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Compiled & Edited by:
Adrian Chester
Secretary/Treasurer
Karen Durham
Administrative Assistant

Dear Friends and Colleagues,

You are invited to attend the 5th Biennial Meeting of The Society for Heart Valve Disease to be held in Berlin, Germany between the 27th and 30th June 2009. For the first time this will be a joint meeting with the Heart Valve Society of America which represents the global effort to understand and treat valve disease and also to join forces and to provide education around the world. This meeting will provide an opportunity for presentation and discussion of work at the leading edge of this expanding and multi-disciplined field. Experiences can be shared with a worldwide audience on the topics ranging from basic science and developmental biology to the clinical treatment of valve disease and updates on the latest clinical trials. There will be a specific focus on percutaneous heart valve surgery, epidemiology, rheumatic heart disease, functional mitral regurgitation, anticoagulation, mechanical, bioprosthetic, biological valve substitutes and tissue engineering. The multi-disciplinary character of the Societies will create a unique forum and opportunity for a broad exchange of ideas relating to heart valve disease. In addition, we are looking forward to strengthening the bonds between the Societies – the city of Berlin will be an ideal venue for this exciting occasion.



Friedrich Mohr
President—SHVD



Jeffrey Borer
President—HVSA



Adrian Chester
Secretary/Treasurer

Membership renewals for 2009 will be sent out later in the year and remain at \$100 per year, \$50 for Associates. If you have 2008 fees remaining to be paid, please submit by return in order to avoid your membership lapsing.

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... from the Newsletter Editor

Well, it has taken longer than we had hoped before producing this Newsletter number 3!

However, in the meantime you will see we have made real headway in organising our 2009 meeting in Berlin. Information on the meeting, as well as details of the venue and, as from 1st October, abstract submission, can now be accessed on our website.

While talking about the website, we hope you have all had the opportunity of visiting our new and improved site on which we are maintaining an up-to-date contact list for all members. Information is added and updated regularly and we are happy to add news and details of meetings of interest on behalf of members.

This issue of the newsletter includes contributions written by members on their area of interest. If you have a subject that you feel would be appropriate for inclusion in one of the newsletters please do not hesitate to contact us.

Looking forward to hearing from you –

Adrian

New Members

We are delighted to introduce the following new members to the Society ...

Krzysztof Bartus, Jagiellonian University, Krakow
Miroslava Benesova, Homolka Hospital, Prague
Charles Canver, King Faisal Hospital, Riyadh
Marek Cisowski, Medical University Silesia, Katowice
Robert W Emery, St Joseph's Hospital, St Paul
Michael J Flynn, Cleveland Clinic, Cleveland
Marion Gaspar, Timosoara Institute of Cardiovascular Medicine
Boguslaw Gaweda, John Paul II Hospital, Krakow
Richard I Han, University of Edinburgh, Roslin
Luminita Iliuth, Institute for Cardiovascular Diseases, Bucharest
Neil Ingels, Stanford University, Palo Alto
Andrei Iosifescu, Institute for Cardiovascular Diseases, Bucharest
Marek Jemielity, Medical University, Poznan
Vit Jirasek, NA Homolce Hospital, Prague
Filip Calin Jusca, Timosoara Institute for Cardiovascular Diseases
Toshinobu Kazui, Memorial Heart Center, Iwate Medical University
Janusz Konstanty, John Paul II Hospital, Krakow
Lenka LeHocka, PJ Safarik Medical School, Kosice

Jan Luczy, Vusich AS, Kosice
Jan Marounek, NA Homolce Hospital, Prague
W David Merryman, University of Alabama, Birmingham
Horatiu Moldovan, Institute for Cardiovascular Diseases, Bucharest
Wlodzimierz Morawski, Medical University of Silesia, Katowice
Elena-Simona Moruzi, Iasi Institute of Cardiology
Marin Ostric, Clinical Hospital Centre, Rijeka, Selce
Marek Pelczar, Cardiosurgery Clinic, Wroclaw
Saulius Raugelis, Vilnius Univ Heart Surgery Center
Jan Rosocha, PJ Safarik Medical School, Kosice
Igor Saftio, Clinical Hospital Center, Rijeka, Selce
Kevin Schembri, St Lukes Hospital, Qawra, Malta
Katja Schenke-Layland, UCLA, Los Angeles
Vyfautas Sirvydis, Vilnius Univ Heart Surgery Center
Zdenek Slavik, Royal Brompton Hospital, London
Lubomir Spassou, Lozenetz Hospital, Sofia
Guiseppe Speciale, Villa Azzura Hospital, Rapallo
Piotr Stepinski, Medinet, Wroclaw
Shibata Toshihiko, Osaka City General Hospital
Tomasz Urbanowicz, Medical University, Poznan
Jan Voja'cek, University Hospital, Hradec Kralove
Karol Wierzbicki, Jagiellonian University, Krakow

Introduction from Robert W Emery —New Editor of The Journal of Heart Valve Disease

Friends and Colleagues,
Beginning on the 1st of March, 2008 I assumed the mantle of Editor in Chief of the Journal of Heart Valve Disease, the official journal of the Society for Heart Valve Disease. Taking over this position from the honored Editor Emeritus, Dr. Endre Bodnar, is a privilege that I approach with some trepidation. Dr. Bodnar, through hard work and persistence, has positioned the Journal for Heart Valve Disease as one of the world's premier journals dealing with the cardiovascular system. Maintaining the quality and integrity of this Journal, is of course, job one.

In the coming decade, significant advances in the diagnosis and therapy of valvular heart disease will be made. The template is present and transitional research will be accomplished. This significant foray into the arena of heart valve disease will be to the next decade what heart transplantation was to the 1980's, minimally

invasive to the 1990's, and atrial fibrillation to the first decade of the new millennium. The Journal of Heart Valve Disease is ideally positioned to be the major organ of communication for this revolution. Not only does the Journal have a significant international flavor, but its contents are undiluted with other aspects of cardiology and cardiovascular surgery such as congestive heart failure, transplantation, or coronary artery disease to name a few. The concentrated efforts of this Journal will allow the audience to have important up-to-date, rapidly published manuscripts that will keep them abreast of exciting advances.

I hope to include over the next several years a greater number of editorial comments, invited commentaries, and invited technological review articles. If these are precisely placed, they will continually update the reader to advances in the field of valvular heart disease.

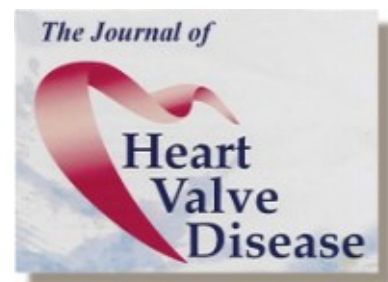
The challenges are both exciting and formidable and I would look very much forward to the officers and members of the Society for their contributions and efforts to enhance the standing and reputation of the Journal of Heart Valve Disease.

Robert W Emery
Editor – The Journal of
Heart Valve Disease



Robert W Emery
Editor
Journal of Heart Valve
Disease

"The Journal of Heart Valve Disease is ideally positioned to be the major organ of communication for this revolution."



**5th Biennial Meeting of The Society for Heart Valve Disease
Joint Meeting with the Heart Valve Society of America**

Ritz Carlton Hotel, Berlin—27th to 30th June 2009

Abstract Submission now open at www.shvd.org

Categories:-

Valve Biology

Developmental Biology

Tissue Engineering

Epidemiology

Inflammatory Heart Disease

Valve Repair

Functional Mitral Regurgitation

Timing of Intervention

Percutaneous Valve Surgery

Devices

Late Breaking Trials

Innovative Technological Developments & Engineering

Imaging

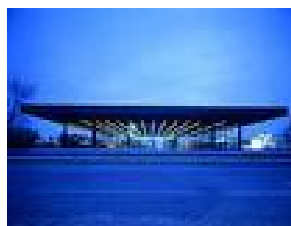
Anti-thrombotic Therapy in Heart Valve Disease

Submission System closes 31st January 2009

**ABSTRACT
SUBMISSION
NOW OPEN**

The venue for our next meeting is the luxurious Ritz Carlton, ideally situated in the prestigious Potsdamer Platz and very convenient for sightseeing, whether historic (Brandenburg Gate is a mere 500 metres away) or contemporary (the New National Gallery designed by Mies van der Rohe with its collection of 20th Century European painting & sculpture is just as close).

**Registration and
accommodation links will
be added shortly**



The German-Dutch Ross Registry

In June 1994 the first data were entered to an initially local database of patients undergoing the Ross procedure at the Department of Cardiac Surgery of the University of Luebeck. Beside the International Ross Registry of Dr. Oury, this database was set up to collect the clinical and echo data especially for patients undergoing the Ross procedure in the sub-coronary technique, which is the predominant technique performed at our institution. However, during the following years eight other centers joined the database and, in November 2002, the German Ross Registry was initiated. Besides the University of Luebeck, participating centers are: Dept. of Paediatric Cardiac Surgery, University Heart Center, Hamburg; Department of Thoracic and Cardiovascular Surgery, Johann Wolfgang Goethe University Frankfurt; Dept. of Cardiac Surgery, Sana Heart Center, Stuttgart; Department of Thoracic- and Cardiovascular Surgery, University Hospital Tuebingen; Heart Center Bodensee, Konstanz; German Heart Center Berlin, Dept. of Cardiothoracic Surgery, Friedrich Schiller University, Jena; and German Heart Center Munich.

To evaluate the outcome of the Ross procedure with standard techniques of aortic valve replacement, a randomized prospective trial comparing aortic valve replacement either with artificial valve substitutes or an autograft would be desirable. However, it would need a large number of patients to reveal significant results in some aspects of the postoperative outcome and it may be problematic from an ethical point of view to enter patients to this trial. Therefore, it is thought that a registry where different centers enter their data following a strict protocol may be the best way to follow these surgical techniques and compare it to others.

Each patient entering the registry undergoes a clinical and echocardiographic evaluation at 6 and 12 months postoperatively and thereafter annually. Besides standard demographic data of the patient such as age, gender, medical history, heart and valve pathology, intra- and early postoperative data are documented. These include the usual information as bypass- and cross-clamp time as well as detailed data of the procedure performed, like additional surgical procedures (i.e. coronary artery bypass grafting, Maze, additional valve reconstruction, etc.) and the detailed implantation technique of the auto-

and homograft with statements of aortic root tailoring or enlargement techniques. Details of the homograft further include donor's age and gender, the preservation technique used, as well as the quality of the homograft.

Postoperatively, patients are questioned with regard to their clinical status, medication, hospital admissions and their ability to work. Autograft- and homograft performance is evaluated by transthoracic echocardiography. To achieve optimal patient compliance external data from referring cardiologists are also accepted, when they answer the relevant questions, especially with regard to autograft and homograft function. Up to November 2006, data of 1014 patients from nine German heart centers were analysed using the standards named above.

In Germany the total number of Ross procedures performed per year varied between 270 and 300 over the last four years. Of the 1014 patients who entered the registry until 2006, 77.5% were male. More than three thirds (77%) had a left ventricular ejection fraction (LV-EF) greater than 49% and only 0.4% a LV-EF less than 26%. Most of the aortic valves operated on were bicuspid (69.9%) with aortic stenosis as the predominant hemodynamics.

Completeness of follow-up was 99.5% for clinical and 94% for echocardiographic data. Hospital mortality (30 day mortality) was 0.8%. Three patients had to undergo reoperation due to autograft failure within this time. At last follow-up, 76.3% of the patients were NYHA class I.

Using a hierarchical multilevel analysis, the increase of autograft regurgitation over time was 0.034 grades per year. Using the same model homograft regurgitation increased with 0.031 grades per year, resulting in a reoperation rate of 0.5% for homograft regurgitation. On the other hand, development of homograft stenosis seems to be of a major concern in these patients. However, 79.5% of all patients investigated had a gradient less than 11mmHg on the right ventricular outflow tract, resulting in a reoperation rate of 2.3% (23 patients) due to homograft stenosis. Interestingly, the development of homograft stenosis seems to occur within the first 18 months and remains stable thereafter. 16 patients (1.6%) developed homograft

endocarditis. Of these, four patients had to undergo reoperation.

Overall, the probability of survival following the Ross procedure in this series was similar to the normal survival rate in Germany in an age and gender matched population.

In 2007 the data from the German Ross Registry were merged with the data of the Erasmus Medical Center in Rotterdam, resulting in a total number of 1369 procedures enrolled at the 8th of June 2007, with a completeness of follow-up of 96.7%, a mean follow-up of 3.8+/- 2.4 years and a total of 2221 patient years.

The German Ross Registry and, since 2007, the German-Dutch Ross Registry is a valuable database for the follow-up of patients after the Ross operation. Besides enrolling more patients to this database, it seems to be of much greater importance to follow-up the patients who already entered the registry on a regular base. The next years, beyond the 10 years follow-up period, will be of major interest to obtain more information about the long term performance of the auto- and homograft in patients undergoing the Ross procedure.

**Martin Misfeld,
Hans-H Sievers &
Ulrich Stierle
Department of Cardiac and
Thoracic Vascular Surgery,
University of Luebeck, Ger-
many**

**... a total number of 1369
procedures enrolled ... with a
completeness of follow-up of
96.7%, a mean follow-up of
3.8+/- 2.4 years and a total
of 2221 patient years.**



Professor Jan Navratil

- J Spatenka (Prague)
- P Nemeč (Brno)
- J Dominik (Hradec Kralove)



fig 2:
Heart Lung Machine

50 Years of Open Heart Surgery in the Czech Republic & Middle Europe

On 5th February 1958 Professor Jan Navratil (1909 – 1992) performed his first successful intracardiac repair (ASD closure under direct vision) with the use of the heart – lung machine in Brno. It was less than 5 years after John Heysham Gibbon had performed the same operation on 6th May 1953 in Philadelphia.

This operation of Professor Navratil was not an accidental success. It reflected the systematic efforts of catching the

The first heart valve was replaced in the country on 19th November 1963. The stenotic mitral valve was successfully replaced by the mechanical valve worked up in the local experimental laboratory in Brno.

Exceptionality of Professor Navratil should be

cardiac surgical progress in Europe. It could be documented by priorities in “closed heart surgery” which enabled the further progress in the field.

As early as in 1947 Professor Jan Bedrna (Hradec Králové) closed the patent ductus arteriosus, and the same surgeon started with closed mitral commissurotomies in 1951. According to the statistics of former Czechoslovakia, in 1954 as many as 396 mitral commissurotomies were referred on the

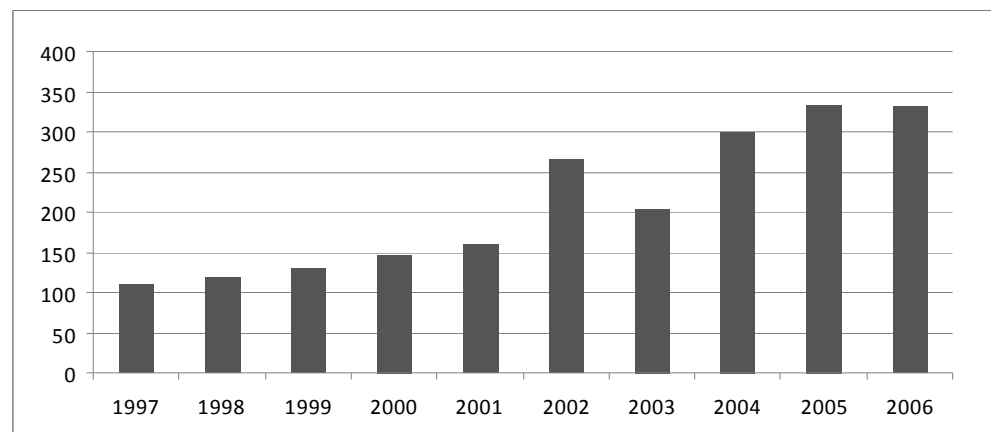
documented by another success of his professional career. In 1967 he was appointed the head of the 2nd Surgical Department of the Vienna General Hospital and up to the end of his life he held the post of Director of Boltzmann Institute of Cardiology, Vienna, Austria.

Cardiac Surgical Conference in Prague.

Professor Jan Navratil himself undoubtedly belonged to pioneers of cardiac surgery in the Middle Europe. Interesting was the fact that first seven operations (four patients survived long-term) were performed on the heart – lung machine of local origin (fig. 2), before the modified Gibbon’s device became available in former Eastern Europe.

It was the history, but even now the Czech Republic belongs to countries with high accessibility of advanced cardiology & cardiac surgery. From the point of view of SHVD the numbers of heart valve surgical statistics could be interesting – Fig. 3.

Fig 3: Heart valve surgery in the Czech Republic (10 million inhabitants) - numbers pmp



**Reminiscences of the East European Heart Valve Postgraduate Course with “Hands On” Workshop
“Cardiovascular Tissue Banking”
26th & 27th September 2007, České Budejovice Ceske Budejovice, Czech Republic**

In September 2007 the East European Heart Valve Postgraduate Course was organised under the auspices of The Society for Heart Valve Disease (SHVD) & European Association of Tissue Banks (EATB) in České Budejovice, Czech Republic. In addition important support was provided by local scientific organisations (Czech Society of Cardiovascular Surgery and Czech Society of Cardiology).

The aim of the Course was to organise a top quality postgraduate event at a reasonable price in order to enable East European participants to attend.

A high quality teleconference (5 live transmissions of aortic & mitral surgery) was presented, together with interesting invited speeches.

Our Course Director **Professor Sir Magdi Yacoub** assembled an International Faculty of 14 experts. Unfortunately Professor Alain Carpentier was not able to attend but was efficiently replaced by Professor Gilles Dreyfus of Royal Brompton & Harefield Hospitals, London, UK.

The Course was very successful thanks to the help of SHVD members Dr Johanna Takkenberg (Rotterdam), Dr Adrian Chester (London), Dr William Northrup, III (Lincoln, Nebraska) and Professor Vytautas SIRVIDIS (Vilnius). In addition, the personal contribution of cardiologists Dr Alain Berrebi from Paris and Dr Zdenek Slavik (London / Prague) is acknowledged with thanks.

The satellite event “Hands On” **Workshop “Cardiovascular Tissue Banking”** (under the auspices of EATB) was another highlight of the event. The basic information was offered to those who were interested in that particular issue. The experience of EATB (European Association of Tissue Banks) members Professor Jan Koller from Bratislava and Dr Ramadan Jashari from Brussels guaranteed the top level of the session.

The 190 registered participants were made up of 160 medical doctors, 15 exhibitors, 4 nurses, 2 transplant coordinators, two medical students and one

technician and came from 16 countries.

Of the 62% of participants who completed the evaluation forms the response was very positive. Most were satisfied with the program (choice of patients, surgery itself, as well as with invited speakers presentations) and also with the venue, technical quality of telebridge and presentations, and time available. We are pleased to say most respondents recommended repeating the event, if possible! Our Workshop can be considered as positive or highly positive from the 76% who responded with completed evaluation forms.

In conclusion the aim of the course was fulfilled. The organisers were able to attract many Middle & East European colleagues to attend. Event quality was considered as high level by most participants. SHVD was introduced to participants, and 35 of them applied for SHVD Membership. The cooperation between SHVD & EATB was launched, and our opinion is that it could be fruitful to establish regular contacts for cardiovascular tissue bankers and mutual participation in scientific and meeting activities.

In September of last year a Postgraduate Course was held in Ceske Budejovice in the Czech Republic. We are pleased to be able to publish the following review by its organisers Jaroslav Spatenka and Ales Mokracek.

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 President Elect - Robert O Bonow
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Stentless bioprostheses, Ross Procedure &

Homografts

Tirone David

Thrombosis, Embolism & Bleeding

Dieter Horstkotte

Tissue Bio-mechanics

Ivan Vesely

Tissue Engineering & Molecular Biology

Magdi H Yacoub

A major review of our Working Groups is currently taking place.

We intend to hold individual Working Group meetings during the Berlin Meeting at which time delegates with a specific interest in any of the revised Working Groups will be invited to take part in the meeting.

Forthcoming Valve Meetings Worldwide

6th Triennial Brigham Cardiac Valve Symposium

23 – 24th October 2008

Boston, MA, United States

<http://www.brighamandwomens.org/cardiacsurgery/events.aspx>

Cardiac Master Classes 2008 – Minimally Invasive Cardiac Surgery: Mitral Valve and Atrial Fibrillation

23rd – 24th October 2008

East Carolina Heart Institute

<http://www.cardiacmasterclasses.com/>

Valve Technology Symposium – Day One: Transcatheter Aortic & Aortic Valve Intervention.

Day Two: Mitral Valve, Atrial Fibrillation & Ventricular Disease

22nd – 23rd January 2009

London, United Kingdom

<http://www.valvetechnology-sgh.co.uk>

Florida Valve 2009 – “Valvular Heart Disease for the Surgeon and Cardiologist: New Strategies that Unify Practice”

27th February – 1st March 2009

St Petersburg, FL, United States

<http://www.floridavalvesymposium.com>

Functional Ischaemic Mitral Regurgitation (FIMR)

3rd April 2009

National Heart & Lung Institute, London, UK

http://www1.imperial.ac.uk/medicine/about/conferences/nhli_events/

The 1st Meeting – Minimally Invasive Cardiac Surgery

17th – 18th April 2009

Bari, Italy

<http://www.minimally.it>

Advance Cardiac Techniques in Surgery – The Seventh in the Series – Surgical & Interventional Therapies for Heart Valve Diseases, Left Ventricular Failure, Aortic Arch Aneurysms & Atrial Fibrillation

6th – 7th May 2009

New York, NY, United States

<http://www.promedicacme.com/>

