SE)*
11:45	**Preventive strategies. All**

Exhibition	**AEPC WG Morphology** Anatomical exhibition of congenital specimens in tight relationship with the topics of the Symposia Coordinator: G. Thiene (Padua, It)

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ABSTRACT SESSIONS

Thursday, May 16

SESSION 1 (8:15–9:45): Imaging

Chairmen: R. Oberhöffer (Munchen, DE), E. Baker (London, UK)

8:15 **01** Coronary flow reserve in patients after the Fontan operation
A. Eicken, W. Sebening, Th. Genz, H. Kaemmerer, G. Balling, S. Fratz, R. Lange, R. Blasini, R. Busch, J. Hess (Munich, DE)

8:25 **02** Myocardial perfusion and coronary flow reserve assessed by positron emission tomography in patients after Fontan-like operations
M. Hauser, A. Khn, F.M. Bengel, U. Sauer, S.G. Nekolla, M. Schwaiger, J. Hess (Munich, DE)

8:35 **03** Safety and reliability of Dobutamine-stress echocardiography for detection of myocardial ischemia in children
S. Di Filippo, M.J. Raboisson, B. Semiond, F. Sassolas, A. Bozio (Lyon, FR)

8:45 **04** The Quebec Child Telehealth Network: implementation and early results
M.J. Bland, A. Cloutier, N. van Doesburg, M. Bellavance (Montréal, CDN)

8:55 **05** Superior quantification of pulmonary blood flow by phase velocity magnetic resonance imaging compared to lung perfusion scintigraphy in patients with Fontan like circulation
H.C. Stern, S. Fratz, M. Schwaiger, J. Hess (München, DE)

9:05 **06** Which tissue Doppler echocardiography data are useful in the early diagnosis of hypertrophic cardiomyopathy in children with a familial pre-disposition?
L.B. Pauliks, M. Vogel, S. Dickie, W. McKenna, J.E. Deanfield (Denver, USA)

9:15 **07** Early results and echocardiographic evaluation of bovine jugular vein (contegra) used for right ventricular outflow tract reconstruction
H.K. Najm, M. Almotairi, J. Du Plessis, A. Omran, M. Godman (Riyadh, SAU)

9:25 **08** Relationship between myocardial fibrosis and electrical instability in patients with hypertrophic cardiomyopathy
G. Limongelli, G. Pacileo, P. Calabr, F. Cerrato, S. Severino, G. Di Salvo, R. Calabro (Naples, IT)

9:35 **09** Dynamic three-dimensional (3D) colour doppler ultrasound of human fetal intracardiac flow – potential for dynamic diagnosis
J. Deng, R. Yates, I.D. Sullivan, D. McDonald, A.D. Linney, W.R. Lees, R.H. Anderson, C.H. Rodeck (London, UK)

SESSION 2 (10:30–12:00): Surgery

Chairmen: T. Carrel (Bern, CH), A. Bogers (Rotterdam, NL)

10:30 **10** Pulmonary artery banding with early and late telemetric adjustment
A.F. Corno, N. Sekarski, M.A. Bernath, M. Payot, P. Tozzi, L.K. von Segesser (Lausanne, CH)

10:40 **11** Results of surgical repair in patients suitable for primary angioplasty of coarctation of the aorta
J.D.R. Thomson, R. Guerrero, C. Van Doorn, J.L. Gibbs, K.G. Watterson (Leeds, UK)

10:50 **12** Staged surgical approach of neonates with univentricular heart, transposition of the great arteries and sub-aortic obstruction
W. Daenen, B. Eyskens, D. Boshoff, L. Mertens, F. Marchau, M. Gewillig, B. Meyns (Leuven, BE)

11:00 **13** Percutaneous versus surgical closure of ostium secundum atrial defect
G. Butera, M. Chessa, R. Youssef, M.R. Bini, A. Giamberti, G. Pome, M. Drago, L. Rosti, D. Negura, A. Frigiola, M. Carminati. Istituto Policlinico San Donato, S. Donato Milanese (MI), IT

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11:10 **14** Use of bovine jugular vein conduit to reconstruct the right ventricular outflow tract: early results
Y. Boudjemline, D. Bonnet, T. Abdel Massih, G. Agnoletti, F. Jaubert, D. Sidi, P. Vouh (Paris, FR)

11:20 **15** The impact of ventricular morphology on outcome following completion total cavopulmonary connection
S.P. McGuirk, S.M. Langley, O. Stumper, R. Dhillon, P. Miller, J.V. deGiovanni, J.G. Wright, W.J. Brawn, D.J. Barron (Birmingham, UK)

11:30 **16** The spectrum of native cardiac disease requiring transplantation in pediatric age
D. Mancuso, A. Angelini, C. Frescura, F. Calabrese, O. Milanesi, A.P. Caforio, P.A. Pellegrino, D. Casarotto, G. Thiene (Padua, IT)

11:40 **17** Regional low flow perfusion during neonatal aortic arch surgery: relationship to repair
F.A. Pigula, S.K. Gandhi, R.D. Siewers, J. Tamblyn, S.A. Webber, E.M. Nemoto (Pittsburgh, USA)

11:50 **18** RV-PA-conduit versus modified BT-shunt in stage I palliation (Norwood Procedure or Modified Norwood Procedure)
R. Mair, E. Sames, G. Geiselseder, E. Lechner, G. Tulzer (Linz, AT)

SESSION 3 (14:50–15:30): Short Abstract Presentations 1
Chairmen: M. Elliot (London, UK), J. Dangel (Warsaw, PO)

14:50 **19** (=P224). Phase-contrast magnetic resonance imaging measurement of pulmonary venous blood flow in normal and surgically repaired pulmonary veins
E.R. Valsangiacomo, C. Barrea, C.K. Macgowan, J.S. Smallhorn, J.G. Coles, S.J. Yoo (Zürich, CH)

14:55 **20** (=P225). Cerebral function monitoring patterns during neonatal cardiopulmonary bypass
C.C. Geerts, N.E.M. Sins, A.N.J. Schouten, M.C. Toet, P.A. Hutter, N.M. Turner, A. Dodge-Khatami, G.B.W.E. Bennink, E.J. Meijboom (Utrecht, NL)

15:00 **21** (=P127). A heterozygous SCN5A point mutation in the domain I-II linker leading to LQT syndrome with 2:1 AV block, ventricular hypertrophy, contraction and relaxation abnormalities
M. Gewillig, I. Witters, B. Eyskens, L. Mertens, T. Rossenbacker, H. Heidbchel, X. Wehrens, R. Jongbloed, R. Kass (Leuven, BE; Maastricht, NL; New York, USA)

15:05 **22** (=P193). Genetic transmission of vagal hyperreactivity in rabbits
A. Livolsi, J. Feldman, J. Feingold, Y. Alembik, L. Weiss, M. Fischbach, J. Messer, P. Bousquet (Strasbourg, FR)

15:10 **23** (=P159). Cardiac manifestations and complications in children with the acquired immunodeficiency syndrome at the Chris Hani Baragwanath Hospital, Johannesburg
F.F. Takawira, A.M. Cilliers (Johannesburg, RSA)

15:15 **24** (=P189). Quality of Life in children with pulmonary atresia and intact ventricular septum (PA-IVS) in Sweden
B-M. EkmanJoelsson, L. Berntsson, J. Sunnegärdh (Skvde, SE)

15:20 **25** (=P190). Endocarditis prophylaxis in children with congenital heart disease: parent's awareness
J.L. Barreira, M.J. Baptista, J. Moreira, A. Azevedo, J.C. Areias (Porto, PO)

15:25 **26** (=P299). Serious complications after implantation of SynerGraft valved conduits in the pulmonary position
U. Salzer-Muhar, E. Kitzmller, M. Marx, M. Schlemmer, P. Simon, G. Weigel, G. Amann (Vienna, AT)

SESSION 4 (16:15–17:45): Fetal
Chairmen: V. Fesslova (Milano IT), G. Sharland (London, UK)

16:15 **27** Kartagener syndrome is an heterogeneous condition that may be associated to axonemal dynein intermediate chain gene (DNAI1) mutations
C. Guichard, M-C. Harricane, J-J. Lafitte, J. Godard, M. Zaegel, V. Tack, G. Lalau, P. Bouvagnet (Lyon, FR)

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16:25 **28** Genome wide gene expression profile analysis of congenital malformed hearts
S. Sperling, B. Kaynak, A.v. Heydebreck, D. Seelow, R. Pregla, S. Mebus, H. Lehrach (Berlin, DE)

16:35 **29** Familial recurrence of congenital heart disease in a cohort of 6647 consecutive pregnancies assessed by fetal echocardiography
H. Gill, M. Splitt, G. Sharland, J. Simpson (London, UK)

16:45 **30** Doppler tissue imaging enables assessment of fetal right ventricular function
H. Gardiner, J. Wolfenden, W. Lei, M. Henein (London, UK)

16:55 **31** Real-time 3D versus 2D echocardiography in fetuses with normal and abnormal hearts
G. Tulzer, W. Arzt (Linz, AT)

17:05 **32** Cardiac malformations in fetuses with increased nuchal translucency: ultrasound diagnosis and post-mortem morphology
M.C. Haak, M.M. Bartelings, J.M.G. van Vugt, A.C. Gittenberger-de Groot (Leiden, NL)

17:15 **33** The relationship between increased fetal nuchal translucency in the first trimester and second trimester cardiac echogenic foci
F. Prefumo, F. Presti, B. Thilaganathan, J.S. Carvalho (London, UK)

17:25 **34** Pulmonary venous flow in fetuses with hypoplastic left heart syndrome and restrictive foramen ovale
C. Barrea, M. Taketazu, J.F. Smallhorn, L.K. Hornberger. (Brussels, BE & Toronto, CND)

17:35 **35** Experiences with the AEPC research protocol in fetuses with bradyarrhythmias and complete heart block
R. Oberhoffer, M. Tollens, D. Lang, K.T.M. Schneider (Munich, DE)

Friday, May 17

SESSION 5 (8:15–9:45): General

Chairmen: H. Kramer (Kiel, DE), F. Bourlon (Monaco, MC)

8:15 **36** The value of QT dispersion and the rate-corrected QT interval in detecting children with mitral valve prolapse susceptible to ventricular tachycardia: a prospective study
W. Bobkowski, A. Siwinska, J. Zachwieja, B. Mrozinski, J. Maciejewski (Poznan, PL)

8:25 **37** Impaired response to dobutamine and amrinone of the adult isolated perfused heart following neonatal hypoxia in the rat
C.V. Rohlicek, S. Viau (Montréal, CDN)

8:35 **38** Pulmonary artery remodeling in transposition of the great arteries: relevance for neo-aortic root dilatation
S. Lalezari, M.G. Hazekamp, M.M. Bartelings, P.H. Schoof, A.C. Gittenberger-de Groot (Leiden, NL)

8:45 **39** Inotropic effects of selective ET-B receptor stimulation and its modulation by the endocardial endothelium
A. Leite-Moreira, C. Brs-Silva, C. Pedrosa (Porto, PO)

8:55 **40** Endothelium-dependent vasodilation is impaired in down syndrome: a new target for therapy?
M. Cappelli-Bigazzi, G. Santoro, C. Battaglia, M.T. Palladino, M. Pascotto, C. Morelli, R. Calabr (Naples, IT)

9:05 **41** Beneficial effect of steroids on cardiac function of patients with Duchenne muscular dystrophy
A. Fournier, J. Thrien, M. Filiatrault, Y. Brousseau, M. Vanasse (Montréal, CDN)

9:15 **42** Neonatal screening for critical congenital heart defects – low sensitivity for lesions with duct-dependent systemic circulation
J. Sunnegardh, M. Mellander (Göteborg, SE)

9:25 **43** Persistent ductus arteriosus and infective endocarditis – a forgotten entity
M. Sadiq, F. Latif, M. Nazir, S.A. Sheikh (Lahore, PAK)

9:35 **44** Histopathological evaluation on late myocardial changes following Kawasaki disease with coronary aneurysm using endomyocardial biopsy
S. Yonesaka,T. Takahashi, T. Sato, K. Otani, S. Eto, K. Ichinose (Hirosaki, JA)

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SESSION 6 (11:20–12:00): Short abstract presentations 2

Chairmen: U. Salzer (Vienna, AT), J. Skovranek (Praga, CR)

11:20 **45** (=P251). The new intratherapeutics doublestrut stent: in-vitro evaluation of stent geometry following overdilation and initial clinical experience in congenital heart disease
F. Ing, J. Mathewson, M. Cocalis, S. Kirkpatrick, K. Maginot, J. Perry (San Diego, USA)

11:25 **46** (=P160). Anti-Ro and anti-La antibodies and their effect on conduction in the absence of overt heart block – a prospective study.
P. Gordon, M. Khamashta, G.R.V. Hughes, E. Rosenthal, J. Simpson, G. Sharland (London, UK)

11:30 **47** (=P252). Implantation of large Amplatzer devices to close atrial septal defects in children: is it a safe practice?
M.J. Raboisson, M. Bourdages, E. Piette, P. De Guise, M. Brassard, J. Mir (Montréal, CDN)

11:35 **48** (=P191). Thrombus formation in patients after Fontan operation detected by transoesophageal echocardiography
G. Balling, M. Vogt, H. Kaemmerer, A. Eicken, R. Lange, J. Hess (München, DE)

11:40 **49** (=P226). Spiral CT scan and angiographic correlations of stents implanted in the aortic arch
M. Chessa, M. Carminati, G. Butera, R.M. Bini, M. Drago, F. Voterrani, F. Bedogni, D. Negura (Milan, IT)

11:45 **50** (=P227). Influence of hypoxaemia on the function of ATP dependent K+– channels in cardiomyocytes from children with congenital cardiac defect
K. Schumacher, E. Jungling, J.F. Vazquez-Jimenez, G. von Bernuth, M.-C. Seghaye, A. Luckhoff (München, DE)

11:50 **51** (=P161). Prevalance and spectrum of cardiac abnormalities in pediatric patients with intestinal malrotation
E. Thomas, A.P. Salmon, B.R. Keeton, J.P. Gnanapragasam, J.J. Vettukattil (Southampton, UK)

11:55 **52** (=P253). Interventional catheterization procedures in the treatment of hypoplastic left heart syndrome
A. Uebing, G. Fischer, J. Stieh, J. Scheewe, A. Boening, H.H. Kramer (Kiel, DE)

SESSION 7 (14:00–15:30): General

Chairmen: T. Sluysman (Brussels, BE), A. Celiker (Ankara, TR)

14:00 **53** Longterm neurodevelopmental outcome after neonatal arterial switch operation (ASO) for transposition tof the great arteries (TGA)
H.H. Hvels-Grich, R. Schnitker, K. Konrad, M. Wiesner, M.-C. Seghaye, W. Huber, F. Kotlarek, B.J. Messmer, G. von Bernuth (Aachen, DE)

14:10 **54** Comparison of health related quality of life (MOS SF-36) with exercise testing in adolescents and adults with congenital heart disease
A. Hager, J. Hess (München, DE)

14:20 **55** Neuropsychological and neurodevelopmental outcome of children with hypoplastic left heart syndrome following the three-stage Norwood Procedure: a British experience
J. Blyth, E. Wassmer, W. Brawn, J. Wright, C. Jones, C. Penrose (Birmingham, UK)

14:30 **56** Modified Norwood procedure and subsequent cavopulmonary anastomoses for classic hypoplastic left heart syndrome (classic HLHS): short-term and intermediate results
B. Nilsson, M. Mellander, T. Gilljam, G. Sdow, H. Berggren (Göteborg, SE)

14:40 **57** Ascending aortic growth following Norwood operation
B.H.P. Nagel, M. Chaudhari, J.G.C. Wright, D. Barron, W.J. Brawn, O. Stumper (Essen, DE; Birmingam, UK)

14:50 **58** Complete atrioventricular septal defect (CAVSD): outcome in relation to LV size.
G. Ciotti, R. Pande, R. Holzer, M. Pozzi (Liverpool, UK)

15:00 **59** Inhaled nitric oxide (iNO) and GMPc blood levels: proposal for a new therapeutical strategy in pediatric cardiac surgery

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E. Mazza, C. Panzeri, R. Rigolini (Milan, IT)

15:10 **60** Total cavopulmonary connection in patients with functionally single ventricle and regurgitation of atrioventricular valves
T. Tlaskal, B. Hucin, V. Chaloupecky, O. Reich, R. Gebauer, J. Marek (Prague, CZR)

15:20 **61** Outcome of pregnancy in 147 mothers with congenital heart disease
V. Fesslova', L. Villa, S. Salmona, B. Acaia (Milano, IT)

SESSION 8 (16:15–17:35): General
Chairmen: J. Happonen (Helsinki, FI), F. Picchio (Bologna, IT)

16:15 **62** Congenital cardiovascular malformations in infants of diabetic mothers: a 6 year prospective study
C. Wren, G. Birrell, G. Hawthorne (Newcastle upon Tyne, UK)

16:25 **63** Increased levels of P-BNP and P-ANP after stage I but not stage II operation in children with single ventricle defects
D. Holmgren, A. Westerlind, G. Lindstedt, P.-A. Lundberg, H. Whlander (Göteborg, S)

16:35 **64** Effect of Idebenone treatment on cardiac parameters in Friedreich ataxia patients
L. Mertens, F. Weidemann, I. Matthys, B. Eyskens, M. Gewillig, G. Di Salvo, D. Boshoff, G. Sutherland, L. Hatle, J. Van Hove, G. Buyse (Leuven, BE)

16:45 **65** Coagulation profile and liver function in patients after total cavopulmonary connection
V. Chaloupecky, I. Svobodova, I. Hadacova, V. Tomek, B. Hucin, T. Tlaskal, J. Marek, J. Skovranek (Prague, CZR)

16:55 **66** Clinical characteristics and effect of new treatments in pediatric primary pulmonary hypertension
A. Manes, N. Gali, D. Prandstraller, A. Donti, R. Formigari, G. Bronzetti, M. Aquilina, G. Boggian, F. Pelino, A. Branzi, F.M. Picchio (Bologna, IT)

17:05 **67** Inhaled iloprost: an alternative therapy to continuous prostacyclin infusion for pulmonary arterial hypertension in children
M. Fasnacht, P.C. Rimensberger, R. Burger, M. Beghetti (Zürich, CH)

17:15 **68** Cardiovascular gene polymorphisms in paediatric patients with systemic or pulmonary hypertension
J. Kreuder, A. Dost, I. Michel-Behnke, R. Zimmermann, K.J. Hagel, D. Schranz (Giessen, DE)

17:25 **69** Ryanodine receptor gene (RyR2) mutations in the paediatric age
B. Bauce, A. Rampazzo, C. Basso, A. Bagattin, L. Daliento, G. Thiene, G.A. Danieli, A. Nava (Padova, IT)

17:35 **70** Lung volumes and pulmonary gas exchange at rest and during exercise in patients with Fontan circulation at a long-term follow-up
E. Strömvall-Larsson, B.O. Eriksson, R. Sixt (Göteborg, SE)

Saturday, May 18

SESSION 9 (8:15–9:35): Cathlab – Intervention
Chairmen: A. Serraf (Le Plessis-Robinson, FR), J. Weil (Hamburg, DE)

8:15 **71** Feasibility and efficacy of R wave synchronized atrial pacing in postoperative junctional ectopic tachycardia using a modified commercially available temporary pacemaker
J. Janousek, P. Vojtovis, R.A. Gebauer (Prague, CZR)

8:25 **72** A comparison of conventional mapping versus non-contact mapping of intraatrial reentrant tachycardias in patients after atrial switch procedures for d-transposition of the great arteries
T. Kriebel, B. Franzbach, B. Windhagen-Mahnert, H. Kditz, H. Bertram, J. Tebbenjohanns, T. Paul (Hannover, DE)

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8:35 **73** Experimental evaluation of a new angled Amplatzer duct occluder
J.L. Bass, H. Kong, X. Gu, M. Urness, J. Titus, D.W. Hunter (Minneapolis, MN, USA)

8:45 **74** European multicentre study on transcatheter ASD closure with the helex septal occluder
F. Maymone-Martins, H. Sievert, J. Hess, P. Ewert, M. Carminati, M. Schneider, A. Salmon, S. Qureshi, J. De Giovanni, N. Wilson (European Centers, PO, DE, IT, UK)

8:55 **75** Interventional closure of patent foramen ovale and atrial septal defects after paradoxical embolic events
A. Beitzke, H. Schuchlenz, M. Beitzke, A. Gamillscheg, J.I. Stein, P. Zartner (Graz, AT)

9:05 **76** Complications of transcatheter closure of ventricular septal defects – results of an international questionaire
J.V. DeGiovanni (Birmingham, UK)

9:15 **77** Outcome of balloon valvuloplasty of congenital aortic stenosis: up to fourteen years follow-up
O. Reich, P. Tax, J. Marek, J. Skovrnek, J. Gilk, H. Bartkov, V. Chaloupeck (Prague, CZR)

9:25 **78** Transcatheter closure of perimembranous ventricular septal defects with an eccentric Amplatzer device: initial human experience
J.L. Bass, R. Arora, W.R. Torres, H. Sievert, J. Masura, B.D. Thanopoulos (Minneapolis, MN, USA)

9:35 **79** Stent implantation in children with congenital heart disease: acute and non-acute complications
M.B.E. Schneider, A. Will, P.E. Lange (Berlin, DE)

SESSION 10 (10:30–11:50): INTERVENTION

Chairmen: C. Mortera (Barcelona, SP), J. Stein (Graz, AT)

10:30 **80** Perforation of the atretic pulmonary valve: 10 years follow-up
G. Agnoletti, T.A. Massih, Y. Boudjemline, P. Bonhoeffer, D. Bonnet, D. Sidi (Paris, FR)

10:40 **81** Impact of radio-frequency perforation of the pulmonary valve for pulmonary atresia, intact ventricular septum in the neonate: intermediate-term follow-up and outcome
R. Johnson, E.J. Ladusans, K.P. Walsh, M. Pozzi, R. Arnold (Liverpool, UK)

10:50 **82** Cellular and molecular studies of inflammatory and proliferative response to biodegradable stents produced from iron-based alloys
C. von Schnakenburg, P. Wuebbolt, A. Poppe, C. Fink, G. Hausdorf, M. Peuster (Göettingen, DE)

11:00 **83** Outcome of modified technique of stent fenestration of the atrial septum
O. Stumper, M. Gewillig, B. Nagel, J. Vettukattil, M. Chessa, J.G.C. Wright (Birmingham, UK)

11:10 **84** Biodegradable septal occluder: early experimental results
H. Bertram, C. Jux, M. Peuster, P. Wohlsein, M. Brgmann, T. Paul, G. Hausdorf (Hannover, DE)

11:20 **85** Perventricular closure of muscular and perimembranous ventricular septal defects without cardiopulmonary bypass: application in animals and humans
D.A. Danford, J.M. Berry, J. Foker, J.L. Bass (Omaha, USA)

11:30 **86** Transcatheter closure of perimembranous ventricular septal defects with the Amplatzer asymmetric ventricular septal defect occluder: preliminary experience in children
G.S. Tsaousis, J. Bass, N.G. Eleftherakis, E. Karanasios, E. Dragogia, B.D. Thanopoulos (Athens, GR)

11:40 **87** Is there a risk of thrombus formation on ASD and PFO closure devices?
U. Krumsdorf, S. Ostermayer, K. Billinger, T. Trepels, E. Zadan, K. Horvath, H. Sievert (Frankfurt, DE)

11:50 **88** Animal study of a reexpandable "growth stent" for the treatment of vessel stenosis in infants and small children.
P. Ewert, E. Riesenkampff, M. Neuss, O. Kretschmar, H. Abdul-Khaliq, N. Nagdyman, P.E. Lange (Berlin, DE)

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