
The Vascular Endothelium

Basic and Clinical Aspects
Third International Congress
Pisa (Italy) , October 2-3, 2000

Palazzo dei Congressi
Via Matteotti, 1

October 2

Auditorium

- 08.30 **Opening ceremony**
Introduction
C. Mittermayer (Aachen)

Endothelium and fluid dynamics

- Chairpersons: **M.W. Collins** (London, UK)
F.M. Montecvecchi (Milan, I)
- 09.00 **T.M. Griffith** (Cardiff, UK)
Internal endothelial processes
- 09.15 **A. Remuzzi** (Bergamo, I)
Fluidynamic implications on endothelial cells
- 09.30 **W. Wang** (London, UK)
External endothelial processes
The role of endothelial glycocalyx on the interaction between flow and vascular endothelium
- 09.45 **V. Coscia, M. Padula** (Ferrara, I), **G. Pontrelli** (Rome, I), **M.W. Collins** (London, UK)
A nonlinear mathematical model for the dynamics of the saccular aneurysm
- 09.55 **M.A. Atherton, D.J. Doorly, M.W. Collins** (London, UK)
A new approach to planning in vitro and in vivo experiments for cardiovascular stents (1) Fundamental of design procedures
- 10.05 **M.A. Atherton, D.J. Doorly, M.W. Collins, U. Sigwart** (London, UK)
A new approach to planning in vitro and in vivo experiments for cardiovascular stents (2) Planning of experiments
- 10.15 Discussion

Endothelium, biomaterials and bioengineering

- Chairpersons: **H. Richter** (Aachen, D)
D. De Rossi (Pisa, I)
- 10.25 **S. Mantero, F.M. Montecvecchi** (Milan, I)
Biomaterial endothelization

- 10.40 **F.M. Montevecchi, S. Mantero**(Milan, I)
Protein absorption on to biomaterial promote cell adhesion
- 10.50 **V. Charulatha, H. Richter, S. Handt** (Aachen, D)
Evaluation of the in vitro blood compatibility of polymeric biomaterials
- 11.00 **H.C. Lüdtke-Handjery, M. Wenzel, H. Richter, C. Mittermayer** (Aachen, D)
Scaffold - a possibility for the fixation of implants; influence of structure and surface on the 3D-growth of cells
- 11.15 **P. Chiarelli, G. Di Santi, A. D'Arcangelo** (Pisa, I)
Antibiotics delivery by means of poly-vinyl-alcohol matrix
- 11.25 **J.M. Schierholz** (Bonn, D), **J. Beuth** (Cologne, D)
Immunology and implant-healing. Developing new antiinfectious materials
- 11.35 Discussion

Endothelium dependent hyperpolarization

- Chairpersons: **P.M. Vanhoutte** (courbevoie, F)
T. M. Griffith (Cardiff, UK)
- 11.45 **P.M. Vanhoutte** (Courbevoie, F)
Overview: The other relaxing factor(s)
- 12.10 **M. Félétou, P.M. Vanhoutte** (Courbevoie, F)
Prostacyclin and EDHF
- 12.30 **A.H. Weston** (Manchester, UK)
The role of potassium channels and potassium ions in EDHF-induced hyperpolarizations
- 12.50 **T.M. Griffith** (Cardiff, UK)
Gap junctional communication and endothelium-dependent hyperpolarization
- 13.10 **R. Busse** (Frankfurt, D)
EDHF and vascular homeostasis
- 13.30 **P.M. Vanhoutte** (Courbevoie, F)
Conclusion
Discussion
Lunch

Endothelium-dependent contractions

- Chairpersons: **P.M. Vanhoutte** (Courbevoie, F)
Z.S. Katusic (Rochester, USA)
- 14.40 **P.M. Vanhoutte** (Courbevoie, F)
Overview
- 15.05 **Z.S. Katusic** (Rochester, USA)
Superoxide Anions
- 15.25 **S. Taddei** (Pisa, I)
Endothelium-dependent contractions: Cyclooxygenase
- 15.45 **P.M. Vanhoutte** (Courbevoie, F)

Conclusion

Discussion

Endothelium basic studies

Session I

Chairpersons: **R. Giardino** (Bologna, I)

R. Strom (Rome, I)

16.00 **A.M. Müller, K.M. Müller** (Bochum, D), **C. Cronen, C.J. Kirkpatrick** (Mainz, D)

Comparison of endothelial cells in a monolayer and an organ-culture-model

16.10 **V. Lubrano, C. Vassalle, C. Blandizzi, M. Del Tacca, A. L'Abbate** (Pisa, I)

Effect of oxidized-low density lipoproteins on nitric oxide production from human endothelial cells

16.15 **M. Scavuzzo, F. Ambrogi** (Pisa, I)

Modulation of Leucocyte-Endothelium interaction by Cyclosporin A

16.25 **P. Romagnani, F. Annunziato, L. Lasagni, E. Lazzeri, C. Beltrame, M. Francalanci, L. Cosmi, L. Maurenzig, G. Galli, E. Maggi, S. Romagnani, M. Serio** (Florence, I), **M. Uguccioni, M. Baggiolini** (Bern, CH)

CXC chemokine receptor 3 (CXCR)3 is expressed by human microvascular endothelial cells in the S/G2-M phase of the cell cycle and mediates angiostatic activity

16.35 **R. Strom, P. Cardelli, A. Fiori** (Rome, I)

Characterization of the permeation and transport system of brain microvessels

16.45 **M. Rocca, G. Giavaresi, M. Fini, R. Giardino** (Bologna, I)

Experimental approach in skeletal muscle ischaemia-reperfusion injury

16.55 **A. Perna, G. Tarro, F. Perna, C. Esposito** (Naples, I)

Immunohistochemical evaluation of endothelial damage by angiogenicity

Discussion

Endothelium basic studies

Session II

Chairpersons: **G. Remuzzi** (Bergamo, I)

A.P. Davenport (Cambridge, UK)

17.15 **D. Giannessi, S. Del Ry, A. Biagini** (Pisa e Massa, I)

Endothelin receptors in human heart

17.25 **A.P. Davenport** (Cambridge, UK)

Endothelin pathways and human cardiovascular disease

17.40 **H. Jin, R. Yang, H. Lu, A.K. Ogasawara, W. Li, A. Ryan, F. Peale, N.F. Paoni** (San Francisco, USA)

How to mend a broken heart: beneficial effects of growth hormone treatment following acute myocardial infarction

17.50 **G. Remuzzi** (Bergamo, I)

Pathophysiology of thrombotic microangiopathies

18.05 Discussion

19.00 Welcome address of local Authorities.
Welcome party (Town Hall, Sala delle Baleari)

October 3

Endothelium: clinical studies

Chairpersons: **C. Mittermayer** (Aachen, D)
A. Sagripanti (Pisa, I)

- 08.30 **A. Vittoria, G.L. Messa, A. Benocci, M. Belluardo, G. Pantone, G. Giorgi, A.I. Fiaschi, M. Artusa, P. Borgogni, A. Auteri** (Siena, I)
Behaviour of nitric oxide (NO) during exercise in hypertensive patients
- 08.40 **G.L. Messa, A. Vittoria, M. Belluardo, G. Pantone, A. Benocci, A. Ghezzi, M. Artusa, P. Borgogni, A. Auteri** (Siena, I)
Tissue plasminogen activator (T-PA) and plasminogen activator inhibitor (PAI-1) before and after physical exercise in essential hypertension
- 08.45 **A. Cupisti, M. Rossi, S. Placidi, R. Caprioli, E. Morelli, G. Manca Rizza, S. Paoletti, G. Barsotti** (Pisa, I)
Endothelium-dependent and endothelium-independent vasodilation in the skin of chronic uremics patients
- 08.50 **S. Mariani, F. Fagnani, L. Rossi, A. Lucchetti, D. Calci, G. Grandi, E. Boldrini, O. Giampietro, E. Matteucci** (Pisa, I)
Plasma homocysteine in families of type 1 diabetic patients
- 08.55 **S. Mazzuca, R. Cimino, D. Ferrari, G. Muccari, R. Giovinazzo, D. Galasso** (Catanzaro, I)
Underuse of statins in type 2 diabetic patients with hyperlipemia
- 09.00 **E. Matteucci, S. Quilici, V. Cinapri, G. Forotti, D. Calvi, O. Giampietro** (Pisa, I)
Oxidative stress in families of type 1 diabetics
- 09.10 Discussion
- 09.15 **S. Mazzuca, R. Cimino, D. Ferrari, G. Muccari, F. Talarico, D. Galasso** (Catanzaro, I)
Laser doppler of skin blood flow in limited and diffuse systemic sclerosis
- 09.20 **G. Ruotolo, S. Mazzuca, S. Giancotti, F. Talarico, P. Gareri, D. Galasso** (Catanzaro, I)
Role of videocapillaroscopy in chronic autoimmune thyroiditis
- 09.25 **G. Muccari, S. Mazzuca, R. Cimino, D. Ferrari, F. Talarico, D. Galasso** (Catanzaro, I)
Primary heart disease in a patients with crest syndrome
- 09.30 **G. Ruotolo, P. Gareri, G. Clericò, F. Talarico, S. Giancotti, D. Galasso** (Catanzaro, I)
Relationship between cognitive status and vascular risk factors
- 09.35 **R. Cimino, S. Mazzuca, D. Ferrari, V. Celia, G. Muccari, D. Galasso** (Catanzaro, I)

Intravenous iloprost in the treatment of critical lower limbs ischemia (CLI)

Discussion

Endothelium and haemostatic system

Chairpersons: **C. Mittermayer** (Aachen, D)

N. Nardi (Pisa, I)

- 09.45 **A. Ferretti, A. Guastini, M. Duminuco** (Pistoia, I)
Reduction of platelet activity markers after an oral methionine load in normal healthy adults
- 09.50 **B. Fattori, A. Nacci, A. Casani, C. Donati, A. Carpi, A. Sagripanti** (Pisa, I)
Relevance of plasma D-dimer measurement in patients with acute peripheral vertigo
- 09.55 **A. Sagripanti, L.M. Sarteschi, R. Toscano, L. Evangelisti, A. Reali, M. Calonaci, S. Puccetti, A. Carpi, R. Giordani, F. Ambrogi** (Pisa, I)
A comprehensive study of coagulation and fibrinolytic system parameters in patients with atherothrombotic disorders
- 10.05 **A. Sagripanti, S. Murri, L. Evangelisti, A. Carpi, R. Giordani, M. Nardi** (Pisa, I)
Haemostatic abnormalities in patients with retinal vein occlusion
- 10.15 **M. Mosti, F. Veschi, S. Orsucci, G. Tognetti** (Massa, I), **A. Carpi, A. Sagripanti** (Pisa, I)
D-dimer testing for the exclusion of Venous Thromboembolism: a comparative study of four assays
- 10.20 **A. Murinello, F. Pinto, A. Agapito, A. Gonçalves, C. Loureiro, J. Melo** (Lisbon, E)
Antiphospholipid syndrome and chronic pulmonary thromboembolism
- 10.25 **E. Turio, A. Avvenente, L. Evangelisti, R. Giordani, A. Sagripanti, P. Barachini** (Pisa, I)
Measurement of plasmatic parameters of blood coagulation and fibrinolysis in patients affected with venous ulcer, either post-phlebitic or non post-phlebitic
- Discussion

Dear Colleague,

we thank you for your participation and we hope you appreciate this scientific program which explores the pathophysiologic role of endothelium and reports new data on the origin of clinically important tumors as well as on their management.

Progress in experimental research, technology and clinical management is the basis of this congress program. To this purpose the collaboration of the co-organizing Institutions and the Advisory Committee has been precious.

Special thanks are due to the Italian Nuclear Medicine Association for its patronage to this congress in which many members are covering new important topics on cancer management.

We can not forget to acknowledge the support of the Menarini International Foundation which continues since 1988.

We hope very much all these collaborations will permit the further editions of this meetings which pursue the ambitious aim to contribute to stimulate research and clinical progress on vascular

diseases and cancer.

Please, feel free to send comments or suggestions for the next congress on 2002.

The scientific Secretaries

Organized by

Insegnamento di Semeiotica e Metodologia Clinica (Pisa)
Institut für Pathologie und Tumorzentrum (Aachen e.V.)
Centre of Competence in Biomaterials of RWTH (Aachen)
Department of Radiation Oncology,
Hahnemann University (Philadelphia, Pennsylvania)

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