<table>
<thead>
<tr>
<th>Day</th>
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| **Friday 24** | Autoregulation Meeting (Room 3 Rios)  
Session I: Challenges and progress in measuring autoregulation  
Session II: New insights into the physiology and pathology of autoregulation  
Lunch and Poster session  
Session III: Clinical applications of autoregulation assessment  
Discussion of bootstrap projects  
Tutorials (Rooms Corgo and Tâmega)  
Basic Tutorial: Theory  
Basic Tutorial: Practical Demonstration  
Basic Tutorial: Hands-on  
Lunch  
Advanced Tutorial: Theory  
Advanced Tutorial: Practical Demonstrations  
International certification examination in neurosonology: theory (Room Corgo)  
Informal social event (dinner in a beach restaurant) |
| **Saturday 25** | International certification examination in neurosonology: practical (Room Tâmega)  
Teaching Symposium on Autoregulation (Room Porto)  
Multimodal monitoring of the neurocritical care patient (Room Porto)  
Welcome ceremony (Room Porto)  
Lunch and NSRG executive committee meeting (Rest. Madruga; Room Minho/Lima)  
Session I: Atherosclerotic risk assessment (Room Porto)  
Session II: Functional ultrasonography (Room Porto)  
Session III: Cerebral hemodynamics (Room Porto)  
Postersession I (Foyer)  
Welcome Reception (Port Wine cellars) |
| **Sunday 26** | Session V: Intracranial pathology (Room Porto)  
Session VI: Heart and brain I (Room Porto)  
In memoriam Prof Furuhata (Room Porto)  
Lunch and ESNCH executive committee meeting (Rest. Madruga; Room Minho/Lima)  
Session VII: Heart and brain II (Room Porto)  
Poster session II (Foyer)  
Selected poster presentation (Room Porto)  
General assembly of the European Society of Neurosonology and Cerebral Hemodynamics (Room Porto)  
Gala Dinner and awards (Boat in River Douro) |
| **Monday 27** | Session VIII: Ultrasound of cerebral parenchyma, peripheral nerves and muscles  
Session IX: Cervical and cerebral venous ultrasonography  
Session X: Pitfalls and interesting cases in neurosonology - interactive session  
Highlights of the Meeting  
Closing Ceremony & Invitation to the 19th ESNCH Meeting in 2014 |
FRIDAY, 24th of May 2013

8:00 – Reception desk opening (Foyer of Floor 0)

8:30–19:00 Exhibition (Room Douro)

3rd Meeting of Cerebral Autoregulation Network (Room 3 Rios)

9:00-9:10 Opening by D. Simpson, UK, and E. Azevedo, Portugal

9:10 – 10:40 Session I: Challenges and progress in measuring autoregulation

(L1) Cerebral autoregulation challenges
V. Novak, USA

Oral presentations:

(O1) Convergent cross mapping: a promising technique for future cerebral autoregulation estimation

(O2) Between-centre variability in transfer function analysis, a widely used method for linear quantification of the dynamic pressure-flow relation: the CARNet study
A. Meel-van den Abeelen and J. Claassen on behalf of the CARnet bootstrap network, The Nederlands

(O3) Can Subcomponents Analysis Help With the Interpretation of the CBFv Response to Neural Activation After Acute Ischaemic Stroke?
A. Salinet, T. Robinson, R. Panerai, U.K.

(O4) Random steps in lower-body-negative pressure to augment blood pressure variability in the measurement of cerebral autoregulation,

10:40 – 11:10 Coffee break (Room Douro)

11:10 – 12:40 Session II: New insights into the physiology and pathology of autoregulation

(L2) New insights into the physiology and pathology of autoregulation
Y.C. Tzeng, New Zealand

Oral presentations:

(O5) Non linear analysis does show impaired cerebral autoregulation in human experimental endotoxemia

(O6) Association of cerebral blood flow variability and cerebral tissue oxygenation with tolerance to central hypovolemia
C. Rickards, V. Kay, M. George, K. Ryan, C. Hinojosa-Laborde, V. Convertino, USA

(O7) Improving the physiological interpretation of cerebral critical closing pressure
C. Pappo, J. Camacho, G.V. Varos, B. Yelicich, H. Gómez, A. Biestro, M. Czosnyka, Uruguay, Spain and UK

(O8) Effects of high altitude on dynamic cerebral autoregulation
J. Smirl, N. Lewis, S. Lucas, G. duManior, N. Sherpa, K. Smith, P. Ainslie, Canada and New Zealand

12:40 – 14:30 Lunch and poster session (Living of Food Court; Foyer of Floor 1)

(P1) TCARNet: a pathway to translating cerebral autoregulation research into patient benefit

(P2) Doppler flow velocity and ICP: Responses to short-term mild hypocapnia help to assess the intracranial pressure-volume relationship after head injury
C. Haubrich, L.A. Steiner, R.K. Diehl, M. Kasprowicz, P. Smielewski, J.D. Pickard, M. Czosnyka, U.K., Switzerland, Germany and Poland

(P3) Differences in Cerebral Autoregulation between Arterial Beds is Not Reflected in CO2 Reactivity
J. M. Serrador, M. Blatt, A. Acosta, B. Ghobreal and M.J. Falvo, U.S.A.

(P4) Correlation of TCD blood flow velocity and ICP as a new index of cerebral autoregulation. Do we need it?
M. Czosnyka, P. Lewis, P. Smielewski, J.D. Pickard, U.K.

(P5) Cerebrovascular time constant in carotid artery occlusive disease
M. Kasprowicz, P. Smielewski, J.D. Pickard and M. Czosnyka, U.K.

(P6) Cerebral blood flow is reduced in the vascular territory of ischemic stroke in the first 24 hours
Blast Exposure is Associated with Impaired Cerebral Blood Flow Regulation in US Veterans
J. M. Serrador, M. Blatt, A. Acosta, B. Ghobreal and M.J. Falvo, U.S.A. and Portugal

14:30 - 16:00 Session III: Clinical applications of autoregulation assessment

(L3) Clinical applications of autoregulation assessment
J. Serrador, USA

Oral presentations:
(O9) Cerebral autoregulation in hypertensive elderly
L. Wang, A. Meel-van den Abeelen, C. Slump, A. van Beek, J. Sijbesma, M. Oudegeest-Sander, J. Lagro, J. Claussen, The Netherlands

(O10) Cerebral autoregulation indices are not significantly different between the ‘on’ and ‘off’ states in idiopathic Parkinson’s disease
V. Haunton, N. Lo, R. Panerai, T. Robinson, U.K.

(O11) Dynamic Cerebral Autoregulation Assessed by Magnetic Resonance Imaging and Transcranial Doppler: a Comparative Study in Acute Ischaemic Stroke

(O12) Prx - a tool to evaluate autoregulation and decide the optimal CPP management at bedside in a neurocritical care unit
C. Dias, E. Pereira, A. Cerejo, J. A. Paiva, M. Czosnyka, Portugal and U.K.

16:00 – 16:30 Coffee Break (Room Douro)

16:30 – 18:00 Discussion of bootstrap projects

19:30 Informal social event

18th Meeting of European Society of Neurosonology and Cerebral Hemodynamics

8:30–13:00 Basic Tutorial (Rooms Corgo and Tâmega)
Chairperson: E. Bartels, Germany, and J. Sargento-Freitas, Portugal

8:30–10:00 Basic Tutorial: Theory (Room Corgo)
(T1) Basic Ultrasound Principles – V. Oliveira, Portugal
(T2) Ultrasonography of Carotid Stenosis – J. Klingelhofer, Germany
(T3) Clinical impact of IMT measurement – M. Rodrigues, Portugal
(T4) Ultrasonography of vertebral arteries – G. M. von Reutern, Germany
(T5) Non-Atherosclerotic Cervical Arterial Disease – G. Baltgaile, Latvia
(T6) Transcranial Doppler/Duplex ultrasonography – E. Bartels, Germany

10:00–10:20 Basic Tutorial: Practical Demonstration of extracranial and intracranial ultrasound evaluation - P. Castro, Portugal

10:20–10:50 Coffee Break (Room Douro)

10:50-13:00 Basic Tutorial: Hands-on (25 min rotations in groups) (Room Tâmega)
(Group 1) Cervical carotid artery examination – G. Baltgaile, Latvia
(Group 2) Cervical vertebral artery examination – S. Piñeiro, Spain
(Group 3) Transcranial Duplex Sonography – J. Sargento-Freitas, Portugal
(Group 4) Transcranial Doppler diagnostic – M. Rubiera, Spain
(Group 5) Transcranial Doppler monitoring – P. Castro, Portugal

13:00-14:00 Lunch (Living of Food Court)

14:00-18:00 Advanced Tutorial
Chairperson: E. Vicenzini, Italy, and P. Castro, Portugal

14:00-15:30 Advanced Tutorial: Theory (Room Corgo)
(T7) Transcranial Imaging Planes - advanced approach using fusion imaging – S. Schreiber, Germany
(T8) Sonothrombolysis and ultrasound monitoring in acute stroke interventions – M. Rubiera, Spain
(T9) Contrast agents: plaque risk and cerebral perfusion – R. Kern, Germany
(T10) Microemboli detection in different settings – D. Russell, Norway
(T11) Extracranial and Transcranial venous evaluation – J. Valdheza, Germany
(T12) Cerebral Parenchyma Ultrasound Imaging – U. Walter, Germany
SATURDAY, 25th of May 2013

8:00 – Reception desk opening (Foyer of Floor 0)
8:30–19:00 Exhibition (Room Douro)
8:30–10:30 International certification examination in neurosonology: practical (Room Tâmega)
E. Bartels, Germany, and G.M. von Reutern, Germany
8:30–9:30 – Teaching Symposium on Autoregulation (Room Porto)
Chairperson: V. Novak, USA
(TS1) Multimodal Pressure-Flow Analysis to Assess Dynamic Cerebral Autoregulation
A. Yang, Taiwan
9:30–10:00 Coffee break (Room Douro)
10:00 – 11:30 Multimodal monitoring of the neurocritical care patient – Joint Symposium of ESNCH and CARnet (Room Porto)
Chairpersons: R. Aaslid, Switzerland and R. Panerai, UK
(L4) Non-invasive assessment of intracranial pressure dynamics - R. Aaslid, Switzerland
(L5) Cerebral autoregulation measurement - M. Czosnyka, UK
(L6) Electroencephalography role in neurocritical care - F. Sales, Portugal
(L7) Multimodal monitoring in neurocritical care practice - C. Dias, Portugal
Discussion
11:30–12:30 Welcome ceremony (Room Porto)
Chairpersons: E. Azevedo, Portugal and V. Oliveira, Portugal
11:30–11:40
Greetings from the Portuguese Society of Neurosonology - E. Azevedo, Portugal and V. Oliveira, Portugal
Greetings from the European Society of Neurosonology and Cerebral Hemodynamics - L. Csiba, Hungary,
President of ESNCH and D. Russell, Norway. Founding President of the ESNCH
Greetings from the Cerebral Autoregulation Network - David Simpson, Chairman of the CARNet, UK
11:40–12:00 – (L8) Egas Moniz and cerebral hemodynamics: the man behind the Nobel Prize – V. Oliveira, Portugal
12:00–12:20 - (L9) Aging our arteries. A story about ADAM and EVA – E.B. Ringelstein, Germany
12:20–12:30 - Musical moment – Fado by the medical students of University of Porto
12:30–13:30 – Lunch break and NSRG EC meeting (Restaurant Madruga; Room Minho/Lima)
13:30–15:20 Session I: Atherosclerotic risk assessment (Room Porto)
Chairpersons: M. Kaps, Germany and J. Molto, Spain
(L10) Can we identify the unstable carotid artery plaque? – D. Russell, Norway
(L12) Is there a clinical value of plaque perfusion imaging? – H. Popper, Germany
Oral presentations:
(O13) Screening of cerebrovascular diseases in a stroke prevention centers in Latvia
G. Baltguile, T. Timefejeva, A. Raita, Ž. Kovaldina, Latvia
16:50-18:00 Session III: Cerebral hemodynamics (Room Porto)
Chairpersons: R. Vaz, Portugal, and Z. Garami, USA

(L15) Cerebral hemodynamics and the aging brain – F. Sorond, USA

(L16) Why space flight is like ageing: the vestibular-brain blood flow link– J. Serrador, USA

Oral presentations:

(O20) Independent progression of cerebral and skin microcirculatory dysfunction in type 1 diabetes mellitus – preliminary report.
G.M. Kozera, J. Neubauer-Geryk, B. Wolnik, S. Szczeryba, W.M. Nyka, L. Bieniaszewski, Poland

(O21) Reduced pressure reactivity is related to lethal outcome in brain injured patients
B. Schmidt, J.J. Schwarze, M. Weinhold, M. Czosnyka, J. Klingelhofer, Germany and U.K.

(O22) Relationship between white matter lesions on magnetic resonance imaging and cerebral hemodynamics measured by transcranial color flow imaging
H. Mitsumura, K. Sakuta, Y. Sengoku, Y. Kono, T. Kamiyama, H. Faruhata, Y. Iguchi, Japan

18:00-19:00 – Poster Session I (Foyer of Floor 0 and 1)

Poster sessions I-1 to I-6

Poster session I-1 : Extracranial arterial disease I
Chairpersons: G.M.von Reutern, Germany, and M. Rodrigues, Portugal

(P8) Carotid intima-media thickness in rheumatoid arthritis

(P9) APOE gene polymorphism and symptomatic carotid artery disease - An Egyptian study
S. El-Jaafary, S. Ahmed, M. Fathy, F. Abd-Allah, Egypt

(P10) Arterial stiffness of the internal carotid artery does not distinguish patients with stable unruptured aneurysms from normal controls
F. Perren, P. Reynard, E. Fonck, D. Rüfenacht, N. Stergiopoulos, Switzerland


(P12) Carotid atherosclerosis and metabolic syndrome
A. Arsovski, Z. Arsovski, A. Poposki, S. Poposki, Macedonia

(P13) Assessment of the unstable carotid plaque using fluorine-18-labelled fluorodeoxyglucose (FDG) PET

(P14) Complications and Restenosis after carotid endarterectomy, outcomes of a Portuguese centre
J. Meireles, C. Ferreira, R. Santos, E. Azevedo, Portugal
(P15) Evaluating the effect of carotid endarterectomy on the cognitive functions of the patients having a carotid stenosis more severe than 70%

(P16) Intima-media thickness among Mediterranean countries: inter-percentile comparison
L. Pereira, M. Biscata, R. Guerreiro, I. Palma, M. Rodrigues, Portugal

(P17) Carotid stenosis in combination with other factors in the development of stroke
B. Živadinović, Serbia

(P18) Characterization of carotid disease: Carotid Ultrasound VS Carotid Angiography

(P19) shear wave elastography vs. grey-scale median in the assessment of carotid artery disease: a comparison with histology

Poster session I-2: Cerebral vasoreactivity
Chairpersons: R. Panerai, UK, and M. Reinhard, Germany

(P20) The ratio of the dominant hemisphere neuropsychological assessment and indicators of cerebral blood flow
E. Lysenko, Y. Mikadze, A. Shakhovich, S. Abucaid, Russia

(P21) A novel cerebral flow monitor for detecting autoregulation - animal study
M. Kamar, A. Nini, I. Breskin, A. Ron, L. Barkan, Z. Silman, M. Balberg, Israel

(P22) Cerebral autoregulation assessment in Basilar artery stenosis
Xip. Gong, P. Dong, Pand. Zhang, Xingq. Zhao, Yong, Wang, China

(P23) Cerebral perfusion pressure noninvasively in severe head injury.
M.J. Dominguez, A. Sanchez, Spain

(P24) Cerebrovascular reactivity to L-arginine in ischemic leukoaraisis
B. Živan, M. Zajan, M. Zaletel, J. Pretnar- Oblak, Slovenia

(P25) Continuous monitoring of vertebrobasilar hemodynamics utilizing TCDS transducer holder Sonopod during postural changes
T. Shiogai, M. Yamamoto, Y. Arima, D. Yamakawa, K. Yoshikawa, T. Mizuno, M. Nakagawa, Japan

(P26) Dynamic cerebral autoregulation changes during sub-maximal handgrip maneuver
Nogueira RC, Bor-Seng-Shu E, Santos MR, Negrão CE, Teixeira MJ and Panerai R, Brazil

(P27) Ultrasonographic study in chronic migraine and relationship with endothelial damage biomarkers

(P28) Usefulness of Ultrasonology for monitoring the posterior reversible encephalopathy syndrome
P. Lochner, C. Mader, R. Nardone, F. Tezzon, Francesco Brigo, Giovanni Mulare, Maria Luisa Zedde, Italy

(P29) The correlation between attention, movement coordination, cerebral hemodynamics and ethanol concentration on healthy persons
M. Orosz, K.R. Kovacs, G. Hofer, L. Kardos, L. Csiba, Hungary

Poster session I-3: New technologies
Chairpersons: T. Shiogai, Japan, and V. Cruz, Portugal

(P30) Clinical assessment of innovative intracranial pressure and volume wave monitoring system
A. Raquaskas, V. Petkus, R. Chomskis, R. Ferenets, P.K. Eide, A. G. Sorteberg, Lithuania, Estonia and Norway

(P31) Innovative method of cerebrovascular autoregulation monitoring without ABP
V. Petkus, A. Raquaskas, A. Preiksaitis, S. Rocka, R. Chomskis, L. Bartusis, Lithuania

(P32) Computer simulation of the cardiovascular system
A. Santos, L. Sousa, J. Tavares, R. Santos, P. Castro, E. Azvedo, Portugal

(P33) Monitoring changes in cerebral blood flow using ultrasound tagged near infrared spectroscopy – A comparative study to 133Xe SPECT

(P34) Web system for medical history management and advanced data analysis
N. Barreira, S. G. Vázquez, C. Ferreira, E. Azvedo, J. Rouco, R. Rocha, Auréliio Campilho, Spain and Portugal

(P35) Computational simulation of the movement of solids and gasses in the cerebral arteries.

(P36) Carotid artery bifurcation modelling from patient CT angiography and ultrasound technics
A. Santos, J. Tavares, L. Sousa, C. Castro, C. Antônio, R. Santos, P. Castro, E. Azvedo, Portugal

(P37) Carotid flow predictions based on artificial neural network and Doppler signal
C. Antônio, C. Castro, L. Sousa, R. Santos, P. Castro, E. Azvedo, Portugal
(P38) Hemodynamics in human carotid bifurcation based on Doppler 
  L. Sousa, C. Castro, C. António, F. Sousa, R. Santos, P. Castro, E. Azevedo, Portugal 
(P39) Assessment of the unstable carotid plaque using 3T MRI 
  K. Skagen, M. Skjelland, Scott 2, P.K. Hol, D. Russel, Norway 
(P40) Double inversion recovery imaging of cortical damage in intracranial atherosclerosis 

Poster session I-4: Case Reports 
Chairpersons: N. Bornstein, Israel, and M. Rubiera, Spain,

(P41) Arterial thrombus and stroke in a patient with Crohn’s Disease 
(P42) Cerebral Embolic Activity in a Patient during Acute Crisis of Takayasu’s Arteritis 
  R.C. Nogueira, E. Bor-Seng-Shu, E. Santos, M.J. Teixeira, Brazil 
(P43) Osler-Weber-Rendu disease with cervical – intracranial and pulmonary arteriovenous malformations: successful management of transient ischemic attacks 
  J. Valaikienë, D. Jataciz, Lithuania 
(P44) Trigeminal neuralgia and TIA’s in a patient with elongation and ectasia of the basilar artery 
  E. Vavrek, Bulgaria 
(P45) Extracranial color coded duplex sonography in a case with recurrent intra-cerebral hematoma: is it a useful tool? 
  F. Abd-Allah, A. Esmail, A. Hegazy, Egypt 
(P46) Mild sensory aphasia after a stroke in the right hemisphere in a right-handed man suffering stroke 
  E.Vavrek, N.Nicheva-Vavrek, E.Vassileva, Bulgaria 
(P47) The role of transcranial Doppler in reversible cerebral vasospasm syndrome — a case report. 
  R.C. Nogueira, L. Peraza, M. de Oliveira, K. James, E. Bor-Seng-Shu, M.J. Teixeira, Brazil 
(P48) Aortic dissection cause of ischemic stroke 
  H. Nicolae, A. Popescu, G. Cioara, C. Panea, Romania 
(P49) Bilateral internal carotid artery dissection in Behçet’s disease patient: A case report 
  T. Mukai, N. Hosomi, A. Segawa, N. Kinosita, I. Kitamura, S. Aoki, H. Ueno, K. Ochi, T. Yamavaki, M. Matsumoto, Japan 
(P50) Pulmonary A-Vm closure by amplatzer device 
  B.Zamani, M.Rohani, S.Adibeig, A.ghofraniha, Iran 
(P51) Carotid A. Dissection with floating clot after pulse therapy for optic neuritis 
  B. Zamani, Iran

Poster session I-5: Eye, Muscle and Veins 
Chairpersons: M. Del Sette, Italy, and M. Manita, Portugal

(P52) Orbital sonography in subarachnoid hemorrhage 
  J. Bäuerle, N. Gross, K.J. Butler, W. Lagrèze, M. Reinhard, Germany 
(P53) Reproducibility and accuracy of optic nerve sheath diameter assessment using ultrasound compared to magnetic resonance imaging 
  J. Bäuerle, F. Schuchardt, L. Schroeder, K. Egger, M. Weigel, A. Harloff, Germany 
(P54) Measurement of optic nerve sheath diameter in Egyptian females with Idiopathic Intracranial Hypertension 
  N. Kishk, A. Hassanen, H. Abdelhafiz, N. Shalaby, N. Abukresearch, M. Elsaed, Egypt 
(P55) Optical nerve diameter and echogenicity are impaired in demyelinating diseases 
  J. Fernández-Domínguez, R. García-Rodriguez, V. Mateos, Spain 
(P56) Transorbital echography for assessment of optical nerve damage in patients with multiple sclerosis 
(P57) Space-time ultrasound imaging of calf muscle lesions 
  E. Titiana, S. Karakaneva, I. Tournev, Bulgaria 
(P58) Transcranial Doppler ultrasonography with jugular vein compression can detect impairment of intracranial compliance 
  R.C. Nogueira, M.F. Machado, F. Paschoal, E. Bor-Seng-Shu, M.J. Teixeira, Brazil

19.30 Shuttle to Welcome Reception (Port Wine Cellars)

SUNDAY, 26 May 2013

8:00 – Reception desk opening (Foyer of Floor 0)

8:30–19:00 Exhibition (Room Douro)
09:00–10:10 Session IV: Acute stroke management (Room Porto)
Chairpersons: E. Titianova, Bulgaria, and M. Ribo, Spain

(L17) Peri-interventional Diagnostic and Therapeutic ultrasound – G. Tsivgoulis, Greece
(L18) A new paradigm in acute stroke treatment: Should neurologists become neurointerventionalists? – M. Ribo, Spain

Oral presentations:
(O23) Treatment delay reduces recanalization after IV Thrombolysis in acute stroke
(O24) Ischemic Stroke is Associated with Transiently Impaired Autoregulation
(O25) Transcranial targeting low frequency ultrasound thrombolysis system: in vitro sonothrombolysis experiment and evaluation of blood flow monitoring in human

10:10–11:20 Session V: Intracranial pathology (Room Porto)
Chairpersons: A. Massaro, Brazil, and J. Carneado, Spain

(L19) Usefulness of Doppler Ultrasound in “vertigo plus” - JM de Bray, France
(L20) How to refine the criteria for intracranial stenting after SAMMPRIS? – L. Wong, Hong-Kong

Oral presentations:
(O26) Prevalence of intracranial atherosclerotic stenosis in Italian stroke patients: the ISIDE study
G. Meneghetti for the ISIDE Study Group, Italy
(O27) Recurrence of cerebrovascular events in patients with intracranial atherosclerotic disease
(O28) Transcranial Doppler imaging in sickle cell disease children: the “confounding” effect of age and anemia
M. Diomedi, I. Zivi, A. Rocco, C. Alfieri, K. Paciaroni, Italy

11:20–11:50 Coffee Break (Room Douro)

11:50-12:50 Session VI: Heart & Brain I – New approaches for stroke prevention (Room Porto)
Chairpersons: D. Russell, Norway, and E. Ringelstein, Germany

(L21) Atrial fibrillation epidemics: a new era in stroke prevention - L. Cunha, Portugal
(L22) Prevention of stroke in atrial fibrillation: a new era on detection devices – R. Dittrich, Germany

Oral presentations:
(O29) Ultrafast Doppler imaging of blood flow dynamics in the myocardium
B-F. Osmanski, M. Perrot, G. Montaldo, A. Bel, E. Messas, M. Tanter, France
(O30) Carotid ultrasound and transesophageal echocardiography - Complementary methods for diagnosing atherosclerosis?

12:50–13:00 In memoriam Prof Furuhata, by T. Shiogai, Japan (Room Porto)

13:00-14:10 Lunch Break and ESNCH EC meeting (Restaurant Madruga; Room Minho/Lima)

14:10-15:30 Session VII: Heart & Brain II – Cerebrovascular Monitoring (Room Porto)
Chairpersons: N. Bornstein, Israel, and P. Pinho, Portugal

(L23) Which ultrasound criteria require recanalisation of carotid stenosis before cardiac surgery? – R. Dittrich, Germany
(L24) Cerebrovascular risk reduction with TCD monitoring of cardiac and aortic interventions – Z Garami, USA
(L25) Predicting Coronary Artery Disease (CAD) in Stroke patients – N. Bornstein, Israel

Oral presentations:
(O31) Cerebral and systemic hemodynamics in patients with hypertrophic cardiomyopathy and syncope.
I. Zivi, R. Morgagni, A. Rocco, E. Bonelli, M. Diomedi, Italy
(P59) Is plaque neovascularisation detected by contrast enhanced ultrasound associated with symptomatic carotid artery disease?
D. Artemis, L. Schall, M. Kablau, M.G. Hennerici, T. Riester, R. Kern, Germany
(P60) Morphological changes of the internal carotid artery and association with vascular risk factors and carotid ischemic stroke
(P61) Restenosis after carotid artery stenting: which are the perfect velocity criteria? Example of an ultrasonographic diagnostic protocol
P. Barros, H. Felgueiras, D. Pinheiro, M. Guerra, V. Gama, M. Veloso, Portugal
(P62) Internal carotid artery stenosis: validation of Doppler velocimetric criteria
A. Monteiro, R. Santos, C. Ferreira, A. Costa, E. Azevedo, Portugal
(P63) Intracranial internal carotid artery dissection: characteristics of early ultrasound diagnosis, follow-up and early predictors of recanalization with ultrasound contrast agents.
E. Vicenzi, M. Toscano, I. Maestri, B. Petolichio, F. Puledda, G.L. Lenzi, V. Di Piero
(P64) Low ankle brachial index in acute ischemic stroke; Dose APOE gene polymorphism have a role?
S. El-Jaafary, F. Abd-Allah, M. Fathy, H. Hosny, M. El-Tamawy
(P65) Neurosonology versus neuroimaging in the diagnosis of cerebrovascular disease: comparison and diagnostic agreement
A. Tanzi, U. Scoditti, R. Silvano, M. Agosti, C. Zanferrari, Italy
(P66) The Role of Adhesion Molecules (sICAM and sVCAM) in Atherosclerotic Ischemic Stroke
N. Kishk, O. Elserafy, H. Hosny, N. Ghanem, S. El-Shafei, M. Nada, R. Shamol, Egypt
(P67) Reversal of Ophthalmic Artery flow and severe ipsilateral carotid stenosis
M. Grilo, A. Monteiro, R. Santos, C. Ferreira, A. Costa, E. Azevedo, Portugal
(P68) Migraine as a risk factor for cranial artery dissection
A. Lovrencic-Huzjan, D. Sodec Simic, I. Martinic Popovic, M. Bosnar Paretic, V. Vukovic Cvetkovic, V. Basic Kes, Croatia
(P69) Relationship between blood pressure control and arterial stiffness, carotid artery and retina damages in hypertensive patients with and without type 2 diabetes
E. Azevedo, S. Penas, C. Ferreira, L. Martins, A. Campilho, J. Polonia, Portugal

Poster session II-2: Intracranial vascular and parenchyma pathology
Chairpersons: V. Zetola, Brazil and M. Viana-Baia, Portugal

(P70) Transcranial brain parenchyma sonography in Parkinson’s disease with glucocerebrosidase mutations
M. Mijailjov, N. Kresojevic, S. Peric, A. Pavlovi, M. Svetel, M. Jankovac, V. Dobricin, I. Novakovic, M. Lakosevic, V. Kosti, Serbia
(P71) Transcranial sonography findings in neurosaroidosis
M. Mijailjov, V. Vucinic, N. Sterni, J. Vidovic, M. Stepanovic, M. Orlic, S. Filipovic, Serbia
(P73) Transcranial sonography and tilt test in idiopathic REM behaviour disorder: preliminary data
E. Guaschino, N. Ghiotto, D. Bosone, A. Moglia, Italy
(P74) Severity of restless legs syndrome is inversely correlated with echogenicity of the substantia nigra in different neurodegenerative movement disorders. a preliminary observation.
(P75) Sickle cell disease task force - A new concept to improve the number of children identified.
MC. Lange, V. Zetola, AC. Leite, C. Lou, DL. Gomes, C. Moro, MM. Alves, AR. Massaro to the Brazilian Task Force Group, Brazil
(P76) Stroke and disability predictors in patients with intracranial atherosclerosis
A. Palmieri, F. Farina, G. Meneghetti G, C. Baracchini, Italy
(P77) Vertebrobasilar Insufficiency and Vascular screening: the role of TCD
V. Zetola, R. Mendes, C. Adriano, A. Mair, M. Lange, A. Caldari, M. Oriques, M. Mocellin, Brazil
(P78) hsCRP and PAI-1 Level and Its Association with Ischemic Stroke with Underlying Intracranial Stenosis Using TCD for assessment intracranial stenosis at RSUPNCM Jakarta
S. Harris, I. Aprianti, N. Nengah Rida Ariarini, Indonesia
(P79) Neurosonologic study of cerebral vascular anomalies (CVAs)
L. Pascazio, C. Chiapparino, P. Iaffaldano, F. Federico, Italy

(P80) Transcranial Color Doppler in adult patients with Sickle Cell Disease
F.M. Casoni, G. Graziadei, A. Marcon, P. Ridolfi, I. Gandolfi, F. Annoni, M.D. Cappellini, Italy

Poster session II-3: Acute stroke
Chairpersons: M. Siebler, Germany, and M. Veloso, Portugal

(P81) Dynamic cerebral autoregulation in acute intracerebral hemorrhage
M. Oeineck, F. Neunhöffer, S. Meckel, K.J. Butler, C. Weiller, M. Reinhard

(P82) The Norwegian Sonothrombolysis in Acute Stroke study NOR-SASS
A. Nacu, CE. Kvistad, U. Waje-Andreassen, H. Naess, L. Thomassen, Norway

(P83) Ultrasound-enhanced systemic thromlysis for acute ischemic stroke
R.C. Nogueira, K.A. Norremose, A.N. Esteves, M.L. Oliveira, K.J. Almeida, E. Bor-Seng-Shu, FI
Yamamoto, E.F. Evaristo, M.J. Teixeira, Brazil

(P84) Early hemodynamic changes post intracranial thrombectomy: a sign of vessel wall injury?
J.M. Pignat, V. Mendes Pereira, F. Perren, Switzerland

(P85) Improvement of transcranial ultrasound uniformity by random modulation
O. Saito, H. Furuhata, Japan

(P86) Neuronosological monitoring during thrombolytic therapy: TCCD’s role in diagnosis and selection of therapeutic strategies
L. Pascazio, C. Chiapparino, P. Iaffaldano, F. Federico, Italy

(P87) Sonothrombolysis in Araucanía, Chile: thrombolytic treatment in acute ischemic stroke in a new stroke center
R. Rivas, C. Klapp, M.C. Abarca, L. Bustos, M. Manosalva, C. Merino, B. Cid, Chile

(P88) The relationship between the degree of cerebral blood flow augmentation by external counterpulsation and clinical outcomes after acute ischemic stroke
L. Xiong, W. Hua Lin, X. Yan Chen, T. Leung, Y. Soo, K. Sing Wong, China

Poster session II-4: Heart and brain + Peri-interventional
Chairpersons: K. Niederkorn, Austria, and C. Correia, Portugal

(P89) Cerebral Embolisation During Catheter Ablation of Atrial Fibrillation

(P90) Modifying effect of aortic atheroma on ischemic events recurrence in stroke patients with cervical and intracranial steno-occlusive disease
L. Pereira, C. Fernandes, M. Rodrigues, Portugal

(P91) Segmental left ventricle hypokinesis is associated with embolic signals in transcranial Doppler
A. Warsz-Wiamecka, A. Lasek-Bal, P. Puz, Z. Kazibutowska, Poland

(P92) Perioperative assessment of cerebral autoregulation in patients with arteriovenous malformation
V.B. Semenyuty, V.A. Aliiev, G.K. Panuntcev, A. Patzak, A.V. Kozlov, Russia

(P93) Perioperative assessment of cerebral autoregulation in patients with hydrocephalus
V.B. Semenyuty, V.A. Aliiev, V.P. Borsnev, A. Patzak, L.V. Rozechenko, A.V. Kozlov, G.K. Panuntcev,
Sh.Sh. Ramazanov, Russia and Germany

(P94) An Observational Study of Cerebral Blood Flow Velocity during Hypotensive Epidural Anesthesia
A.M. Bombardieri, N. Sharrock, G. Go, J. Drummond, Italy and U.S.A.

(P95) Intraoperative ultrasonography for presumed brain metastases: a case series study
Teixeira, Brazil

(P96) Searching for a measure on collateral blood flow: multimodal intraoperative monitoring during temporary occlusion in middle cerebral artery aneurysm surgery
P.A. Silva, A. Vilarinho, A. Cerejo, Celeste Dias, Rui Vaz, Portugal

(P97) Systemic blood flow and intracranial arterial velocities changes in the early postoperative course after cardiac surgery
A. Catalán, Sierra R, Díaz R, Spain

(P98) TC Doppler and brain tissue oxygen pressure monitoring in cerebral aneurysm surgery
A. Vilarinho, P. A. Silva, A. Cerejo, C. Dias, R. Vaz, Portugal

(P99) The number and timing of cerebral emboli during cardiac surgery in conjunction with post-operative MRI scans and neuropsychological tests

Poster session II-5: Cerebral Hemodynamics
Chairpersons: A. Razumovsky, USA, and D. Simpson, UK

(P100) Preterm infant brain mapping of cerebral blood flow indexes using Ultrafast Doppler imaging.
C. Demené, M. Pernot, V. Biron, M. Alison, M. Fink, O. Baud, M. Tanter, France

(P101) A longitudinal retrospective study on intracranial arterial pulsatility index: its evolution in ten years’ time and how it relates to the occurrence of cerebral and systemic ischemic disease.
M. Suárez Pinilla, L. Benavente Fernández, S. Calleja Puerta, Spain

(P102) Clinical and analytical predictors of intracranial pulsatility in cerebrovascular prevention

(P103) Receiver operating characteristic analysis of noninvasive intracranial pressure measurement methods
A. Ragauskas, L. Bartuolis, R. Zakelis, G. Daubaris, V. Matijosaitis, K. Petrikonis, D. Rastenyte, Lithuania

(P104) Endothelial dysfunction and leukoaraiosis in patients with obstructive sleep apnea syndrome
J. Pretnar Oblak, M. Zalatek, A. Resman-Gašperšič, L. Dolenc-Grošelj, B. Žvan, A. Keren, M. Zaletel, Slovenia

(P105) Role of endothelial function parameters in evaluation of patients with Fabry disease

(P106) Effects of iodinated contrast media on vasospasm due to subarachnoid hemorrhage
T. Nikitina, V.B. Semenyant, V.P. Bershnev, V.A. Aliev, A. Patzak, M. Sendeski, Germany and Russia

(P107) Prognostic significant of Cerebral Blood Flow volume in Vascular Aphasia by Duplex Sonography
A. Hassanein, N. Kishk, K. Morsi, N. Abokrysha, M. Gerges, Egypt

(P108) Evaluation of Cerebral hemodynamics & its impact on cognitive screening test in SLE patients.
N. Kishk, A. ELGhonamy, A. Nabeel, M. Farghaly, Y. Zakaria, N. Ramadan, M. Raslan, Egypt

(P109) Infratemporal fossa: A window to insonation of internal maxillary and meningeval arteries
M. Lepic, T. Lepic, Serbia

(P110) Diabetes Mellitus and Intracranial pulsatility index: more than just elevated glucose

16:30-17:00 - Coffee Break (Room Douro)

17:00-18:00 - Selected poster presentation (Room Porto)
Chairpersons: M. Sturzenegger, Switzerland and K. Niederkorn, Austria

18:00–19:00 General Assembly of the European Society of Neurosonology and Cerebral Hemodynamics (ESNCH) (Room Porto)

19:00-19:30 – Meeting of the New EC of ESNCH (room Corgo)

20:00 Shuttle Bus for Gala Dinner

21:00 Gala Dinner and Awards (Boat in River Douro)

MONDAY, 27 May 2013

8:00 – Reception desk opening (Foyer of Floor 0)

8:30–13:30 Exhibition (Room Douro)

9:00-10:10 Session VIII: Ultrasound of cerebral parenchyma, eye, muscle and nerve (Room Porto)
Chairpersons: G. Meneghetti, Italy and M. Siebler, Germany

(L26) Role of ultrasound in inflammatory and degenerative brain diseases – U. Walter, Germany

(L27) Tissue velocity imaging of muscle movements – M. Siebler, Germany

Oral presentations:

(O33) Transcranial sonography findings in spinocerebellar ataxia type 3 (Machado-Joseph disease): a cross-sectional study

(O34) Optic nerve sheath diameter, hypobaric Hypoxia and acute mountain sickness: a prospective color study
P. Lochner, T. Cappello, G. Hofer, E. Procter, H. Brugger, L. Coppel, G. Strapazzon, Italy

(O35) The effect of physical characteristics on reference nerve sizes at multiple sites/levels of the arm and neck
T. Sugimoto, K. Ochi, N. Hosomi, T. Mukai, H. Ueno, T. Nakamura, T. Takahashi, T. Ohtsuki, T. Yamawaki, T. Kohriyama, M. Matsumoto, Japan

10:10-11:10 Session IX Cervical and cerebral venous ultrasonography (Room Porto)
Chairpersons: C. Baracchini, Italy, and J. Valdeneu, Germany

(L28) Ultrasound in transient global amnesia. is it useful? - C. Baracchini, Italy

(L29) CoSMo study results on CCSVI and MS - M. Del Sette, Italy
**Oral presentations:**

(O36) Cerebral venous outflow in children’s age. The normal indicators, pathology and diagnostics
  *M. Abramova, I. Stepanova, S. Novoselova, Russia*

(O37) Scalp veins in outflow from cranium in patients with parasagittal meningiomas
  *V.B. Semenyutin, D.A Pechiborsch, V.A. Aliev, A. Putzak, G.K. Panantsev, A.V. Kozlov, Russia and Germany*

11:10–11:30 **Coffee Break (Room Douro)**

11:30–12:30 **Session X: Pitfalls and interesting cases in neurosonology - interactive session (Room Porto)**

*Chairpersons: C. Kremer, Sweden and L. Olah, Hungary*

(O38) A rare case of familial moyamoya disease presenting with non-aneurysmal subarachnoid hemorrhage (NASAH): hemodynamic features.
  *M. Toscano, F. Puledda, G. Guidetti, G.L. Lenzi, V. Di Piero, E Vicenzini, Italy*

(O39) Severe intracranial involvement in a case of giant cell arteritis

(O40) Arteriovenous malformation in the carotid artery bifurcation as a rare cause of syncope – case report
  *D. Sváková, J. Neumann, F. Charvát, J. Lacman, D. Netuka, P. Bodnárová, Czech Republic*

(O41) Prompt diagnosis of carotico-cavernous fistula by color coded sonography
  *J. Valaikienė, A. Širvinskas, Lithuania*

(O42) Vertebral artery dissection and acute right cerebellar infarction in patient with coexisting transverse vertebral foramen stenosis
  *J. Valaikienė, D. Jatuzis, J. Dementaviciene, Lithuania*

(O43) Bilateral steno-occlusive disease of the middle cerebral artery: a case report with clinical-hemodynamic mismatch
  *H. Rocha, R. Santos, P. Castro, A. Bastos-Leite, E. Azevedo, M. Carvalho, Portugal*

12:30–13:00 **Highlights of the Meeting (Room Porto)**

*Chairpersons: K. Niederkorn, Austria and M. Sturzenegger, Switzerland*

13:00–13:30 **Closing Ceremony & Invitation to the 19th ESNCH Meeting in 2014 (Room Porto)**

*Chairpersons: E. Azevedo and V. Oliveira, Portugal, and E. Vicenzini and M. Diomedi, Italy*