

13th Meeting of the
**European Society of Neurosonology and
Cerebral Hemodynamics**

5th National Congress of the
**Italian Society of Neurosonology and
Cerebral Hemodynamics**

Genova, Italy, May 10–13, 2008

Abstracts

Guest Editors

M. Del Sette, Genova

C. Gandolfo, Genova

K. Niederkorn, Graz

D. Russell, Oslo

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U. Walter (*Germany*)
A. Zaninelli (*Italy*)

Scientific Programme

Saturday, 10th May 2008

11.00-13.00 Registration of Participants

13.00-16.45 TUTORIALS

Chair: P. Prati (*Udine - Italy*) - P.J. Touboul (*Paris - France*)

- 13.00-13.15 **Physics and diagnostic US**
R. Brucher (*Ulm - Germany*)
- 13.15-13.30 **Artifacts in vascular imaging**
L. Derchi (*Genova - Italy*)
- 13.30-13.45 **Cervical artery dissection**
C. Baracchini (*Padova - Italy*)
- 13.45-14.00 **Potentials and pitfalls of US in cervical vessel stenosis**
F. Ferrio (*Torino - Italy*)
- 14.00-14.15 **TCD: how to do it**
A. Alexandrov (*Birmingham - USA*)
- 14.15-14.30 **Diagnostic protocols in neurosonology**
G. Meneghetti (*Padova - Italy*)
- 14.30-14.45 **TCD: lights and pitfalls**
Z. Garami (*Houston - USA*)
- 14.45-15.00 **Vasospasm**
G. Iacopino (*Palermo - Italy*)
- 15.00-15.15 **Intraoperative monitoring in neurosurgery**
P. Limoni (*Bologna - Italy*)
- 15.15-15.30 **Intracranial stenosis and occlusions**
G.A. Ottonello (*Genova - Italy*)
- 15.30-15.45 **Acute stroke**
C. Molina (*Barcelona - Spain*)
- 15.45-16.00 **Microemboli**
M. Jauss (*Giessen - Germany*)
- 16.00-16.15 **TCD monitoring in cardiovascular surgery**
D. Russell (*Oslo - Norway*)
- 16.15-16.30 **Patent foramen ovale**
M. Del Sette (*Genova - Italy*)

16.45-18.00 PRACTICAL SESSION

Chair: G.M. von Reutern (*Nidda - Germany*) - E. Bartels (*Göttingen - Germany*)

TEACHERS: Brucher, Derchi, Baracchini, Ferrio, Alexandrov, Meneghetti, Garami, Ottonello, Molina, Jauss, Russell, Del Sette, Ajmar, Bianchini, Brusa, Rizzi, Dinia, Olah, Csapo

18.00-19.00 TEST PRACTICAL PART 1

Chair: G.M. von Reutern (*Nidda - Germany*) - E. Bartels (*Göttingen - Germany*)

Sunday, 11th May 2008

8.30-11.45 TUTORIALS

Chair: L. Csiba (*Debrecen - Hungary*) - M. Kaps (*Giessen - Germany*)

- 08.30-08.45 **Cerebral hemodynamics**
M. Silvestrini (*Ancona - Italy*)
- 08.45-09.00 **PFO and migraine**
C. Finocchi (*Genova - Italy*)
- 09.00-09.15 **Cerebral circulatory arrest**
M. Marinoni (*Firenze - Italy*)
- 09.15-09.30 **The quantification of tight carotid and vertebral artery stenosis by US**
J.M. de Bray (*Angers - France*)
- 09.30-09.45 **TCCD: intracranial vessel detection**
N. Carraro (*Trieste - Italy*)
- 09.45-10.00 **TCCD: pathological findings**
G. Malferrari (*Reggio Emilia - Italy*)
- 10.00-10.15 **Cerebral venous system**
E. Stolz (*Giessen - Germany*)
- 10.15-10.30 **Parenchyma imaging**
U. Walter (*Rostock - Germany*)
- 10.30-10.45 **Perfusion imaging**
G. Seidel (*Lübeck - Germany*)
- 10.45-11.00 **Neuro-vascular coupling**
M. Kaps (*Giessen, Germany*)
- 11.00-11.15 **Neuromuscular diseases**
A. Tagliafico (*Genova - Italy*)
- 11.15-11.30 **Endothelial function testing**
L. Csiba (*Debrecen - Hungary*)
- 11.30-11.45 **Endovascular treatment monitoring by US**
S. Horner (*Graz - Austria*)

12.00-13.00 PRACTICAL SESSION

Chair: G.M. von Reutern (*Nidda - Germany*) - E. Bartels (*Göttingen - Germany*)

TEACHERS: Silvestrini, de Bray, Finocchi, Marinoni, Carraro, Malferrari, Sanguigni, Stolz, Walter, Seidel, Kaps, Csiba, Niederkorn, Horner, Bartels, Olah, Csapo

13.00-14.00 **Lunch**

13.30-14.00 EXECUTIVE COMMITTEE MEETING

14.00-16.00 THEORETICAL AND PRACTICAL TEST - PART 2

Chair: G.M. von Reutern (*Nidda - Germany*) - E. Bartels (*Göttingen - Germany*)

16.00-19.00 Opening Ceremony

Chair: D. Russell (*Oslo - Norway*), G.F. Gensini (*Firenze - Italy*)

Greetings from the ESNCH

K. Niederkorn (*Graz - Austria*)

Greetings from the University of Genova

G. Deferrari (*Genova - Italy*)

Greetings from the Department of Neurosciences

M. Abbruzzese, G.L. Mancardi (*Genova - Italy*)

Lecture: Post-stroke depression

C. Gandolfo (*Genova - Italy*)

Lecture: Vascular dementia

D. Inzitari (*Firenze - Italy*)

Lecture: Evidence-Based Medicine in Neurosonology

S. Ricci, on behalf of the Cochrane Neurological Network (*Perugia - Italy*)

19.00-20.00 General Assembly of the Italian Society of Neurosonology and Cerebral Hemodynamics (SINSEC)

20.00 Welcome Cocktail

Monday, 12th May 2008

08.30-09.45 SESSION 1: Acute Stroke

Chair: G.A. Ottonello (*Genova - Italy*), H. Furuhashi (*Tokyo - Japan*)

08.30-08.45 **Acute stroke monitoring**

A. Alexandrov (*Birmingham - USA*)

08.45-09.00 **Enhanced thrombolysis**

C. Molina (*Barcelona - Spain*)

09.00-09.15 **US and antithrombotic treatment**

M. Kaps (*Giessen - Germany*)

09.15-09.30 **Recovery after stroke and US**

M. Silvestrini (*Ancona - Italy*)

09.30-10.15 ORAL PRESENTATIONS

Chair: D. Palombo (*Genova - Italy*), C. Molina (*Barcelona - Spain*)

09.30-09.40 **Middle cerebral artery main stem occlusion: natural course and impact of alteplase and sonothrombolysis on recanalization**

J. Eggers, J. Koehler, (*Hamburg - Germany*)

09.40-09.50 **Fast-track duplex US in acute stroke**

S.J. Schreiber¹, F. Doepp¹, J.M. Valdueza², J.E. Röhl¹ (¹*Bad Segeberg - Germany*, ²*Berlin - Germany*)

09.50-10.00 **Timing of microbubble-enhanced sonothrombolysis strongly predicts intracranial hemorrhage in acute ischemic stroke**

L. Dini^{1,2}, M. Rubiera¹, M. Ribo¹, E. Santamarina¹, O. Maisterra¹, R. Delgado-Mederos¹, J. Alvarez-Sabin¹, J. Montaner¹, M. Del Sette², C.A. Molina¹ (¹*Barcelona - Spain*, ²*Genova - Italy*)

10.00-10.10 **Sonothrombolysis acceleration by bubble liposomes in vitro**

T. Zenitani, M. Yogo, R. Suzuki, K. Maruyama, H. Furuhashi (*Tokyo - Japan*)

10.15-11.15 SESSION 2: Atherosclerosis, carotid plaques, lipids, statins

Chair: V. Toso (*Vicenza - Italy*), V. Demarin (*Zagreb - Croatia*)

10.15-10.30 **Cerebral hemodynamics, lipids and statins: the SPARCL study**

N. Bornstein (*Tel Aviv - Israel*)

10.30-10.45 **Extracranial and intracranial arteritis**

E.B. Ringelstein (*Münster - Germany*)

10.45-11.00 **Carotid plaques: which drugs?**

J.M. Molto (*Alicante - Spain*)

11.00-11.15 **Cervical artery dissection**

C. Baracchini (*Treviso - Italy*)

11.15-12.45 SYMPOSIUM: Comorbidity between hypertension, migraine and stroke: the Miracle project
Chair: C. Gandolfo (*Genova - Italy*), M. Del Sette (*Genova - Italy*)

- 11.15-11.30 **Migraine as a risk factor for stroke**
A. Carolei (*L'Aquila - Italy*)
- 11.30-11.45 **Hypertension and stroke: speculations coming from the large trials**
E. Agabiti Rosei (*Brescia - Italy*)
- 11.45-12.00 **Hypertension, large and small vessel disease**
L. Csiba (*Debrecen - Hungary*)
- 12.00-12.15 **The Project MIRACLES: comorbidity between migraine and hypertension**
B. Trimarco (*Napoli - Italy*)
- 12.15-12.45 **General discussion**

12.45-13.30 ORAL PRESENTATIONS

Chair: G. Lanza (*Varese - Italy*), E.B. Ringelstein (*Münster - Germany*)

- 12.45-12.55 **Usefulness of an US perfusional approach and derived maps for predicting the prognosis of MCA and T-type occlusion stroke patients**
G. Malferrari, M. Zedde, G. De Berti, M. Maggi, F. Nicoli, G. Borasi, N. Marcello (*Reggio Emilia - Italy*)
- 12.55-13.05 **Safety evaluation of newly developed transcranial targeting low-frequency ultrasonic thrombolysis system (TCT-LOFUT) at 490kHz for Macaca monkey's brain**
J. Shimizu, T. Fukuda, T. Abe, M. Ogihara, J. Kubota, A. Sasaki, T. Azuma, K. Sasaki, K. Shimizu, T. Ohishi, S.I. Umemura, H. Furuhashi (*Tokyo - Japan*)
- 13.05-13.15 **Asymptomatic carotid emboli study (ACES): baseline data**
J. Siegel, K. Jones, R. Topakian, H.S. Markus
For The Aces Investigators (*London - UK*)
- 13.15-13.25 **Increased expression of visfatin in unstable carotid plaques – possible role in plaque destabilization**
M. Skjelland, A. Dahl, T. Dahl, A. Yndestad, E. Øie, A. Michelsen, K. Krohg-Sørensen, D. Russell, P. Aukrust, B. Halvorsen (*Oslo - Norway*)

13.30-14.30 SYMPOSIUM WORKING LUNCH
The Clinical Role of Contrast-Enhanced US in Neurosonology
Chair: M. Del Sette (*Genova - Italy*), M. Kaps (*Giessen, Germany*)

- 13.30-13.50 **Potential of contrast US in neurology: microbubbles for prognostic, diagnostic and peri-interventional assessment**
C. Greis (*Konstanz - Germany*)
- 13.50-14.05 **Principles of Cerebral Perfusion Imaging**
G. Seidel (*Lübeck - Germany*)
- 14.05-14.20 **Practical value of contrast-enhancement for transcranial color-coded sonography (TCCS): improved diagnostic yield in chronic and acute patients**
E. Stolz (*Giessen - Germany*)
- 14.20-14.30 **Discussion**

14.30-17.00 SESSION 3: Vascular cognitive impairment
Chair: P. Cerrato (*Torino - Italy*) - V. Oliveira (*Lisbon - Portugal*)

- 14.30-14.45 **Predictors of carotid clamping intolerance: a reminder for carotid artery stenting procedures**
G.P. Anzola (*Brescia - Italy*)
- 14.45-15.00 **Invasive procedure and silent cerebral ischemia**
D. Russell (*Oslo - Norway*)

15.00-17.00 ORAL PRESENTATIONS

Chair: J. Klingelhöfer (*Chemnitz - Germany*), B. Gossetti (*Roma - Italy*)

- 15.00-15.10 **Hypertension-dependent reduction in mental efficiency is associated with different cerebral haemodynamic abnormalities according to age**
S. Castellani, F. D'Abate, E. Di Nunzio, I. Tanini, M. Nieri (*Firenze - Italy*)
- 15.10-15.20 **Is there an association between white matter lesions, cognitive decline and microembolic signals in patients with atrial fibrillation?**
M.A. Ritter¹, C. Tentrop¹, H. Wersching¹, C. Stehling¹, H. Lohmann¹, S.P. Kloska¹, P. Kirchhof², S. Knecht¹, D.G. Nabavi¹
(¹Berlin - Germany, ²Münster - Germany)

- 15.20-15.30 **Visually evoked cerebral blood flow response remains impaired for months after cessation of smoking**
L. Olah¹, Y. Yonai¹, N. Boms¹, K. Csapo¹, S. Molnar¹, B. Rosengarten², N.M. Bornstein³, L. Csiba¹
(¹Debrecen - Hungary, ²Giessen - Germany, ³Tel-Aviv - Israel)
- 15.30-15.40 **Difference in plaque area between lacunar stroke and the atherothrombotic stroke subtype**
J. Carneado-Ruiz, J. Sánchez-Paya, A. Alfaro-Sáez, M. Lezcano-Rodas, L. Berenguer-Ruiz, F. Mira-Berenguer, J.M. Molto-Jorda, F. Gracia (Madrid - Spain)
- 15.40-15.50 **Reversible vascular parameters after short-term therapy of hypertension**
K. Csapo¹, Z. Bajko², C.S. Szekeres², K.R. Kovacs², P. Soltesz¹, L. Csiba¹ (¹Debrecen - Hungary, ²Targu Mures - Romania)
- 15.50-16.00 **Statin treatment improves cerebral more than systemic endothelial dysfunction in patients with arterial hypertension**
J. Pretnar-Oblak, M. Šabovič, M. Zaletel, T. Pogačnik, B. Žvan (Ljubljana - Slovenia)
- 16.00-16.10 **Atherosclerosis and IMT - 12 years after ischemic stroke at a young age**
U. Waje-Andreassen¹, H. Naess¹, L. Thomassen¹, Ge. Eide², R. Meijer², Ca. Vedeler¹
(¹Bergen - Norway, ²Leiden - The Netherlands)
- 16.10-16.20 **Systematic TCCS analysis of the A2 segment of the anterior cerebral artery and the pericallosal artery**
A. Rogge¹, F. Doepp², S. Schreiber², Jm. Valdueza¹ (¹Bad Segeberg - Germany, ²Berlin - Germany)
- 16.20-16.30 **Unilateral versus bilateral detection of right-to-left shunt by power M-mode transcranial doppler**
J.T. Jesurum, C.J. Fuller, M.A. Moehring, J.M. Renz, & M.P. Spencer (Seattle - USA)
- 16.30-16.50 **No cinderella but three knights TCCD, HMR and TEE) at heART-HUR's round table for PFO identification and quantification**
N. Carraro, V.M. Sarra, L. Pagnan, G. Pizzolato (Trieste - Italy)
- 16.40-16.50 **Percutaneous closure of patent foramen ovale in patients with presumed paradoxical embolism: periprocedural results and long-term risk of recurrent neurological events**
M. Balbi, D. Rollando, G. Gnecco, M. Del Sette, L. Dinia, G. Sivori, L. Strada, A. Barsotti (Genova - Italy)
- 16.50-17.00 **Unilateral vertebral artery hypoplasia is associated with decreased net vertebral flow volume**
A. Ching Chao¹, Yen-Yu Chen², Han-Hwa Hu³
(¹Kaohsiung - Taiwan, ²Changhua - Taiwan, ³Taipei - Taiwan)
- 17.00 -17.30 SESSION 4: Perfusion imaging**
Chair: C. Fieschi (Roma - Italy) - L. Castellan (Genova - Italy)
- 17.00-17.15 **Microbubbles and brain tissue perfusion imaging**
T. Shiogai (Kyoto - Japan)
- 17.15-17.30 **Cerebral perfusion studies in acute stroke**
G. Seidel (Lübeck - Germany)
- 17.30-17.45 **New insights in perfusion imaging**
E. Bartels (Göttingen - Germany)
- 17.45-18.30 ORAL PRESENTATIONS**
Chair: C. Fieschi (Roma - Italy) - L. Castellan (Genova - Italy)
- 17.45-17.55 **Transcranial perfusionsonography preceding thrombolysis - perfusion deficit correlates with clinical as well as vascular status**
W. Niesen, W. Marouf, C. Weiller, A. Hetzel (Freiburg - Germany)
- 17.55-18.05 **Differentiating ICH from early hemorrhagic transformed ischemic infarction with transcranial perfusion sonography**
A. Schläger, S. Struempell, C. Weiller, A. Hetzel, W. Niesen (Freiburg - Germany)
- 18.05-18.15 **Volume estimation of intracerebral hematoma with transcranial sonography**
W. Niesen, A. Schläger, S. Struempell, C. Weiller, A. Hetzel (Freiburg - Germany)
- 18.15-18.25 **Cerebral blood flow in interictal migraineurs: transcranial doppler study**
M. Alpaidze, M. Janelidze (Tbilisi - Georgia)
- 18.30 GENERAL ASSEMBLY OF ESNCH**
- 20.30 Italian Gala Dinner with Music**

Tuesday, 13th May 2008

08.30-09.30 SESSION 5: Cerebral hemodynamics, arteries and veins

Chair: S. Castellani (*Firenze - Italy*), D. Evans (*Leicester - UK*)

- 08.30-08.45 **Cerebral hemodynamics in syncope and epilepsy**
G. Micieli (*Milano - Italy*)
- 08.45-09.00 **Hemodynamics in cerebral artery stenting**
K. Niederkorn (*Graz - Austria*)
- 09.00-09.15 **Neurosonology in the future**
R. Aaslid (*Seattle - USA*)
- 09.15-09.30 **The intracranial venous system**
E. Stolz (*Giessen - Germany*)
- 09.30-11.30 **ORAL PRESENTATIONS**
Chair: N. Bornstein (*Tel Aviv - Israel*), F. De Falco (*Napoli - Italy*)
- 09.30-09.40 **Hemodynamic evaluation of vertebral artery hypoplasia by magnetic resonance angiography and ultrasonography**
H. Mitsumura, M. Yogo, K. Inoue, H. Furuhashi (*Tokyo - Japan*)
- 09.40-09.50 **Validation of a one-dimensional model of the arterial cerebral circulation**
P. Reymond¹, F. Perren², D. Rüfenacht², N. Stergiopoulos¹ (¹*Lausanne - Switzerland*, ²*Geneva - Switzerland*)
- 09.50-10.00 **Migraine with aura attack after diagnostic microbubbles injection**
L. Caputi¹, S. Usai¹, M.R. Carriero¹, M. Del Sette², G.P. Anzola³, L. Grazi¹, D. D'amico¹, G. Bussone¹, E. Parati¹ (¹*Milano - Italy*, ²*Genova - Italy*, ³*Brescia - Italy*)
- 10.00-10.10 **Changes in cerebrovascular reactivity following repetitive transcranial magnetic stimulation**
F. Sallustio, G. Koch, S. Di Legge, B. Rizzato, D. Centonze, G. Bernardi, P. Stanzione (*Roma - Italy*)
- 10.10-10.20 **Prognosis of mobile plaques in carotid arteries**
K. Nagatsuka, N. Toratani, T. Torii, Bh. Hyun, K. Iihara, S. Miyamoto, H. Naritomi (*Osaka - Japan*)
- 10.20-10.30 **Safety and efficacy of PFO closure: a comparison between amplatzer and cardiastar devices**
A. Tanzi, M. Devetak, S. Mantovan, U. Talliani, E. Aurier, C. Zanferrari, (*Parma - Italy*)

- 10.30-10.40 **High frequency repetitive transcranial magnetic stimulation induces a decrease of cerebral vasomotor reactivity**
F. Vernieri, P. Maggio, F. Tibuzzi, M.M. Filippi, P. Pasqualetti, J.M. Melgari, C. Altamura, P. Palazzo, P.M. Rossini (*Roma - Italy*)
- 10.40-10.50 **Doppler US 'Knock' phenomena produced by fluid in an obstructed branch vessel**
E. M. L. Chung¹, K.V. Ramnarine¹, C.V. Long¹, C. Udommongkol², B.R. Chambers², D.H. Evans¹ (¹*Leicester - UK*, ²*Victoria - Australia*)
- 10.50-11.00 **Seeking for stroke etiology: TCD monitoring for right-to-left shunt in patients with acute cerebral ischemia of uncertain origin**
S. Di Legge, M. Diomedi, F. Sallustio, E. De Marchis, B. Rizzato, D. Samà, G. Koch, P. Stanzione (*Roma - Italy*)
- 11.00-11.10 **Cerebral hemodynamics and cerebrovascular reactivity to hypercapnia during repeated maximal apneas in breath hold divers**
M. Diomedi, S. Di Legge, G. Raimondi, G. Leone, G. Misaggi, A. Renna, A. Simonitto, G. Bernardi (*Roma - Italy*)
- 11.10 -11.20 **Predictors of carotid clamping intolerance: a reminder for carotid artery stenting procedures**
G.P. Anzola¹, P. Limoni², G. Cavrini² (¹*Brescia - Italy*, ²*Bologna - Italy*)
- 11.20-11.30 **Blood flow velocity (BFV) measurements in the basal vein of rosenthal (BVR) to differentiate vasospasm and hyperperfusion in subarachnoid hemorrhage (SAH): an alternative for the MCA/ICA-Index?**
F. Doepp¹, J.M. Valdueza², D. Gruber¹, A. Bick-Sander¹, S.J. Schreiber¹ (¹*Berlin - Germany*, ²*Bad Segeberg - Germany*)

11.30 - 12.15 SESSION 6: Non-cerebrovascular use of US

- Chair: G. Abbruzzese (*Genova - Italy*) - A. Zaninelli (*Milano - Italy*)
- 11.30-11.45 **Sickle cell anemia**
G. Meneghetti (*Padova - Italy*)
- 11.45-12.00 **Transcranial sonography in movement disorders**
U. Walter (*Rostock - Germany*)
- 12.00-12.15 **Peripheral nerves US**
A. Tagliafico (*Genova - Italy*)

12.15-13.30 ORAL PRESENTATIONS

Chair: M. Sturzenegger (*Bern - Switzerland*), U. Walter (*Rostock - Germany*)

- 12.15-12.25 **Brain parenchyma sonography in Huntington's disease in relation to the neurological and psychiatric status**
C. Krogias, C. Saft, K. Strassburger, R. Gold, C. Norra, G. Juckel, D. Ninphius (*Bochum - Germany*)
- 12.25-12.35 **Transcranial sonography in spinocerebellar ataxia type 2**
M. Mijajlovic, N. Dragasevic, E. Stefanova, I. Petrovic, M. Svetel, V. Kostic (*Belgrade - Serbia*)
- 12.35-12.45 **Acute anxiety and brain circulation: a TCD study with clomipramine challenge**
F. Rotella, M. Marinoni, F. Alari, F. Lejeune, F. Cosci, M. Ciampelli, D. Depinesi, C. Faravelli (*Firenze - Italy*)
- 12.45-12.55 **Improved analysis of substantia nigra US images in healthy subjects with and without heterozygous *Parkin* mutations**
G. Seidel¹, C. Kier¹, C. Cyrus¹, N. Brüggemann¹, J. Hagenah¹, U. Hofmann¹, T. Aach², C. Klein¹ (*¹Lübeck - Germany, ²Aachen - Germany)*
- 12.55-13.05 **Vasospasm due to intracranial aneurysm rupture: value of TCD monitoring**
M. Fontanella, M. Ferrio, V. Zappalà, C. Benevello, D. Garbossa, M. Berardino, G. Bradac, A. Ducati (*Torino - Italy*)
- 13.05-13.15 **Monitoring changes in intracranial hemodynamics after carotid endarterectomy with the pulsatile apparent resistance**
A. Schaafsma (*Groningen - The Netherlands*)
- 13.15-13.25 **Perioperative monitoring of cerebral hemodynamics in patients with arteriovenous malformations**
V.B. Semenyutin¹, V.A. Aliev¹, V.P. Bersnev¹, A. Patzak², P.I. Nikitin¹, V.A. Pak¹, A.V. Kozlov¹ (*¹St. Petersburg - Russia, ²Berlin - Germany)*

13.30-15.00 POSTER SESSION with Lunch

Chair: L. Thomassen (*Oslo - Norway*), W. Liboni (*Torino - Italy*)
G. Rodriguez (*Genova - Italy*), P. Traubner (*Bratislava - Slovak Republic*), G. Baltgaile (*Riga - Latvia*), F. Iemolo (*Ragusa - Italy*), A.Y. Razumovski (*Cockeysville - USA*)

15.00- 16.00 SESSION 7: Cerebral monitoring

Chair: R.G. Ackerstaff (*Utrecht - Netherlands*), L. Provinciali (*Ancona - Italy*)

- 15.00-15.15 **TCD monitoring in the intensive care unit**
M. Marinoni (*Firenze - Italy*)
- 15.15-15.30 **New perspectives in cardiovascular US monitoring**
Z. Garami (*Houston - USA*)
- 15.30-15.45 **Hyperflow and hypoflow patterns in brain injury. The role of neurosonology**
M. Visocchi (*Roma - Italy*)

16.00-17.00 ORAL PRESENTATIONS

Chair: K. Niederkorn (*Graz - Austria*), M. Del Sette (*Genova, Italy*)

- 16.00-16.10 **Continuous monitoring in the vertebrobasilar artery utilizing a newly developed transducer holder (Sonopod) for TCCD sonography**
T. Shiogai, M. Matsumoto, K. Ikeda, A. Morisaka, K. Yoshikawa, Y. Nagakane, T. Mizuno, M. Nakagawa (*Kyoto - Japan*)
- 16.10-16.20 **TCD evaluation of cerebral hemodynamics in Fabry disease**
A. Caruso, F. Alari, W. Borsini, V. Mastronardi, M. Marinoni (*Firenze - Italy*)
- 16.20-16.30 **Relationship between carotid artery stenosis and stroke after total arch replacement**
N. Toratani, K. Nagatsuka, H. Sasaki, H. Ogino, H. Naritomi (*Osaka - Japan*)
- 16.30-16.40 **Brain death and flow patterns in the internal carotid artery siphon**
P. Cardona, A. Escrig, H. Quesada, F. Rubio (*Barcelona - Spain*)
- 16.40-16.50 **Is 30 min. monitoring sufficient time evaluating microembolic signals as predictor of recurrent ipsilateral ischaemic stroke in symptomatic patients with high grade carotid stenosis?**
T. Zuromskis¹, D. Jatuzis², R. Watterholm³, R. Volkmann³ (*¹Vilnius - Lithuania, ²Göteborg, Sweden, ³Scarborough - UK)*
- 16.50-17.00 **Ultrasonographic assessment of intracranial hemodynamics in acute stroke patients**
Foad Abd Allah, N. Chalabi, O. Hussein, H. Aref, A. Borai, N. Adel, A. Abo Mousa (*Cairo - Egypt*)

17.00 SCIENTIFIC AWARDS

Invitation to the 14th ESNCH Meeting 2009

Closing Ceremony

Poster List

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Noninvasive Assessment of Cerebral Venous Outflow (CVO), Elastance (E), Reserve Capacity of Craniovertebral Content (RCCC) in Patients with Chronic Subdural Haematomas (CSH) before and after Closed External Drainage (CED)

Abuzaid S.M., Shakhnovich V.A., Shakhnovich A.R., Potapov A.A., Kravchuk A.D.
Burdenko Neurosurgical Institute, Moscow, Russia

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Ultrasonographic Evaluation in Therapy Naive Patients with Human Immunodeficiency Virus Infection

Alari F.¹, Mastronardi V.¹, Martinelli C.², Giuntini R.², Caruso A.¹, Marinoni M.¹
¹*Department of Neurological Sciences, University of Firenze, Italy*
²*Department of Infectious Diseases, Careggi Hospital, Firenze, Italy*

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Post Coital Intracerebral Venous Haemorrhage in a Patient with Jugular Valve Incompetence

Albano B., Gandolfo C., Del Sette M.
Department of Neuroscience, Ophthalmology and Genetic University of Genova, Italy

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Measurement of Intima-Media Thickness in Female Patients with Polycystic Ovary Syndrome

Arsovska A.¹, Cepreganova-Cangovska T.¹, Popovska S.², Popovski A.¹
¹*Clinic of Neurology, Skopje, Macedonia*
²*Clinic of Gynecology and Obstetrics, Skopje, Macedonia*

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Recurrent Spontaneous Cervical Artery Dissection

Baracchini C., Tonello S., Vitaliani R., Giometto B.
Department of Neurology, Ospedale Ca' Foncello Treviso, Italy

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Recurrent and Migrant Right Internal Carotid Artery Vasospasm after Left Internal Carotid Artery Dissection

Borsato C., Basile A.M., S. Tonello, Baracchini C., Avruscio G.P.¹, Amistà P.², Manara R.², Tavolato B., Meneghetti G.
Departments of Neurology, Angiology¹ and Neuroradiology² University of Padova, Italy

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Brainstem Raphe Lesion in Depressed and Suicidal Patients Recorded on Transcranial Sonography (TCS)

Budisic M., Karlovic D., Trkanjec Z., Lovrencic-Huzjan A., Vukovic V., Bene R., Demarin V.
University Department of Neurology and Psychiatry Reference Center for Neurovascular Disorders of Republic of Croatia, Zagreb, Croatia

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Extracranial Carotid Vasospasm in a Patient with Migraine with Aura: A Case Report

Caputi L.¹, Usai S.², Ciceri E.³, Parati E.¹, Carriero M.R.¹, Grazi L.², Bussone G.²
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Transcranial Color-Coded Sonography (TCCS) for the Evaluation of Dural Arteriovenous Fistulae (DAVF).

Cardona-Portela P., Mora P., Majos C., Escrig A., Rubio F.
Bellvitge University Hospital, Department of Neurology Department or Neuroradiology, Idibell, Barcelona, Spain

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TCD Emboli Detection Monitoring in Patients with Asymptomatic Carotid in-Stent Restenosis

Chiti A., Gallerini S., Giorli E., Terni E., Gialdini G., Orlandi G.
Department Of Neuroscience, Clinic Of Neurology, Pisa, Italy

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Intracranial Stenoses: Comparison between Transcranial Color-Coded Sonography and MR Angiography

Coppo L.¹, Pollice S.², Savio K.¹, Bolamperti L.¹, Ravagnani M.¹, Reggiani M.¹, Carriero A.², Monaco F.¹
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²*Department of Radiology, Amedeo Avogadro University School of Medicine and "Maggiore della Carità" Hospital, Novara, Italy*

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Diagnosis of Vasospasm following SAH: the Role of Perfusion-CT in Comparison with Transcranial Doppler

Corsico M.¹, Ferrio M.F.¹, Fontanella M.², Daniele D.¹, Bradac G.B.¹

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²Neurochirurgia Universitaria, Ospedale S. Giovanni Battista, Torino, Italy

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Failure of Diastolic Function in Non-Hypertensive Young Adults Affected by Ischemic Stroke

De Campora P.¹, Malferrari G.², Ragozzino L.¹, Sangiuolo R.¹

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²Uoc Neurologia Ospedale S. Maria Nuova - Reggio Emilia, Italy

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Is the Role of Transesophageal Echocardiography Overweighed in the Diagnosis of Atrial Septal Abnormalities?

Devetak M.¹, Tanzi A.¹, Mantovan S.¹, Talliani U.², Aurier E.², Zanferrari C.¹

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²Cardiological Unit, Cardiac Department, Hospital-University of Parma, Italy

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²Department of Neurology, Military Medical Academy Belgrade, Serbia

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Department of Neurology, University S.M. Misericordia, Udine, Italy

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Josep Trueta Hospital. Department of Neurology, Stroke Unit, Girona, Spain

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Internal Jugular Vein Valvular Incompetence: an Ultrasonographic Evaluation in Healthy Subjects

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Department of Neuroscience, Clinic of Neurology, Pisa, Italy

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Neurological Clinic, Polytechnic University of Marche, Ancona, Italy

Neurological Clinic, Campus Biomedico University, Roma, Italy

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Department of Neurology, Military Medical Academy, Belgrade, Serbia

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Jolic S.¹, Zivkovic M.¹, Bosnjakovic P.², Ilic M.², Vukasinovic N.¹, Jolic M.¹

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²Institute Of Radiology, Clinical Center, Nis, Serbia

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Jovanović B.Z., Pavlović M.A., Zidverc Trajković J.J., Mijajlović D.M., Radojičić P.A., Šternić Čovičković M.N.

Institute of Neurology Clinical Centre of Serbia, Belgrade, Serbia

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Jun Hong Lee

Department of Neurology, National Health Insurance Corporation Ilsan Hospital, Koyang-Shi, Korea

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Krogias C.¹, Meves S.¹, Schoellhammer M.², Gold R. 1, Andrich J.¹
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²Department of Radiology, St. Josef-Hospital, Ruhr University Bochum, Germany

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Department of Neurology, Asian Medical Center, University of Ulsan, Seoul, Korea

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Lepic T.¹, Jekic Dj.¹, Veljancic D.¹, Lepic M.¹, Djajic V.², Raicevic R.¹
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Lovrencic-Huzjan A., Vukovic V., Strineka M., Azman D., Bene R., Demarin V.
Department of Neurology, University Hospital «Sestre Milosrdnice», Reference Center for Neurovascular Disorders of Republic of Croatia, Zagreb, Croatia

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Malferrari G.¹, Zedde M.¹, Dallari A.¹, Nucera A.¹, Accorsi F.², Marcello N.¹
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³Biophysics Department, Arcispedale Santa Maria Nuova, Reggio Emilia, Italy
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US Parenchymal Evaluation of a Heavy Metal Poisoning

Malferrari G.¹, Zedde M.¹, Dallari A.¹, Nucera A.¹, Zucco R.², Bondavalli M.², Marcello N.²
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Malferrari G.¹, Zedde M.¹, Dallari A.¹, Nucera A.¹, Ferrari A.³, Marcello N.²
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³Gerontology Department, Arcispedale Santa Maria Nuova, Reggio Emilia, Italy

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Mateus S.¹, Pós-De-Mina V.¹, Santos C.², Mendes I.¹

¹ Luscan (Neurovascular Lab)

² Radiology Departments, Espírito Santo Hospital, Évora, Portugal

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Mazzucco S.¹, Bonetti B.¹, Ferrarini M.¹, Fabrizi G.M.¹, Anzola G.P.², Rizzuto N.¹

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Şişli Etfal Education and Research Hospital, Neurology Department, İstanbul, Turkey

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Nica C.¹, Romanitan M.O.²

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Nicoletti G.¹, Bruno F., Tardi S., Sanguigni S.¹, Malferrari G.², Accorsi F.³

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Nicoletti G.¹, Nicolai A.¹, Albano G.¹, Bruno F., Tardi S., Sanguigni S.², Malferrari G.³

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Regina Elena National Cancer Institute, Department of Neurosurgery, Roma, Italy

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Tai Hwan Park¹, Min Uk Jang¹, Hyung-Geun Oh², Jin Young Ahn¹, Min Ky Kim¹

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²Department of Neurology, Soonchunhyang University College of Medicine, Cheonan, South Korea

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Pascazio L.³, Samarelli V.¹, De Salvia M.A.³, De Blasi R.², Chiumarulo L.³, Federico F.³

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Hao Q.¹, Gao S.², Leung W.H.¹, Wong K.S.¹

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²Department of Neurology, Brain Center, National Neuroscience Institute, Singapore General Hospital Campus, Singapore

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Kaunas University of Technology, Lithuania

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Rogge A.¹, Schreiber S.J.², Doepp F.², Valdueza J.M.¹

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Neurology Unit, Cittadella, Padova, Italy

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Department of Neurology - S. Benedetto Del Tronto, Italy

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Sanzaro E., Alberti F.

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Clinical Neuroscience, St. George's University of London, UK

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Department of Neuroscience, Ophthalmology and Genetic, University of Genova, Italy

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¹ *Child Neuropsychiatry, G. Gaslini Institute, Genova, Italy*
² *Department of Neurosciences, Ophthalmology and Genetics, University of Genova, Italy*
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¹ *Department of Neurology of Adults, Medical University of Gdańsk, Poland*
² *Department of Clinical Physiology, Medical University of Gdańsk, Poland*
³ *Regional Diabetes Centre, Medical University of Gdańsk, Poland*
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¹ *Clinic of Functional Diagnostics of Nervous System, ²Department of Cardiology and Intensive Care, ³Department of Radiology, Military Medical Academy, ⁴Invasive Cardiology, Hospital "Tokuda", Sofia, Bulgaria*
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¹ *Medical University, Specialized Hospital of Neurology and Psychiatry "St. Naum", Bulgaria*
² *Bulgarian Academy of Sciences, Sofia, Bulgaria*
³ *Department of Neurology and Neurosurgery, Military Medical Academy, Bulgaria*
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