

Working Groups

Newsletter of the Working Group on Myocardial Function - May 2000 -

Dear colleagues :

- Please find enclosed brief reports of three recent meetings that were held under the auspices of our Working Group.

International Symposium "Cardiac Interventions 2000: From Physiology to Clinical Practice",

Interlaken, January 13-16, 2000, organized by Otto Hess

The traditional Winter Meeting of our Working Group has been changed in format and location from Lenzerheide to Interlaken. This change has become necessary because our previous sponsor (Bayer Company) was not able to support our meeting any more. Otto Hess and Bernhard Meier from Inselspital Bern organized an international meeting on "Coronary Interventions" in collaboration with the national working groups. Two sessions were dedicated to "Coronary Hemodynamics" and "LV Remodeling" which were organized by the Working Group on Myocardial Function. The role of intracoronary flow and pressure measurements in the assessment of the functional significance of coronary lesions was discussed by different experts in the field. Specifically, the fractional flow reserve and its clinical impact were treated as well as the role of coronary collateral perfusion in ischemia and myocardial infarction. In the second symposium the role of growth factors and cytokines in the pathogenesis of heart failure was discussed. Further, the role of diastolic dysfunction in the elderly population and new horizons in the medical treatment of heart failure were presented. In evening seminars several cases were presented by members of the working group.

The social program included a dinner in a typical farmhouse of the Bernese Oberland and watching of the Lauberhorn Downhill Race. Overall, the meeting was a great success and the organizers plan to repeat this event in 2-years time at the same location and same time.

International Workshop "Diastolic Heart Failure",

Verona, February 19, 2000, organized by Paolo Marino

Another winter meeting took place in Verona around the topic of "Diastolic Heart Failure". Sixty clinical cardiologists, besides the faculty, attended the workshop devoted to this very timely topic.

The meeting started on the evening of February 18, with a welcome dinner at an old taverna located within minutes from the hotel chosen as the venue of the meeting, which in its own right has a very convenient location in downtown Verona.

The workshop started the following day at 9.00, and was structured in 3 sessions. There was a mixture of senior and younger investigators, with discussion time set as 1/3 of the time devoted to presentation time. All the presentations were enriched by productive, lively, interactive, even aggressive discussions. The first session dealt with basic filling dynamics in normal and disease states, spanning over the broad range of the contribution of diastolic dysfunction to exercise intolerance, the importance of ventricular interaction and finally the modulation of left atrial function by diastolic dysfunction. The second session was organized as a point-counterpoint session, devoted to the methodological problems inherent to the assessment of ventricular relaxation and to the clinically very relevant topic of the comparison between the Doppler unloading technique vs the hemodynamic stress testing approach in the prognostic assessment of heart failure patients. The morning was concluded by a final talk devoted to the color-flow propagation technique and its role as a noninvasive approach for the assessment of diastolic function and dysfunction.

The afternoon session started with an overview on the role of the strain-rate imaging technique as a brand-new noninvasive view to regional diastolic function. The workshop continued with a talk focussed on the contribution of LV hypertrophy to the clinical syndrome of diastolic heart failure and to the role of cytokines and NO synthases in the ventricular filling process. Finally the problem of treatment of diastolic heart failure was addressed, with talks devoted to medical and instrumental (pacing) therapies for the disease. The meeting ended at 16.30.

After the meeting, in the second part of the afternoon, there was a guided visit to the complex of Castelvecchio, within walking distance from the hotel, home to the Scaligeri, the signori of Verona in the Middle Ages. The complex, which is interesting in its own right from an architectural point of view, both for the articulated building itself and the renovation project it underwent in the sixties, houses a remarkable collection of paintings and statues, some of which testify the role Verona played in the progression of Gothic taste from Northern to Southern Europe.

Dinner was in the centre of the old town, where the ancient Roman forum used to be. For speakers leaving later in the day on Sunday, in the morning there was a guided visit to the archeological complex of the Roman theatre, by the river Adige, and to the little museum which is attached. From there a walk lead the party to a domus romana nearby, which has been recently opened and which can be visited by small groups of people.

Workshop on "Current Concepts and Methods in Cardiovascular Research", Hannover/Großburgwedel, March 3-5, 2000, organized by Bernhard Schieffer

This workshop was the first workshop organized from the Division of Molecular Cardiology of the Department of Cardiology, Medizinische Hochschule Hannover (Chair: H. Drexler). This workshop was initiated in 1999 by members of the Working Group on Myocardial Function of the European Society of Cardiology e. g. Prof. G. Heusch, Essen, Prof. Piper, Gießen, Germany and Prof. M. Schaub, Zurich in order to bring cardiovascular researchers early in their career together to exchange/share and discuss their concepts and methods with senior researchers in the rapidly growing field of cardiovascular research. With respect to new molecular methods which will be introduced in the near future (DNA-Array and functional genomics), the speakers were selected and invited. The workshop began with a key-stone lecture from Axel Ullrich, Max-Planck Institut of Biochemistry Munich. Dr. Ullrich demonstrated brilliantly the importance of reversible phosphorylation events in various diseases and presented new results on non-peptide kinase inhibitors. This lecture was followed by an extensive discussion about the importance of kinases and phosphatases in chronic cardiovascular diseases and lasted up to midnight. The next-days program focused on Cardiogenesis in-vitro and myocyte differentiation in the morning sessions, discussed by Markus Schaub, Zurich and Anna Wobus, Gattersleben who presented impressive results about the role of cytokines and growth hormones on cardiomyocytes structure and development. Later on genomic analysis of various cardiovascular diseases, such as the long-QT-Syndrome, hypertension and atherosclerosis was discussed by H. Schunkert, Regensburg, H. Wedekind, Munster and M. Stoll, Milwaukee.

All speakers discussed intensively the frustrating results of retrospective genomic analysis, e.g. gene polymorphisms which were performed in the past. The speakers explained that this latter is due to the heterogeneity of the study-populations. In parallel to oral presentations, a poster presentation was held, in which all participants had the opportunity to present their latest results. A more clinical aspect of cardiovascular research and leading edge techniques of interventional rhythmology was presented by J. Tebbenjohanns, Hannover. In the evening and sunday morning sessions, J. Stamler, St. Rose-John, M. Kockx and B. Staels discussed the role of oxidative stress, apoptosis and redox sensitive gene expression for the development of atherosclerosis and endothelial dysfunction. For all participants from a variety of research fields, this informal and innovative workshop was a great success, and it is planned to repeat this kind of meeting in a bi-annual circuit. At the end on sunday afternoon, the poster-prices were given to Mark Brede, Univ. Würzburg, Ms. Aartsen, Univ. Maastricht and J. Sunkomat, Hannover. At the end of this workshop many participants expressed their will for a closer pan-european collaboration in the field of beneficial among young researchers.

- The results of a joint initiative of our Working Group and that on Coronary Circulation on "Alpha-Adrenergic Coronary Vasoconstriction and Myocardial Ischemia in Humans" were published as a "From Bench to Bedside" article in *Circulation* (101, 2000, 689-694).

- ▶ At the upcoming annual ESC meeting in Amsterdam my term as chairman will end. The current co-chairman Paolo Marino/Verona is, following our traditions, the candidate for chairman. The nucleus has unanimously voted per ballot to nominate Otto Smiseth/Oslo as the candidate for co-chairman. Formal elections will be held during our Working Group meeting on Sunday, August 27. I will send the detailed agenda of this meeting in due time.

With my best regards

Prof. Dr. med. Gerd Heusch, FESC
Chairman of Working Group on Myocardial Function