

# Scientific Program (updated to Sept 1, 2009)

**Thursday, September 17, 2009**

## *18th Advanced Course "NEW INSIGHTS IN WHITE MATTER DISEASES"* *Lecture Hall "TERPSICHORE" (Diagnostic)*

*Chairpersons : Olof Flodmark (Sweden), Stephanos Lachanis (Greece)*

- 08:30-09:00      **Myelin maturation and white matter development: an embryologic eye view.**  
John Hesselink (USA)
- 09:00-09:30      **Concepts of myelin and myelination in MRI**  
John Hesselink (USA)
- 09:30-10:00      **Conventional, diffusion and magnetization transfer MRI in the study of myelination.**  
Maria Argyropoulou (Greece)
- 10:00-10:30      **White-matter diseases: radiologic-pathologic correlation**  
James Smirniotopoulos (USA)

### **10:30-11:00 Break**

*Chairpersons : John Hesselink (USA), Clementine Karageorgiou (Greece)*

- 11:00-11:30      **New clinicopathological perspectives in MS**  
Ludwig Kappos (Switzerland)
- 11:30-12:00      **New diagnostic criteria in MS**  
Frederik Barkhof (The Netherlands)
- 12:00-12:30      **Monitoring therapy in MS**  
Ernst Wilhelm Radü (Switzerland)
- 12:30-13:00      **White matter lesions in ageing and dementia**  
Frederik Barkhof (The Netherlands)

### **13:00-14:30 Lunch**

*Chairpersons : Pia Sundgren (Sweden), Frederik Barkhof (The Netherlands)*

- 14:30-15:00      **Therapeutic effects on white matter**  
Alex Rovira (Spain)
- 15:00-15:30      **MRI pattern recognition in white matter disorders**  
Marjo Van der Knaap (The Netherlands)

### **15:30-16:00 Break**

*Chairpersons : Pia Sundgren (Sweden), Frederik Barkhof (The Netherlands)*

- 16:00-16:30      **MRI definition of novel white matter disorders.**  
Marjo Van der Knaap (The Netherlands)
- 16:30-17:00      **Differential diagnosis of white matter lesions at high-field MR.**  
Majda Thurnher (Austria)
- 17:00-17:30      **Parcelation of the white matter using DTI: insights into the functional connectivity of the brain**  
Spyridon Kollias (Switzerland)
- 17:30-18:00      **3-Tesla study of the spinal cord white matter**  
Luca Albin Riccioli (Italy)

**19:00 WELCOME RECEPTION at Hilton Galaxy Bar Terrace**

# Thursday, September 17, 2009

## 2nd Advanced Interventional “SPINE AND SPINAL CORD” Lecture Hall "HESPERIDES" (Interventional)

### 08.30-10.30 SPINAL VASCULAR MALFORMATIONS

*Chairpersons : Luc Picard (France), Anton Valavanis (Switzerland)*

- 08:30-9:00            **Classification of spinal cord arteriovenous malformations**  
Timo Krings (Canada)
- 09:00-9:30           **Imaging of the spinal vascular malformations**  
Robbert Nijenhuis (The Netherlands)
- 09:30-10:00         **Intrinsic spinal cord AVMs**  
Georges Rodesch (France)
- 10:00-10:30         **Dural AVMs of the spinal cord**  
Anton Valavanis (Switzerland)

### 10:30-11:00 Break

### 11.00-17.30 SPINE TREATMENTS ACROSS EUROPE

*Chairpersons : Jean Baptiste Martin (Switzerland), Spyridon Kavvadias (Greece)*

- 11:00-11:30         **Tumor ablation of the spine**  
Afshin Gangi (France)
- 11:30-12:00         **Disc herniation: diagnostic procedures**  
Alexis Kelekis (Greece)
- 12:00-12:30         **Disc herniation: therapeutic procedures**  
Cosma Andreula (Italy)
- 12:30-13:00         **Disc ozone therapy: does it replace surgery?**  
Mario Muto (Italy)

### 13:00-14:30 Lunch

*Chairpersons : Jacques Chiras (France), Charalambos Drossos (Greece)*

- 14:30-15:00         **Advances in percutaneous treatment of low back pain**  
Jacques Theron (France)
- 15:00-15:30         **Percutaneous treatment of the cervical spine**  
Giovanni Carlo Anselmetti (Italy)

### 15:30-16:00 Break

*Chairpersons : Jacques Chiras (France), Charalambos Drossos (Greece)*

- 16:00-16:30         **Kyphoplasty. Better or worse than vertebroplasty?**  
Kai Wilhelm (Germany)
- 16:30-17:00         **Vertebroplasty. What's new?**  
Hendrik Fransen (Belgium)
- 17:00-17:30         **Treatments for sciatica mimics: facets and sacroiliac joints**  
Massimo Gallucci (Italy)

### 19:00 WELCOME RECEPTION at Hilton Galaxy Bar Terrace

# Friday, September 18, 2009

## Morning

Lecture Hall "TERPSICHORE"

### 08:00 - 09:15 REFRESHER COURSE D I: The brain movement disorders

Chairpersons : Jordi Rusalleda (Spain), Panayotis Toulas (Greece)

- 08:00-08:15 **MRI biomarkers of Parkinson disease and Parkinsonian disorders: State of the art**  
Maria Grazia Bruzzone (Italy)
- 08:15-08:30 **Neuroimaging challenges in abnormal movement diseases**  
Beatriz Gomez-Anson (Spain)
- 08:30-08:45 **Present role of nuclear medicine in the diagnostic work-up of cognitive impairment in Lewy body disease**  
Zuzane Walker (United Kingdom)
- 08:45-09:00 **When and how should patients with movement disorders be imaged, if at all**  
Tarek Yousry (United Kingdom)
- 09:00-09:15 Discussion

### 09:15 - 10:30 OPENING CEREMONY

#### ESNR Awards

European Society of Neuroradiology: 40 years. A long way towards maturity  
Luc Picard (France)

### 10:30-10:50 Break

### 10:50-11:25 STATE OF THE ART LECTURE

Chairpersons : Athanasios D. Gouliamos (Greece)

#### Neuroradiology between Hippocratic encephalocentrism and Aristotelian cardiocentrism

Anton Valavanis (Switzerland)

### 11:25-13:00 LECTURE AND SCIENTIFIC PAPERS

Chairpersons : Guido Wilms (Belgium), Aggeliki Tavernaraki (Greece)

- 11:25-11:50 **Low grade gliomas; can we predict tumor behaviour from imaging features?**  
Charles Romanowski (United Kingdom)
- 11:50-13:00 **Scientific Papers (TE1): Imaging of brain tumors-multimodality approach I**

#### CONTRAST AGENT LEAKAGE EFFECTS: PITFALLS IN TUMOR MR PERFUSION ASSESSMENT IN THE CNS, EVALUATING ANTIOANGIOGENIC TREATMENT

C. VARALLYAY(1, 2), EA. Neuwelt(2), L. Solymosi(1)

(1)Universitätsklinikum Würzburg Dept. of Neuroradiology Würzburg GERMANY, (2)Oregon Health and Science University Dept. of Neurology, Portland, OR, USA

#### PERFUSION CT OF BRAIN TUMORS CAN BE PERFORMED WITH 25 ML OF CONTRAST MATERIAL USING 64-DETECTOR CT

K. TSUCHIYA, M. IMAI, M. YOSHIDA, H. TATEISHI, T. NITATORI

(1)Kyorin University, Department of Radiology Tokyo JAPAN

#### DIFFERENTIATION OF TUMOR RECURRENCE AND POSTTREATMENT RADIATION EFFECT: COMPARISON OF MRI COMBINED WITH PERFUSION MR/MR SPECTROSCOPY AND FDG PET

S. KIM, S.J. Kim, H.K. Lim, C.G. Choi

(1)University of Ulsan college of medicine, Asan medical center Seoul SOUTH KOREA

**THE ROLE OF MAGNETIC RESONANCE SPECTROSCOPY IN EXTRAAXIAL BRAIN LESIONS**

E. KAPSALAKI, I. Tsougos, E. Kousi, K. Fountas, I. Fezoulidis  
(1)University Hospital Of Larissa Larissa GREECE

**RADIOLOGIC FEATURES OF CYSTIC AND NONCYSTIC GLIOBLASTOMAS**

H. HWANG(1), S.J. CHOI(1), NR. KIM(2), SW. LEE(1), JH. KIM(1), HY. CHOI(1), HS. KIM(1)  
(1)Department of radiology, Gachon university Gil medical center Incheon SOUTH KOREA,  
(2)Department of pathology, Gachon university Gil medical center Incheon SOUTH KOREA

**DIAGNOSIS OF CAVERNOUS SINUS BENIGN TUMORS BASED ON THEIR RESPONSES TO RADIATION**

W. GUO(1), HC. CHEN(1), HM. WU(1), HC. PAN(2)  
(1)Department of Radiology, Taipei Veterans General Hospital Taipei TAIWAN, (2)Neurological Institute, Taipei Veterans General Hospital Taipei TAIWAN

**USING A BLOOD POOL CONTRAST AGENT FOR MAGNETIC RESONANCE PERFUSION IMAGING IN BRAIN TUMORS WITH DISRUPTED BLOOD BRAIN BARRIER– A FEASIBILITY STUDY**

A. FÖRSCHLER(1), A. Grams(2), J. Gempt(3), C. Zimmer(1)  
(1)Department of Neuroradiology, Klinikumrechts der Isar Munich GERMANY, (2)Department of Diagnostic and Interventional Radiology and Neuroradiology Essen GERMANY, (3)Department of Neurosurgery, Klinikumrechts der Isar Munich GERMANY

**THE DIFFERENTIATION OF CLASSIC MEDULLOBLASTOMAS (MB) AND MEDULLOBLASTOMA VARIANTS BASED ON MAGNETIC RESONANCE (MR) IMAGING FEATURES: A MULTICENTER STUDY**

J. FRUEHWALD-PALLAMAR(1), S. PUCHNER(1), A. ROSSI(2), S. BLASER(3), G. HEDLUND(4), AG. OSBORN(4), MM.THURNHER(1)  
(1)Medical University Vienna / Vienna General Hospital Vienna AUSTRIA, (2)Gaslini Children's Hospital Genova Genova ITALY, (3)The Hospital for Sick Children Toronto CANADA, (4)The University of Utah, school of medicine Salte Lake City, UT, USA

**THE ROLE OF PERFUSION-WEIGHTED CEREBRAL BLOOD VOLUME MEASUREMENTS FOR PREDICTING SHORT-TERM OUTCOME AND RECURRENT DISEASE IN GLIOMAS: COMPARISON WITH THE WHO-GRADING**

S. BISDAS(1), Z. Rumboldt(2), M.V. Spampinato(2), P. Giglio(2), C. Welsh(2), T. Plotas(3), U. Ernemann(1)  
(1)University Hospital of Tübingen Tübingen GERMANY, (2)Medical University of South Carolina Charleston, SC, USA, (3)CT and MRI Peloponissou, Corinth, GREECE

**DIFFERENTIATION BETWEEN HIGH-GRADE GLIOMAS AND SOLITARY METASTASES USING PERFUSION AND DIFFUSION WEIGHTED MR IMAGING**

A. ZIMNY, M. GUZINSKI, P. SZEWCZYK, A. CZARNECKA, M. SASIADEK  
(1)Department of General and Interventional Radiology and Neuroradiology, Wroclaw Medical University, Wroclaw, POLAND

*13:00-14:00 Lunch*

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*Afternoon*

**14:00-14:25 LECTURE**

*Chairpersons : Athanasios Dimitriadis (Greece)*

**Radiologic grading of Astrocytoma**

James Smirniotopolous (USA)

**14:25-16:00 LECTURE AND SCIENTIFIC PAPERS**

*Chairperson : Bozena Goraj (The Netherlands), Alex Rovira (Spain)*

14:25-14:50 **Present role of nuclear medicine in the diagnostic work-up of brain tumors**  
Klaus Tatsch (Germany)

14:50-16:00 **Scientific Papers (TE2): Inflammatory and demyelinating diseases of the brain I**

**LATERALISATION OF HIPPOCAMPAL DYSFUNCTION IN MELANCHOLIC AND PSYCHOTIC MAJOR DEPRESSION? PRELIMINARY RESULTS BASED ON VOLUMETRIC ANALYSIS IN A MAGNETIC RESONANCE IMAGING STUDY**

K. VASILOPOULOU(1), M. PAPATHANASIOU(2), F. BOUFIDOU(3), P. OULIS(4), C. NIKOLAOU(3), L. LYKOURAS(1)

(1)2ND DEPARTMENT OF PSYCIATRY, ATTIKON GENERAL HOSPITAL ATHENS GREECE

(2)2<sup>ND</sup> DEPARTMENT OF RADIOLOGY, ATTIKON GENERAL HOSPITAL ATHENS GREECE

(3) BIOPATHOLOGY LABORATORY EGINATION HOSPITAL ATHENS GREECE (4) 1<sup>ST</sup>

DEPARTMENT OF PSYCIATRY EGINATION HOSPITAL ATHENS GREECE

**CORRELATION BETWEEN APOLIPOPROTEIN EPSILON GENOTYPE AND REGIONAL GRAY MATTER VOLUME LOSS: ONE-YEAR FOLLOW-UP AFTER CONVERSION FROM MILD COGNITIVE IMPAIRMENT TO ALZHEIMER'S DISEASE**

M. SPAMPINATO(1), S. Bisdas(2), J. Mintzer(1), J. Koonce(1), Z. Rumboldt(1)

(1)Medical University South Carolina Charleston, SC USA, (2)Diagnostic and Interventional Neuroradiology Karls Eberhard University Tubingen GERMANY

**PAIN STIMULATION TO FACIAL STRUCTURES EVOKES ELEVATED INSULAR GLUTAMINE CONCENTRATIONS IN IN PATIENTS WITH TEMPOROMANDIBULAR DISORDERS (TMD) AS DEMONSTRATED BY 1H PROTON SVS MR SPECTROSCOPY**

A. Deebajah(1), A. Overgaard(2), G. Gerstner(1,5), E. Ichesco(1), RH. Gracely(1,3), RE. Harris(4), DJ. Clauw(4), PC. Sundgren(2, 6)

(1)Universtity of Michigan, Department of Biologic and Material Sciences, School of Dentistry Ann Arbor, MI USA, (2)Diagnostic Center for Imaging and Functional Medicine, UMAS, University of Lund Malmö SWEDEN, (3)Department of Endodontics, University of North Carolina Chapel Hill, NC, USA, (4)Department of Anaesthesiology, University of Michigan Ann Arbor, MI USA, (5)Department of Psychology, University of Michigan Ann Arbor, MI USA, (6)Department of Radiology, University of Michigan Ann Arbor, MI USA

**VOXEL-BASED VOLUMETRIC ANALYSIS OF WHITE MATTER ABNORMALITY IN MILD ALZHEIMER DISEASE AND MILD COGNITIVE IMPAIRMENT USING DIFFUSION TENSOR IMAGING**

H. LIM(1), SJ. KIM(1), CG. CHOI(1), JH. LEE(2), SY. KIM(2), GH. JAHNG(3)

(1)Department of Radiology and Research Institute of Radiology, University of Ulsan College of Medicine, Asan Medical Cente Seoul SOUTH KOREA, (2)Department of Psychiatry, University of Ulsan College of Medicine, Asan Medical Center Seoul SOUTH KOREA, (3)Department of Radiology, Kyunghee East-West Neo Medical Center, Kyunghee University, College of Medicine Seoul SOUTH KOREA

**MEDIAL TEMPORAL LOBE ATROPHY SCORE: A LOCALLY DERIVED MEASURE WITH STRONG GLOBAL IMPLICATIONS**

L. KOZAK(1), I. Gyuricza(2), T. Gyorke(3), L. Szidonya(3), J. Gyebnar(3), T. Kovacs(4), G. Rudas(1), P. Barsi(1,5)

(1)Semmelweis University - MR Research Center Budapest HUNGARY, (2)State Health Centre - Department of Radiology Budapest HUNGARY, (3)Semmelweis University - Department of Diagnostic Radiology and Oncotherapy Budapest HUNGARY, (4) Semmelweis University - Department of Neurology Budapest HUNGARY, (5) Semmelweis University - Cardiovascular Centre, MRI Laboratory Budapest HUNGARY

**LEUKOARAÏOSIS AND MESIOTEMPORAL ATROPHY IN MILD COGNITIVE IMPAIRMENT**

M. HENRY FEUGEAS, E. SCHOUMAN CLAEYS

(1)BICHAT CLAUDE BERNARD UNIVERSITY HOSPITAL PARIS FRANCE

## **VENTRICULAR ENLARGEMENT IN MILD COGNITIVE IMPAIRMENT**

M. HENRY FEUGEAS, E. SCHOUMAN CLAEYS

(1)BICHAT CLAUDE BERNARD UNIVERSITY HOSPITAL PARIS FRANCE

## **HIPPOCAMPAL ATROPHY ON 3T MRI IS A MARKER OF COGNITIVE DETERIORATION AND DEMENTIA IN PARKINSON'S DISEASE, APPLICABLE WITH AUTOMATED CLASSIFICATION PROCEDURES**

B. GOMEZ-ANSON(1), O. LOPEZ-MOUREL(2), R. ROTGER(1), GC. MONTE(3), J. PAGONABARRAGA(4), G. LLEVARIA(4), S. KLOPPPEL(5), E. GRANELL(1), Y. VIVES(2), J. RUSCALLEDA-NADAL(1)

(1)NEURORADIOLOGY, RADIOLOGY, HOSPITAL SANTA CREU I SANT PAU BARCELONA SPAIN, (2)PIC, IFAE, UNIVERSITAT AUTONOMA BARCELONA SPAIN, (3)FUNDACIO CLINIC/IDIBAPS/HOSPITAL CLINIC BARCELONA SPAIN, (4)NEUROLOGY, HOSPITAL SANTA CREU I SANT PAU BARCELONA SPAIN, (5)NEUROLOGY, FREIBURG UNIVERSITAT FREIBURG GERMANY

## **BRAIN CHANGES ON 3T MRI AND MRS IN FRAGILE X PREMUTATION CARRIERS: EVIDENCE FOR PREFRONTAL DYSFUNCTION**

B. GOMEZ-ANSON(1), O. LOPEZ-MOUREL(2), J. PAGONABARRAGA(3), GC. MONTE(4), M. MILA(4), L. RODRIGUEZ-REVENGA(4), Y. VIVES(2), J. SANCHEZ-GONZALEZ(5), M. DEJUAN-DELAGO(1), J. RUSCALLEDA-NADAL(1)

(1)NEURORADIOLOGY, HOSPITAL SANTA CREU I SANT PAU BARCELONA SPAIN, (2)PIC, IFAE, UNIVERSITAT AUTONOMA BARCELONA SPAIN, (3)NEUROLOGY, HOSPITAL SANTA CREU I SANT PAU BARCELONA SPAIN, (4)FUNDACIO CLINIC, IDIBAPS, HOSPITAL CLINIC BARCELONA SPAIN, (5)PHILIPS IBERIA MEDICAL SYSTEMS MADRID SPAIN

## **A BLINDED RADIOLOGICAL STUDY OF MR FINDINGS IN PATHOLOGICALLY CONFIRMED PROGRESSIVE SUPRANUCLEAR PALSY (PSP), MULTIPLE SYSTEM ATROPHY (MSA) AND PARKINSON'S DISEASE (PD)**

C. MICALLEF(1), L. Massey(5, 2), D. Paviour(5, 2), S. O'Sullivan(2), J. Holton(2), T. Revesz(2), D. Burn(4), A. Lees(5, 2), N. Fox(3), H. R. Jager(1)

(1)Lysholm Dept of Neuroradiology, NHNN, UCLH London UNITED KINGDOM, (2)Queen Square Brain Bank for Neurological Disorders London UNITED KINGDOM, (3)Dementia Research Group, UCL Institute of Neurology London UNITED KINGDOM, (4)Clinical Ageing Research Unit, Newcastle University Newcastle UNITED KINGDOM, (5)Sara Koe PSP Research Centre, London, UNITED KINGDOM

**16:00-16:30 Break**

## **16:30-17:45 LECTURE AND SCIENTIFIC PAPERS**

*Chairpersons : James Smirniotopoulos (USA), Jerzy Walecki (Poland)*

16:30-16:55      **Neuroimaging contributes to the diagnosis, management and prognosis of patients with craniocerebral trauma**  
Paul Parizel (Belgium)

16:55-17:45      **Scientific Papers (TE3): Imaging in epilepsy**

## **USE OF FMRI PARADIGMS FOR THE STUDY OF MEMORY-RELATED MEDIAL TEMPORAL LOBE ACTIVATIONS: APPLICATION TO TEMPORAL LOBE EPILEPSY (TLE)**

C. ROSAZZA(1), F. GHIEMMETTI(1), L. D'INCERTI(1), L. MINATI(1,2), F. DELEO(1), A. RIVA(1), AR. GIOVAGNOLI(1), R. SPREAFICO(1), MG. BRUZZONE(1), F. VILLANI(1)

(1)Fondazione IRCCS Istituto Neurologico 'Carlo Besta' Milano ITALY, (2)Psychiatry Dept., Brighton and Sussex Medical School, Brighton, UNITED KINGDOM

## **HIPPOCAMPAL MALROTATION: PATHOLOGY OR VARIATION**

S. NAIR(1), J. McLean(2), J. MacFarlane(2), D. Hadley(1), C. Santosh(1), J. Bhattacharya(1)

(1)Department of Neuroradiology, Institute of Neurosciences, Sothorn General Hospital, 1345 Govan

Road, Glasgow, G51 4TF Glasgow UNITED KINGDOM, (2)Department of Clinical Physics, Institute of Neurosciences, Sothern General Hospital, 1345 Govan Road, Glasgow, G51 4TF Glasgow UNITED KINGDOM

**THE USE OF TRACTOGRAPHY DERIVED FROM DIFFUSION TENSOR IMAGING (DTI-TR) TO CHECK WHITE MATTER (WM) CONNECTIONS IN EPILEPTICS WITH HEMISPHEROTOMY OR WITH MALFORMATIONS OF CORTICAL DEVELOPMENT (MCD)**

P. BARSÌ(1), A. ALTMANN(2), M. HEGYI(3), M. NEUWIRTH(3), ZS. SIEGLER(3), A. FOGARASI(3), G. RUDAS(1)

(1)Semmelweis University, MR Research Centre Budapest HUNGARY, (2)St. János's Hospital, Child Epilepsy Centre Budapest HUNGARY, (3)HRC Bethesda Children's Hospital, Dept. of Neurology Budapest HUNGARY

**SURGICALLY TREATED MESIAL SCLEROSIS: MAGNETIC RESONANCE IMAGING EVALUATION AND CLINICAL OUTCOME**

S. COSTA PEREIRA(1), G. Santos(1), O. Brito(1), F. Sales(2), C. Bento(2), E. Machado(1)

(1)University Hospital of Coimbra - Neuroradiology Coimbra PORTUGAL, (2)University Hospital of Coimbra - Epilepsy Unit Coimbra PORTUGAL

**HIGH-RESOLUTION MR-IMAGING OF HIPPOCAMPAL SCLEROSIS IN PATIENTS WITH FOCAL EPILEPSY AT 7 TESLA**

T. BREYER(1), M.U. Schlamann(1,2), S. Maderwald(1,2), O. Kraff(1,2), F. Woermann(3), J.M. Theyssohn(1,2), A. Ebner(3), M. Forsting(1,2), M.E. Ladd(1,2), I. Wanke(1,2)

(1)Institute for Diagnostic und Interventional Radiology and Neuroradiology, Essen University Hospital Essen GERMANY, (2)Erwin L. Hahn Institute for Magnetic Resonance Imaging, University of Duisburg-Essen Essen GERMANY, (3)MR-Center and Mara Clinic I, Bethel Epilepsy Center, Bielefeld, GERMANY

**INTEGRATION OF ADVANCED STRUCTURAL AND FUNCTIONAL IMAGING TECHNIQUES IN EPILEPSY WHERE CONVENTIONAL INVESTIGATIONS ARE INCONCLUSIVE**

HM. KARAKAS(1), ET. TALI(1), S. KARAKAS(2)

(1)GAZI UNIVERSITY - DEPARTMENT OF RADIOLOGY - SECTION OF NEURORADIOLOGY ANKARA TURKEY, (2)HACETTEPE UNIVERSITY - COGNITIVE PSYCHOPHYSIOLOGY RESEARCH UNIT ANKARA TURKEY

**VOXEL BASED MORPHOLOGY IN PATIENTS WITH CRYPTOGENIC OCCIPITAL EPILEPSY**

A. Elefante(1), R. Senese(1), L. Bilo(2), F. Caranci(1), F. Di Salle(3), A. Brunetti(1)

(1)Diagnostic Imaging Dept. Neuroradiology University Federico II Napoli ITALY, (2)Neurology Department, University Federico II Napoli ITALY, (3)Diagnostic Imaging Dept. Neuroradiology University of Pisa Pisa ITALY

**17:45 -18:45 Case based review session: The brain**

Anne Osborn (USA)

**Friday, September 18, 2009**

***Morning***

***Lecture Hall "HESPERIDES"***

**08:00 - 09:15 REFRESHER COURSE INT I: Aneurysm treatment by modelling of flow**

*Chairpersons : Marco Leonardi (Italy), James Byrne (UK)*

- 08:00-08:15 **Potentials of flow modelling in cerebral aneurysms**  
Daniel Rufenacht (Switzerland)
- 08:15-08:30 **Flow diversion for the treatment of complex cerebral aneurysms**  
Laurent Spelle (France)
- 08:30-08:45 **Different flow diversion concepts in the endovascular aneurysms treatment**  
Saruhan Cekirge (Turkey)
- 08:45-09:00 **Pipeline embolization device for the treatment of cerebral aneurysms**  
Istvan Szikora (Hungary)
- 09:00-09:15 Discussion

***10:30-11:00 Break***

**11:25-13:00 LECTURE AND SCIENTIFIC PAPERS**

*Chairpersons : Luc Picard (France), Daniel Rufenacht (Switzerland)*

- 11:25-11:50 **The possible use of flow diverting stens in the treatment of large-giant cerebral aneurysms**  
Marco Leonardi (Italy)
- 11:50-13:00 **Scientific Papers (HE1) : Interventional – aneurysms**

**LEO PLUS™ SELF-EXPANDABLE STENT IMPLANTATION IN ENDOVASCULAR TREATMENT OF INTRACRANIAL ANEURYSMS**

I. ORAN, C. CINAR

Ege University Medical School, Department of Radiology Izmir TURKEY

**MANAGEMENT OF DISTAL DISSECTING BRAIN ANEURYSMS**

A. MIRONOV

CREIGHTON UNIVERSITY-Department of Radiology Omaha, NE USA

**SILK STENT – USAGE RELATED DIFFICULTIES AND HOW TO AVOID THEM**

Z. KULCSAR(1), I. Wanke(1, 2), D. Rufenacht(1)

(1)Klinik Hirslanden, Neurozentrum Zurich SWITZERLAND, (2)University Hospital of Essen, Neuroradiology Essen GERMANY

**FLOW DIVERTER TREATMENT FOR TINY, UNCOILABLE, RUPTURED INTRACRANIAL**

**ANEURYSMS: SILK STENT EXPERIENCE**

Z. KULCSAR(1), S. Wetzel(2), A. Gruber(3), I. Wanke(1), D. Rufenacht(1)

(1)Klinik Hirslanden, Neurozentrum Zurich SWITZERLAND, (2)University Hospital, Neuroradiology Basel SWITZERLAND, (3)University Hospital, Neurosurgery Vienna AUSTRIA

**UNILATERAL AGENESIS OF THE INTERNAL CAROTID ARTERY PRESENTED AS TRANSIENT ISCHAEMIC ATTACK**

O. KIRITSI(1), K. TSITAS(2), A. ANASTASIOU(1)

(1)HIPPOKRATION GENERAL HOSPITAL , RADIOLOGY DEPARTMENT THESSALONIKI GREECE, (2)General Hospital Kozani, THESSALONIKI GREECE

**ANIMAL EXPERIMENTAL APPLICATION OF A NEW SELF-EXPANDING STENT IN**

### **THE ENDOVASCULAR THERAPY OF SIDE-WALL ANEURYSMS**

M. Schumacher(1), A. Keuler(1), K. Förster(2), W. Mailänder(3), F. Requejo(4)

(1)University hospital Feriburg, Dep. of Neuroradiology Freiburg GERMANY, (2)University hospital Feriburg, Dep. heart surgery Freiburg GERMANY, (3)Acandis Pforzheim GERMANY, (4)National Pediatric Hospital J P Garrahan Buenos Aires ARGENTINA

### **RECONSTRUCTIVE ENDOVASCULAR TREATMENT OF COMPLEX INTRACRANIAL ANEURYSM WITH FLOW DIVERTER SILK: PRELIMINARY EXPERIENCE**

K. KADZIOLKA, E. LUIS DE SOUZA, L. ESTRADE, A. LEAUTAUD, L. PIEROT  
CHU REIMS REIMS FRANCE

### **COMBINED TREATMENT WITH STENTING AND COILING FOR CEREBRAL COMPLEX ANEURYSM: PRELIMINARY EXPERIENCE ABOUT 20 ANEURYSMS TREATED BY NEWS GENERATIONS INTRACRANIAL STENTS**

M. MUTO, G. GUARNIERI, G. AMBROSANIO, P. VASSALLO, A. LAVANGA  
NEURORADIOLOGY SERVICE CARDARELLI HOSPITAL NAPLES ITALY

### **BLOOD BLISTER-LIKE ANEURYSMS OF THE SUPRACLINOID INTERNAL CAROTID ARTERY: CLINICAL, ANGIOGRAPHIC AND THERAPEUTIC ASPECTS**

A. BIONDI(1), S. PESCHILLO(2), B. DAUMAS-DUPOINT(3), H. DESAL(3)

(1)Pitié-Salpêtrière Hospital-Department of Neuroradiology Paris FRANCE, (2)La Sapienza University-Department of Neurosurgery, Rome, ITALY, (3)Guillaume et René Laennec Hospital-Department of Neuroradiology, Nantes, FRANCE

*13:00-14:00 Lunch*

**13:15-13:45 PHILIPS SYMPOSIUM**

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## *Afternoon*

### **14:00-16:00 LECTURES AND SCIENTIFIC PAPERS**

*Chairpersons : Rudiger von Kummer (Germany), George Magoufis (Greece)*

#### **14:00-14:25 Hemorrhagic intracranial dissections**

Serge Bracard (France)

#### **14:25-14:50 Treatment of wide neck aneurysms with balloon remodelling**

Paul Stracke (France)

#### **14:50-16:00 Scientific Papers (HE2): Interventional - aneurysms and AVMs**

### **CLINICAL AND ANGIOGRAPHIC OUTCOMES FOLLOWING BALLOON ANGIOPLASTY AND STENTING OF VENOUS SINUS OCCLUSION COUPLED WITH DURAL ARTERIOVENOUS FISTULAS**

H. TAJIRI, T. MORI, T. IWATA, T. UESUGI, M. NAKAZAKI

Shonan Kamakura General Hospital Kamakura JAPAN

### **BRAIN AVM TREATMENT BY TRANSMENINGEAL APPROACH**

S. SALEME, C. CRUSIUS, J. THERON, P. COURTHEOUX

CHU de Caen - Department of Neuradiology Caen FRANCE

### **IMMEDIATE ANATOMICAL RESULTS AFTER THE ENDOVASCULAR TREATMENT OF UNRUPTURED INTRACRANIAL ANEURYSMS: ANALYSIS OF THE ATENA SERIES**

L. PIEROT(1), L. SPELLE(2)

(1)CHU REIMS REIMS FRANCE, (2)CHU TOULOUSE TOULOUSE France

### **IMMEDIATE ANATOMICAL RESULTS AFTER THE ENDOVASCULAR TREATMENT OF RUPTURED INTRACRANIAL ANEURYSMS: COMPARISON OF RESULTS WITH GDC AND MATRIX COILS IN CLARITY SERIES**

L. PIEROT(1), C. COGNARD(2), R. ANXIONNAT(3), F. RICOLFI(4), and CLARITY investigators  
(1)CHU REIMS REIMS FRANCE, (2)CHU TOULOUSE TOULOUSE FRANCE, (3)CHU NANCY NANCY FRANCE, (4)CHU DIJON DIJON, France

**CLARITY STUDY: COMPARISON OF CLINICAL RESULTS OF THE ENDOVASCULAR TREATMENT OF RUPTURED ANEURYSMS USING GDC AND MATRIX COILS**

L. PIEROT(1), C. COGNARD(2), R. ANXIONNAT(3), F. RICOLFI(4), and CLARITY investigators  
(1)CHU REIMS REIMS FRANCE, (2)CHU TOULOUSE TOULOUSE FRANCE, (3)CHU NANCY NANCY FRANCE, (4)CHU DIJON, DIJON, France

**TRANS-ORBITAL EMBOLIZATION OF RECURRENT OR RESIDUAL TRAUMATIC CAROTID CAVERNOUS FISTULAS**

CB. LUO(1,2), MMH. TENG(1,2), FC. CHANG(1,2), WY. GUO(1,2), CY. CHANG(1,2)  
(1)Department of Radiology, Taipei Veterans General Hospital Taipei TAIWAN, (2)Department of Radiology, National Yang-Ming University School of Medicine Taipei TAIWAN

**COMBINED TRANSARTERIAL AND TRANSVENOUS ENDOVASCULAR TREATMENT WITH USE OF ONYX AND COILS OF COMPLEX DURAL ARTERIOVENOUS FISTULAS: A CASE SERIES REPORT**

E. DE SOUZA, K. KADZIOLKA, L. ESTRADE, A. LEAUTAUD, L. PIEROT  
CHU REIMS DEPARTMENT OF RADIOLOGY REIMS FRANCE

**INTRACRANIAL ANEURYSMS TREATED BY STENT-ASSISTED EMBOLIZATION. EVALUATION OF THE PROCEDURE SAFETY USING 3 TESLA DIFFUSION-WEIGHTED MR IMAGING**

A. BIONDI, M. MEHRPOUR, A. DRIER, N. SOUROUR, B. JEAN, F. DI MARIA, D. DORMONT  
Pitié-Salpêtrière Hospital-Department of Neuroradiology Paris FRANCE

**ENDOVASCULAR TREATMENT OF SYMPTOMATIC INTRACRANIAL DURAL FISTULAE WITH ONIX**

M. MUSACCHIO(1), A. MUSACCHIO(2), R. LANGHI(2), L. LANGHI(2), A. TOURNADE(1)  
(1)Hôpitaux Civils de Colmar - Neuroradiology Colmar FRANCE, (2)Sanatorio Santa Fe - Neuroradiology Santa Fe ARGENTINA

**16:00-16:30 Break**

**16:30-17:45 LECTURE AND SCIENTIFIC PAPERS**

*Chairpersons : Anton Valavanis (Switzerland), Dimitrios Rologis (Greece)*

16:30 - 16:55 The unruptured aneurysm controversy  
Andrew Molyneux (United Kingdom)

16:55-17:45 **Scientific Papers (HE3) : Interventional – stroke I**

**PREDICTIVE FACTORS FOR UNSUCCESSFUL RECANALIZATION OF ENDOVASCULAR TREATMENT FOR BASILAR ARTERY OCCLUSION IN HYPERACUTE ISCHEMIC STROKE PATIENTS**

H. TAJIRI, T. MORI, T. IWATA, T. UESUGI, M. NAKAZAKI  
Shonan Kamakura General Hospital Kamakura JAPAN

**UNPROTECTED CAS, OUTCOME PREDICTORS; SINGLE CENTER EXPERIENCE**

O. MANSOUR(1,2)  
(1)Freiburg University Hospital , neurocenter, neuroradiology depart. Freiburg GERMANY,  
(2)Alexandria, Univ. Hospital, Neurology Department, Alexandria, EGYPT

**STENT-SPECIFIC GUIDELINES FOR FOLLOW-UP IMAGING AFTER CAS**

S. PILGRAM-PASTOR, A.M.J. Frölich, M.N. Psychogios, P. Schramm, M. Knauth  
Dep. of Neuroradiology, University Hospital Göttingen GERMANY

**CHANGE OF PLATELET REACTIVITY TO ANTIPLATELET THERAPY AFTER**

**STENTING PROCEDURE FOR CEREBRAL ARTERY STENOSIS: VERIFYNOW ANTIPLATELET ASSAY BEFORE AND AFTER STENTING**

S. KIM, D.H. Lee, H.K. Lim, S.U. Kwon, C.G. Choi, D.C. Suh

University of Ulsan college of medicine, Asan medical center Seoul SOUTH KOREA

**IA THROMBOLYSIS IN ACUTE ISCHEMIC STROKE: CHARACTERISTICS OF THE POTENTIAL POPULATION IN ATTICA**

C. IOSIF(1), M. PAPATHANASIOU(1), E. STABOULIS(2), A. GOULIAMOS(1)

(1)Department of Radiology, Attikon University Hospital, Athens Kapodistrian University ATHENS GREECE, (2)Department of Neurology, Attikon University Hospital, Athens Kapodistrian University ATHENS GREECE

**CEREBRAL AUTOREGULATIVE IMPAIRMENT MEASURED AT BRAIN TISSUE LEVEL WITH ARTERIAL SPIN LABELING MRI IN PATIENTS WITH A CAROTID ARTERY STENOSIS**

R. BOKKERS(1), M.J. van Osch(2), H.B. van der Worp(3), G.J. van der Borst(4), W.P. Mali(1), J. Hendrikse(1)

(1)University Medical Center Utrecht - Department of Radiology Utrecht THE NETHERLANDS, (2)Leiden University Medical Center - C.J. Gorter Center for High-Field MRI - Department of Radiology Leiden THE NETHERLANDS, (3)University Medical Center Utrecht - Department of Neurology Utrecht THE NETHERLANDS, (4)University Medical Center Utrecht - Department of Vascular Surgery Utrecht, THE NETHERLANDS

**Friday, September 18, 2009**

*Morning*

*Lecture Hall "THALIA"*

*Chairpersons P. Krupa (Czech Republic), George Karas (The Netherlands)*

11:50-13:00 **Scientific Papers (TH1): Inflammatory and demyelinating diseases of the brain II**

**VOXEL-BASED MORPHOMETRY AND DIFFUSION TENSOR IMAGING OF THE OPTIC PATHWAY IN PRIMARY OPEN-ANGLE GLAUCOMA**

AK. ZIKOU(1), G. KITSOS(2), LC. TZAROUCI(1), L. ASTRAKAS(1), MI. ARGYROPOULOU(1)

(1)UNIVERSITY OF IOANNINA, MEDICAL SCHOOL, DEPARTMENT OF RADIOLOGY IOANNINA GREECE, (2)UNIVERSITY OF IOANNINA, MEDICAL SCHOOL, DEPARTMENT OF OPHTHALMOLOGY IOANNINA GREECE

**CENTRAL NERVOUS SYSTEM INVOLVEMENT IN PRIMARY SJOGREN'S SYNDROME: ASSESSMENT OF GREY AND WHITE MATTER CHANGES BY MRI**

L. TZAROUCI(1), N. TSIFETAKI(2), S. KONITSIOTIS(3), AK. ZIKOU(1), L. ASTRAKAS(1), A. DROSOS(2), MI. ARGYROPOULOU(1)

(1)UNIVERSITY OF IOANNINA, MEDICAL SCHOOL, DEPARTMENT OF RADIOLOGY IOANNINA GREECE, (2)UNIVERSITY OF IOANNINA, MEDICAL SCHOOL, DEPARTMENT OF RHEUMATOLOGY IOANNINA GREECE, (3)UNIVERSITY OF IOANNINA, MEDICAL SCHOOL, DEPARTMENT OF NEUROLOGY IOANNINA GREECE

**OEDEMATOUS BRAIN HEMIATROPHY IN LATE-ONSET PARRY-ROMBERG SYNDROME WITH REFRACTORY FOCAL EPILEPSY**

M. SAFRONOVA(1), I. MATOS(2), J. RESENDE PEREIRA(1)

(1)Hospital Pedro Hispano - Neurorradiologia Matosinhos PORTUGAL, (2)Unidade Hospitalar de Mirandela - Neurologia Mirandela, PORTUGAL

**CHANGES IN BRAIN VOLUME AND T2 LESION LOAD FOLLOWING LIVER**

### **TRANSPLANTATION OVER A 8-YEAR PERIOD**

A. ROVIRA, R. Garcia-Martinez, J. Alonso, E. Huerga, J. Córdoba  
Hospital Vall d'Hebron Barcelona SPAIN

### **NAA AND GLUTAMATE AS NEURONAL BIOMARKERS IN SYSTEMIC LUPUS ERYTHEMATOSUS AND (SLE) AND NEUROPSYCHIATRIC SYSTEMIC LUPUS ERYTHEMATOSUS (NPSLE) PATIENTS. A SINGLE VOXEL 1H MR SPECTROSCOPY STUDY**

JE. Perry(1), RE. Harris(2), G. Beyer(1), P. Cagnoli(3), S. Gebarski(1), S. Rohrer(1), C. Graft(3), J. McCune(3), PC. Sundgren(1,4)

(1)University of Michigan, Department of Radiology Ann Arbor, MI USA, (2)University of Michigan, Department of Anaesthesiology Ann Arbor, MI USA, (3)University of Michigan, Department of Internal Medicine Ann Arbor, MI USA, (4)University of Lund, Diagnostic Center for Imaging and Functional Medicine Malmö SWEDEN

### **IMPROVED SUSCEPTIBILITY WEIGHTED IMAGING WITH CONTRAST AGENT IN DEGENERATIVE BRAIN DISEASE**

L. GERIGK(1), W. CHEN(2), M. ESSIG(1)

(1)German Cancer Research Center Heidelberg GERMANY, (2)The Third Military Medical University Chongqing CHINA

### **EVALUATION OF TEMPORAL LOBE INVOLVEMENT (TLI) BY MRI IN DIFFERENT CLINICAL FORMS OF MULTIPLE SCLEROSIS (MS)**

P. BARS(1), A. Iljicsov(2), M. Simo(2), D. Bereczki(2), G. Rudas(1)

(1)Semmelweis University - MR Research Centre Budapest HUNGARY, (2)Semmelweis University - Dept. of Neurology Budapest HUNGARY

### **DIFFERENCES OF CEREBRAL LESION DISTRIBUTION AND LESION LOAD IN CHILDREN WITH ACUTE DISSEMINATED ENCEPHALOMYELITIS (ADEM) WITH DIFFERENT INFECTIOUS ORIGIN SEEN ON MAGNETIC RESONANCE IMAGING (MRI)**

N. PINTÉR(1), Z. Liptai(2), L. Szidonya(3), G. Rudas(4), P. Barsi(4)

(1)Semmelweis University, Heart Center, Department of Diagnostic Radiology Budapest HUNGARY, (2)Szent László Hospital, Department of Neurology Budapest HUNGARY, (3)Semmelweis University, Department of Diagnostic Radiology and Oncotherapy Budapest HUNGARY, (4)Semmelweis University, MR Research Center Budapest HUNGARY

### **ATYPICAL BRAIN MAGNETIC RESONANCE IMAGING LESIONS OF THE WHITE MATTER FOLLOWING HAART-INDUCED IMMUNE RECONSTITUTION**

S. GEREVINI(1), A. Pazzi(2), A. Boschini(3), P. Cinque(2)

(1)Neuroradiology Service, Head and Neck Department, San Raffaele Hospital Milano ITALY, (2)Department of Infectious Diseases, San Raffaele Hospital Milano ITALY, (3)Patignano Medical Center Rimini ITALY

### **SERUM VITAMIN B12, FOLATE LEVELS AND THEIR ASSOCIATION WITH CORTICAL LESIONS AND CLINICAL PARAMETERS IN MULTIPLE SCLEROSIS**

M. GAVRA(1), M. PAPHATHANASIOU(1), K. VOUMVOURAKIS(2), D. KITSOS(2), A. POULIOS(3), E. STABOULIS(2), A. GOULIAMOS(1)

(1)2nd Department of Radiology, University of Athens, Attikon University Hospital ATHENS GREECE, (2)2nd Department of Neurology, University of Athens, Attikon University Hospital ATHENS GREECE, (3)Department of Psychology, University of Athens, ATHENS, GREECE

### **HYPOPLASIA OF LUMBAR VERTEBRA L5 WITH SPONDYLOLYSIS: ANALYSIS OF LUMBAR VERTEBRAL BODY VOLUME BY CT VOLUMETRY**

E. WILLEMS, B. DE DOBBELAER, F. DE KEYZER, G.E. WILMS

(1)UNIVERSITY HOSPITAL LEUVEN LEUVEN BELGIUM

## Afternoon

Chairpersons : Sotiris Giouroukos (Greece), Nuno Canto-Moreira (Portugal)

14:50-16:00 **Scientific Papers (TH2): Pediatric neuroradiology I**

### **IDIOPATHIC TRANSVERSE MYELITIS IN CHILDREN: ANALYSIS OF MRI FINDINGS**

G. Alper(1), KA. Petropoulou(2), CR. Fitz(2), C. Moore(3)

(1)Division of Child Neurology, Department of Pediatrics - University of Pittsburgh Medical Center Pittsburgh, PA USA, (2)Division of Neuroradiology, Department of Radiology - University of Pittsburgh Medical Center Pittsburgh, PA USA, (3)Center for Research on Health Care Data - University of Pittsburgh Medical Center Pittsburgh, PA, USA

### **PERIVENTRICULAR LEUKOMALACIA IN PRETERM CHILDREN: ASSESSMENT OF GREY AND WHITE MATTER AND CEREBROSPINAL FLUID CHANGES BY MRI**

L. TZAROUCHI(1), L. ASTRAKAS(2), AK. ZIKOU(1), V. XYDIS(1), P. KOSTA(1), S. ANDRONIKOU(3), MI. ARGYROPOULOU(1)

(1)UNIVERSITY OF IOANNINA, MEDICAL SCHOOL, DEPARTMENT OF RADIOLOGY IOANNINA GREECE, (2)UNIVERSITY OF IOANNINA, MEDICAL SCHOOL, DEPARTMENT OF MEDICAL PHYSICS IOANNINA GREECE, (3)UNIVERSITY OF IOANNINA, MEDICAL SCHOOL, CHILD HEALTH DEPARTMENT, INTENSIVE CARE UNIT IOANNINA GREECE

### **PATTERN ANALYSIS OF FETAL BRAIN ASYMMETRY**

G. KASPRIAN(1), G. LANGS(1), PC. BRUGGER(2), D. PRAYER(1)

(1)Medical University of Vienna, Department of Radiology Vienna AUSTRIA, (2)Medical University of Vienna, Center of Anatomy and Cellbiology Vienna AUSTRIA

### **IN UTERO DTI AND SPECTROSCOPY IN ZELLWEGER DISEASE**

G. KASPRIAN(1), R. WASICKY(2), P. BRUGGER(3), M. LANGER(4), D. PRAYER(1)

(1)Medical University of Vienna, Department of Radiology Vienna AUSTRIA, (2)Medical University of Vienna, Department of Clinical Neurology Vienna AUSTRIA, (3)Medical University of Vienna, Center of Anatomy and Cellbiology Vienna AUSTRIA, (4)Medical University of Vienna, Department of Feto-Maternal Medicine Vienna AUSTRIA

### **QUANTIFICATION AND CORRELATION OF CEREBRAL SPINAL FLUID FLOW AT THE CRANIOVERTEBRAL JUNCTION AND WITHIN THE CEREBRAL AQUEDUCT IN NORMAL CONTROLS AND CHIARI I MALFORMATIONS: A PROSPECTIVE STUDY**

J. BAPURAJ, D J. Quint, F. Londy, JM. Myles, S. Khalatbari, KM. Murascko, C. Maher, T. Hoban, M. Michelotti, S. Rohrer

(1)University Hospital, University of Michigan Ann Arbor, MI USA

### **HIPPOCAMPAL DEVELOPMENT DURING THE 23RD TO 36TH GESTATIONAL WEEKS. AN ULTRASOUND STUDY**

D. BAJIC, R. RAININKO

(1)Department of Radiology, University Hospital Uppsala Uppsala SWEDEN

### **MRI OF FETAL INTRACEREBRAL HEMORRHAGE**

U. ASENBAUM(1), PC. BRUGGER(2), G. KASPRIAN(1), B. ULM(3), A. MESSERSCHMIDT(4), D. PRAYER(1)

(1)Department of Neuroradiology, University Clinics of Radiodiagnostics, Medical University of Vienna, Austria Vienna AUSTRIA, (2)Center of Anatomy and Cell Biology, Medical University of Vienna, Austria Vienna AUSTRIA, (3)Department of Obstetrics and Maternal-Fetal Medicine, Medical University of Vienna, Austria Vienna AUSTRIA, (4)Division of General Pediatrics and Neonatology, Department of Pediatrics and Adolescent Medicine, Medical University of Vienna AUSTRIA

### **PRENATAL DEVELOPMENT OF THE SUBDURAL SPACE IN FETAL MRI**

M. SCHMOOK(1), P. BRUGGER(2), G. KASPRIAN(1), S. NEMEC(1), D. PRAYER(1)  
(1)Medical University of Vienna - Department of Musculoskeletal and Neuroradiology Vienna AUSTRIA, (2)Medical University of Vienna - Department of Systematic Anatomy Vienna AUSTRIA

### **MAGNETIC RESONANCE IMAGING FINDINGS IN HUNTER DISEASE**

R. MANARA(1), R. Mardari(1), E. Priante(1), M. Grimaldi(2), L. Astarita(3), P. Concolino(4), A. Rossi(5), A. Rampazzo(1), O. Gabrielli(6), R. Parini(2), M. Scarpa(1)  
(1)Neuroradiologic Unit Padua ITALY, (2)Neuroradiologic Unit Monza ITALY, (3)University Hospital Napoli ITALY, (4)University Hospital Catanzaro ITALY, (5)Gaslini Genova ITALY, (6)University Hospital Ancona ITALY

### **MRI OF JUVENILE ALEXANDER'S DISEASE**

R. ZIMMERMAN, L. BILANIUK, E. SCHWARTZ, A. POLLOCK, D. ZARNOW, T. FEYGIN, K. SHEKDAR, A. VOSSOUGH  
(1)CHILDREN'S HOSPITAL OF PHILADELPHIA - DEPARTMENT OF RADIOLOGY PHILADELPHIA, PA, USA

### **DEVELOPMENT OF FETAL EYE MOVEMENTS ASSESSED BY MRI**

R. WOITEK(1), P.C. Brugger(2), G. Kasprian(1), C. Lindner(1), F. Stuhr(1), D. Prayer(1)  
(1)Medical University of Vienna, Department of Radiology Vienna AUSTRIA, (2)Medical University of Vienna, Department of Systematic Anatomy Vienna AUSTRIA

### **16:00-16:30 Break**

*Chairpersons : Gaida Krumina (Latvia), Eftychia Kapsalaki (Greece)*

### **16:55-17:45 Scientific Papers (TH3): Demyelinating diseases III**

#### **MRI PERFUSION WEIGHTED IMAGING (PWI) IN PATIENTS WITH CLINICALLY ISOLATED SYNDROME (CIS) CONVERTED TO MULTIPLE SCLEROSIS (MS) : INCREASED PERFUSION COMPARED TO THE NON-CONVERTED CIS PATIENTS**

E. PAPADAKI(1), E. AMANAKIS(1), V. MASTORODIMOS(2), K. TSEKOURAS(1), V. STYLIANAKI(1), T. MARIS(3), S. KARAMPEKIOS(1)  
(1)UNIVERSITY HOSPITAL , DEPARTMENT OF RADIOLOGY HERAKLION GREECE,  
(2)UNIVERSITY HOSPITAL , DEPARTMENT OF NEUROLOGY HERAKLION GREECE,  
(3)UNIVERSITY HOSPITAL , DEPARTMENT OF MEDICAL PHYSICS HERAKLION GREECE

#### **APPLICATION OF A PERFUSION WEIGHTED IMAGING (PWI)MRI TECHNIQUE IN PATIENTS WITH CLINICALLY ISOLATED SYNDROME (CIS) SUGGESTIVE OF MULTIPLE SCLEROSIS(MS) : DIFFUSE WHITE AND DEEP GRAY MATTER DISEASE**

E. PAPADAKI(1), E. AMANAKIS(1), V. MASTORODIMOS(2), K. TSEKOURAS(1), V. STILIANAKI(1), T. MARIS(3), S. KARAMPEKIOS(1)  
(1)UNIVERSITY HOSPITAL-DEPARTMENT OF RADIOLOGY HERAKLION GREECE,  
(2)UNIVERSITY HOSPITAL-DEPARTMENT OF NEUROLOGY HERAKLION GREECE,  
(3)UNIVERSITY HOSPITAL-PEPARTMENT OF MEDICAL PHYSICS HERAKLION GREECE

#### **ULTRA-HIGH-FIELD MR IMAGING IN PATIENTS WITH CLINICALLY ISOLATED SYNDROME**

K. KOLLIA(1), N. PUTZKI(2), S. MADERWALD(3), E.R. GIZEWSKI(1), M. SCHLAMANN(1), J.M. THEYSOHN(1), M.E. LADD(3), M. FORSTING(1), I. WANKE(1, 4)  
(1)UNIVERSITY HOSPITAL ESSEN - DEPARTMENT OF DIAGN. & INTERV. RADIOLOGY AND NEURORADIOLOGY ESSEN GERMANY, (2)KANTONSSPITAL ST. GALLEN - DEPARTMENT OF NEUROLOGY ST. GALLEN SWITZERLAND (3)UNIVERSITY-DUISBURG-ESSEN - ERWIN L. HAHN INSTITUTE FOR MAGNETIC RESONANCE IMAGING ESSEN GERMANY, (4)NEUROZENRUM ZÜRICH -KINIK HIRSLANDEN ZÜRICH SWITZERLAND

#### **CORRELATION OF CORTICAL LESIONS WITH NEUROPSYCHOLOGIC AND CLINICAL MEASURES IN MULTIPLE SCLEROSIS PATIENTS**

M. GAVRA(1), M. PAPATHANASIOU(1), K. VOUMVOURAKIS(2), D. KITSOS(2), A. POULIOS(3), E. STABOULIS(2), A. GOULIAMOS(1)

(1)2nd Department of Radiology, University of Athens, Attikon University Hospital ATHENS GREECE, (2)2nd Department of Neurology, University of Athens, Attikon University Hospital ATHENS GREECE, (3)Department of Psychology, University of Athens ATHENS, GREECE

#### **RESTRICTED DIFFUSION IN INFLAMMATORY LESIONS IN CHILDREN**

M. SEVERINO(1), C. DEVILLE(2), DE. SAUNDERS(1)

(1)Department of Radiology, Great Ormond Street Hospital London UNITED KINGDOM, (2)Department of Neurology, Great Ormond Street Hospital London UNITED KINGDOM

#### **PERTINENT MRI FINDINGS OF WERNICKE'S ENCEPHALOPATHY IN A PEDIATRIC PATIENT**

N. SIDDIQUI, I. Loma, G. Zuccoli

(1)University of Pittsburgh Medical Center Pittsburgh, PA, USA

#### **SCHWANNOMAS OF THE CERVICAL SYMPATHETIC CHAIN**

A. ANIL GOPINATHAN, T Y. Tan

(1)Department of Radiology, Changi General Hospital Singapore SINGAPORE

**Saturday, September 19, 2009**

***Morning***

***Lecture Hall "TERPSICHORE"***

#### **08:15 - 09:45 REFRESHER COURSE D II**

*Chairpersons :E. Turgut Tali (Turkey), Nickolas Papanikolaou (Greece)*

	<b>New imaging modalities in clinical practice. The top 5 clinical questions answered by:</b>
08:15-08:30	<b>Spectroscopy</b> Efsthios Gotsis (Greece)
08:30-08:45	<b>DWI</b> Majda Thurnher (Austria)
08:45-09:00	<b>PWI</b> Paul Parizel (Belgium)
09:00-09:15	<b>DTI</b> Stefan Sunaert (Belgium)
09:15-09:30	<b>f-MRI</b> Spyridon Kollias (Switzerland)
09:30-09:45	Discussion

#### **09:45-10:15 LECTURE**

*Chairperson : Kyriakos Strigaris (Greece)*

**CNS involvement in autoimmune diseases**  
Nicholas Patronas (USA)

#### ***10:15-10:45 Break***

#### **10:45-12:10 LECTURE AND SCIENTIFIC PAPERS**

*Chairpersons : Danielle Balériaux (Belgium), Eftychia Kapsalaki (Greece)*

10:45-11:10 **Low back pain. Use or abuse of advanced imaging?**  
Spyros Karampekios (Greece)

11:10-12:10 **Scientific Papers (TE4): Imaging of the spine and spinal cord**

**SPINAL CORD DTI AND FIBER-TRACKING AFTER STEM CELLS THERAPY IN ALS PATIENTS**

A. STECCO(1), L. MAZZINI(2), L. TESTA(2), F. MONACO(2), A. SAPONARO(1), A. CARRIERO(1)

(1)SCDU RADIOLOGIA - AOU MAGGIORE CARITA' NOVARA ITALY, (2)SCDU NEUROLOGIA - AOU MAGGIORE CARITA' NOVARA, ITALY

**COMPARISON OF GADOBENATE DIMEGLUMINE AND GADODIAMIDE IN THE EVALUATION OF SPINAL VASCULAR ANATOMY WITH MAGNETIC RESONANCE ANGIOGRAPHY**

M. SPAMPINATO(1), S. Bisdas(2), D. Zapton(1), Z. Rumboldt(1)

(1)Medical University of South Carolina, Charleston, SC, USA, (2)Diagnostic and Interventional Neuroradiology, Eberhard Karls University Tübingen GERMANY

**EVALUATION WITH CT PERFUSION OF THE RADIATION THERAPY EFFECTS ON SPINAL CORD HEMODYNAMICS IN PATIENTS WITH HEAD AND NECK MALIGNANCIES**

M. SPAMPINATO(1), S. Bisdas(2), D. Zapton(1), Z. Rumboldt(1)

(1)Medical University of South Carolina Charleston, SC USA, (2)Diagnostic and Interventional Neuroradiology Karls Eberhard University Tübingen GERMANY

**DIAGNOSTIC VALUE AND SURGICAL IMPLICATIONS OF THE MAGNETIC RESONANCE IMAGING IN THE MANAGEMENT OF ADULT PATIENTS WITH BRACHIAL PLEXUS PATHOLOGIES**

S. GEREVINI

SAN RAFFAELE HOSPITAL MILAN ITALY

**DYNAMIC CERVICAL SPINE MRI: A NEW VIEW OF CERVICAL STENOSIS**

L. SHAH, N. Lazzaro, R. Wiggins, E. Quigley, U. Rassner

(1)University of Utah Salt Lake City, UT, USA

**DIFFUSION TENSOR MRI STUDY OF THE SPINAL CORD IN PATIENTS WITH MULTIPLE SCLEROSIS**

J. VON MEYENBURG(1), B. WILM(2), A. WECK(3), J. PETERSEN(4), E. GALLUS(1), E. SCHÄTZLE(1), M. SCHUBERT(4), N. GOEBELS(3), S.S. KOLLIAS(1)

(1)University Hospital Zürich, Institute of Neuroradiology Zürich SWITZERLAND, (2)University & ETH Zürich, Institute for Biomedical Engineering Zürich SWITZERLAND, (3)University Hospital Zürich, Department of Neurology Zürich SWITZERLAND, (4)Balgrist University Hospital, Spinal Cord Injury Center Zürich SWITZERLAND

**12:10-13:15 REFRESHER COURSE D III: Pediatric neuroradiology**

*Chairpersons: Daniela Prayer (Austria), Ioannis Nikas (Greece)*

- |             |   |
|-------------|---|
| 12:10-12:30 | <b>Training in fetal MRI-where we stand, where we should go</b><br>Daniela Prayer (Austria) |
| 12:30-12:50 | <b>MR advances in perinatal tensor diffusion imaging</b><br>Guy Sebag (France)              |
| 12:50-13:10 | <b>Congenital and acquired pediatric cerebrovascular disorders</b><br>Andrea Rossi (Italy)  |
| 13:10-13:15 | Discussion  |

13:15-14:15 ESNR GENERAL ASSEMBLY

**13:30-15:00 Lunch**

**14:30-15:00 BRACCO SYMPOSIUM**

**Dose reduction for neuro MRI and MRA with a high relaxivity contrast agent**

Matthew J. Kuhn; Beth Israel Medical Center, Mt. Sinai School of Medicine, New York, NY

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## *Afternoon*

### **15:00-16:50 LECTURE AND SCIENTIFIC PAPERS**

*Chairpersons : Stefan Sunaert (Belgium), Efrosini Z. Papadaki (Greece)*

15:00-15:25 **Neuroradiology in UEMS – a new professional development in Europe**  
Olof Flodmark ( Sweden)

15:25-16:50 **Scientific Papers (TE5): Advanced imaging modalities I**

#### **METABOLITE CONCENTRATIONS IN SUPRAVENTRICULAR WHITE MATTER FROM TEENAGE TO EARLY OLD AGE: DEPENDENT ON AGE BUT NOT ON SEX. A SHORT ECHO TIME 1H MRS STUDY**

R. RAININKO(1), P. MATTSSON(2)

(1)Uppsala University - Department of Radiology Uppsala SWEDEN, (2)Uppsala University - Department of Neuroscience Uppsala SWEDEN

#### **BRAIN 1H-MRS IN LEBER OPTIC NEUROPATHY AND NON-AFFECTED MUTATION CARRIERS**

J. OSTOJIC(1), E. Gotsis(2), D. Kozic(1), J. Jancic(3), K. Koprivsek(1), J. Konstantinovic(1), M. Prvulovic(1)

(1)Diagnostic Imaging Center, Institute of Oncology Sremska Kamenica SERBIA, (2)Advanced Research and Therapeutic Institute

ENCEPHALOS/EUROMEDIC Athens GREECE, (3)Clinic of Neurology and Psychiatry for Children and Youth, School of Medicine, University of Belgrade Belgrade SERBIA

#### **QUANTIFICATION OF [123I] - FP - CIT (DATSCAN) VOLUME IMAGING BY MATLAB FOR THE DIFFERENTIATION AND GRADING OF PARKINSONISM AND ESSENTIAL TREMOR**

M.E. Lyra(1), M. Sotiropoulos(1), N. Lagopati(1), E. Kapaki(2), A. Gouliamos(1), G.S. Limouris(1)

(1)University of Athens, Aretaeion Hospital, A' Radiology Department Athens GREECE,

(2)University of Athens, Aeginition Hospital, Neurology Department Athens GREECE

#### **IS MTR A RELIABLE PARAMETER FOR THE ASSESSMENT OF PATHOLOGIES IN THE BRAIN? ANALYSIS OF MTR REGARDING QMT PARAMETERS WITH HIGH RESOLUTION BSSFP IMAGING**

M. GARCIA(1), M. Gloor(2), S.G. Wetzel(1), F. Jax(1), E.W. Radue(1), K. Scheffler(2), O. Bieri(2)

(1)Department of Neuroradiology, University Hospital, Basel, SWITZERLAND, (2)Department of Radiological Physics, University Hospital, Basel, SWITZERLAND

#### **CLINICAL EVALUATION OF A COMBINED, PROTOTYPE PET-MRI SYSTEM: PRELIMINARY EXPERIENCE IN PROBANDS AND PATIENTS**

S. BISDAS, T. Nägele, B. Pichler, H.P. Schlemmer, S. Claussen, U. Ernemann

Eberhard Karls University Hospital Tübingen GERMANY

#### **HIGH-FIELD 3D WHOLE BODY POST-MORTEM MAGNETIC RESONANCE MICROSCOPY AT 9.4 TESLA: INITIAL EXPERIENCE IN HUMAN FETUSES**

T. YOUSRY, S. Thayyil, J. Cleary, N. Sebire, R. Scott, W. Chong, R. Gunny, C. Owens, O. Olsen, A. Offiah, H. Parkes, L. Chitty, A. Price, N. Robertson, M. Lythgoe, A. Taylor

UCL London UNITED KINGDOM

#### **EXPERIMENTAL HIGH-RESOLUTION MR-IMAGING OF THE PERIODONTAL SPACE WITH A SURFACE COIL AT 3 TESLA**

C. GAUDINO(1), S. HEILAND(1), M. PHAM(1), R. COSGAREA(2), M. BENDSZUS(1), S. ROHDE(1)

(1)Universitätsklinikum Heidelberg, Neuroradiology Department Heidelberg GERMANY,

(2)Universitätsklinikum Heidelberg, Mund-Zahn-Kiefer-Klinik Heidelberg GERMANY

### **CEREBRAL METABOLISM IN PATIENT WITH FIBROMYALGIA: A 3 TESLA STUDY**

P. Feraco(1), A. Bacci(1), F. Pedrabissi(2), V. Tugnoli(3), N. Malavolta(2), M. Leonardi(1)  
(1)Neuroradiology Department, Bellaria Hospital, University of Bologna Bologna ITALY,  
(2)Rheumatology Department, S. Orsola-Malpighi Hospital, University of Bologna Bologna ITALY,  
(3)Department of Biochemistry G. Moruzzi, University of Bologna, Bologna, ITALY

### **MR-ANGIOGRAPHY AND PLAQUE IMAGING OF THE CAROTID BIFURCATION WITH A NEWLY DEVELOPED 8-CHANNEL TRANSMIT-RECEIVE COIL AT 7 TESLA**

T. BREYER(1), O. Kraff(1,2), S. Maderwald(1,2), A. Bitz(1,2), S. Orzada(1,2), M.E. Ladd(1,2), E.R. Gizewski(1,2), H.H. Quick(1,2)  
(1)Institute for Diagnostic und Interventional Radiology and Neuroradiology, Essen University Hospital Essen GERMANY, (2)Erwin L. Hahn Institute for Magnetic Resonance Imaging, University of Duisburg-Essen Essen GERMANY

### **CEREBRAL MR-VOLUMETRIC EXAMINATIONS IN THE DIAGNOSIS OF ALZHEIMER DISEASE**

I. GYURICZA(1), LR. KOZAK(2), T. GYORKE(3), L. SZIDONYA(3), J. GYEBNAR(3), T. KOVACS(4), G. RUDAS(2), P. BARS(2,5)  
(1)State Health Centre, Dept. of Radiology Budapest HUNGARY, (2)Semmelweis University, MR Research Centre Budapest HUNGARY, (3)Semmelweis University Dept. of Diagnostic Radiology and Oncotherapy, Budapest HUNGARY, (4)Semmelweis University Dept of Neurology Budapest HUNGARY, (5)Semmelweis University, Cardiovascular Centre, MRI Laboratory, Budapest, HUNGARY

*16:50-17:15 Break*

### **17:15-18:30 LECTURE AND SCIENTIFIC PAPERS**

*Chairpersons : Paul Parizel (Belgium), Ioannis Andreou (Greece)*

17:15-17:40      **Viral-Prion diseases of the CNS**  
Turgut Tali (Turkey)

17:40-18:30      **Scientific Papers (TE6): Free topics**

### **ENDOVASCULAR TRANSPLANTATION OF STEM CELLS TO THE INJURED RAT CNS**

J. Lundberg(1), K. Le Blanc(2), M. Söderman(1), T. Andersson(1), S. Holmin(1)  
(1)Department of Clinical Neuroscience, Karolinska Institutet and Department of Neuroradiology, Karolinska University Hosp Stockholm SWEDEN, (2)Department of Stem cell research, Karolinska Institutet and Department of Hematology, Karolinska University Hospital, Stockholm SWEDEN

### **COMPARISON OF RADIATION DOSES TO PATIENTS UNDERGOING CEREBRAL ANGIOGRAPHY WITH CTA AND DSA**

Z. RUMBOLDT(1), W. HUDA(1), R. COURSEY(1), E. MAH(1), S. BISDAS(2)  
(1)Medical University of South Carolina - Department of Radiology and Radiological Sciences Charleston, SC, USA, (2)Eberhard Karls University - Department of Neuroradiology Tuebingen GERMANY

### **MEASUREMENT OF THE DIAMETERS OF THE OPTIC NERVE SHEATH AND SUPERIOR OPHTHALMIC VEIN IN BRAIN COMPUTED TOMOGRAPHY: A MEANS TO CONFIRM NEUROIMAGING FINDINGS SUGGESTIVE OF ELEVATED INTRACRANIAL PRESSURE**

T. SOLDATOS(1), D. KARAKYKLAS(1), P. LAMPROPOULOU(1), C. SAMARA(1), E. KROMMIDA(1), A. KARABINIS(2), A. GOULIAMOS(3), C. DROSSOS(1)  
(1)Department of Radiology and Imaging, G.Gennimatas General State Hospital Athens GREECE, (2)Intensive Care Unit, G.Gennimatas General State Hospital Athens GREECE, (3)Second Department of Radiology, University of Athens, Attikon Hospital Athens GREECE

### **THE APPLICATION OF OPTIC NERVE SONOGRAPHY IN THE DIAGNOSTIC**

**EVALUATION OF ADULT BRAIN INJURY**

T. SOLDATOS(1), D. KARAKITSOS(2), K. CHATZIMICHAIL(3), M. PAPATHANASIOU(3), A. GOULIAMOS(4), A. KARABINIS(2)

(1)Department of Radiology and Imaging, G.Gennimatas General State Hospital Athens GREECE,

(2)Intensive Care Unit, G.Gennimatas

General State Hospital Athens GREECE, (3)Second Department of Radiology, University of Athens, Attikon Hospital Athens GREECE,

(4)First Department of Radiology, University of Athens, Aretaieio Hospital Athens GREECE

**NEUROSURGEONS, NEUROLOGISTS AND PSYCHIATRISTS' EXPECTATIONS ON BRAIN IMAGING: WHAT WE (THOUGHT) WE ALWAYS KNEW BUT NEVER DARED TO ASK**

D. SEIXAS, M. AYRES BASTO

SAO JOAO HOSPITAL - DEPT. OF NEURORADIOLOGY PORTO PORTUGAL

**CAN MRI WITH FAST SPIN ECHO T2 REPLACE ENHANCED IMAGES IN FOLLOW-UP OF SURGICALLY TREATED PITUITARY MACROADENOMAS?**

G. RINGSTAD, J. HALD, T. NOME

Oslo University Hospital - Rikshospitalet OSLO NORWAY

**SECOND OPINION CONSULTATIONS IN NEURORADIOLOGY: ASSESSMENT OF VALUE**

E. ZAN(1), D.M. Yousem(1), M. Carone(2), J.S. Lewin(1)

(1)The Johns Hopkins Medical Institution, Department of Radiology Baltimore, MD USA, (2)The

Johns Hopkins Bloomberg School of Public Health, Department of Biostatistics Baltimore, MD USA

**18:30-19:30 Case based review session: The Spine**

Johan van Goethem (Belgium)

# Saturday, September 19, 2009

## Morning

Lecture Hall "HESPERIDES"

### 08:15 -09:25 REFRESHER COURSE INT II: Endovascular treatment of acute stroke

Chairpersons : Claude Manelfe (France), Eftichios Archontakis (Greece)

<b>08:15-08:35</b>	<b>Acute stroke. Diagnostic assessment of the cerebral thrombolysis candidate</b>
	Catherine Oppenheim (France)
<b>08:35-08:55</b>	<b>Intra-arterial thrombolysis in acute ischemic stroke</b>
	Rudiger Von Kummer (Germany)
<b>08:55-09:15</b>	<b>Mechanical thrombectomy for revascularization in acute ischemic stroke</b>
	Martin Schumacher (Germany)
<b>09:15-09:25</b>	Discussion

### 09:25-10:15 LECTURES

Chairpersons : Augusto Goulão (Portugal), Georges Rodesch (France)

09:25 -09:50	<b>Angioarchitectural analysis and treatment strategy in BAVMs</b>
	George Magoufis (Greece)
09:50-10:15	<b>Treatment of BAVMs. Case selection for glue vs Onyx.</b>
	James Byrne (United Kingdom)

### 10:15-10:45 Break

### 10:45-13:15 LECTURE AND SCIENTIFIC PAPERS

Chairpersons: Martin Schumacher (Germany), Achilleas Chatziioannou (Greece)

10:45 -11:10	<b>Endovascular treatment of intracranial atherosclerotic disease</b>
	Juergen Reul (Germany)
11:10-13:15	<b>Scientific Papers (HE4): Interventional stroke II</b>

#### **MECHANICAL EMBOLECTOMY WITH THE PENUMBRA STROKE SYSTEM IN ACUTE ISCHEMIC STROKE: A MATCHED PAIR STUDY IN COMPARISON WITH INTRAARTERIAL THROMBOLYSIS.**

C. TASCHNER(1), M. TREIER(1), W. NIESEN(2), A. BERLIS(1), J. WEBER(1), M. SCHUMACHER(1)

(1)Dept. of Neuroradiology, University Hospital Freiburg FREIBURG GERMANY, (2)Dept. of Neurology, University Hospital Freiburg, FREIBURG GERMANY

#### **CENTRAL RETINAL ARTERY OCCLUSION: LOCAL INTRAARTERIAL FIBRINOLYSIS VERSUS CONSERVATIVE TREATMENT. A MULTICENTER RANDOMIZED TRIAL (EAGLE-STUDY)**

M. SCHUMACHER(1), D. Schmidt(2), B. Jurklies(3), C. Gall(4), I. Wanke(5), C. Schmoor(4), J. Maier-Lenz(4), L. Solymosi(6), H. Brückmann(7), A. Neubauer(8), A. Wolf(8), N. Feltgen(2)  
(1)University Hospital Dpt. of Neuroradiology Freiburg GERMANY, (2)University Hospital Dpt. of Ophthalmology Freiburg GERMANY, (3)University Hospital Dpt. of Ophthalmology Essen GERMANY, (4)University Hospital Center of Clinical Trials Freiburg GERMANY, (5)University Hospital Dpt. of Neuroradiology Essen GERMANY, (6)University Hospital Dpt. of Neuroradiology Würzburg GERMANY, (7)Klinikum Großhadern Dpt. of Neuroradiology München GERMANY, (8)University Hospital Dpt. of Ophthalmology München GERMANY

#### **CONTRAST MATERIAL POOLING IMMEDIATELY AFTER ENDOVASCULAR REVASCULARIZATION IN ACUTE STROKE: A PREDICTOR OF FINAL INFARCT SIZE**

D. SAN MILLAN RUIZ(1), V. Mendes Pereira(1), R. Sztazjel(2), I. Momjian(2), C. Bonvin(2), A.P.

Narata(1), S. Althrichter(1), K. Lovblad(1)

(1)Service of Diagnostic and Interventional Neuroradiology, Department of Radiology, Geneva University Hospital, Geneva, SWITZERLAND, (2)Department of Neurology, Geneva University Hospital Geneva SWITZERLAND

**MULTIMODAL MECHANICAL THROMBECTOMY IN ACUTE ISCHEMIC STROKE WITH THE PHENOX® CLOT RETRIEVER**

S. PROTHMANN, H. Lockau, F. Dorn, C. Zimmer, T. Liebig

(1)University hospital rechts der Isar, Department of Neuroradiology Munich GERMANY

**ENDOVASCULAR TREATMENT OF ACUTE ISCHEMIC STROKE WITH MECHANICAL DEVICE FOR THROMBUS ASPIRATION: OUR EXPERIENCE OF 19 CASES**

A. PAOLUCCI, V. CIVELLI, P. SANTALUCIA, M. ISALBERTI, C.M. CINNANTE, C. SINA, A. COSTA, S. AVIGNONE, R. PAPA, V. BRANCA

(1)IRCCS OSPEDALE MAGGIORE POLICLINICO MANGIAGALLI -REGINA ELENA- DEPARTMENT OF DIAGNOSTIC AND INTERVENTIONAL NEURORADIOLOGY MILAN ITALY

**STENT ANGIOPLASTY IN SYMPTOMATIC STENOSIS OF DISTAL CEREBRAL ARTERIES**

M. MUSACCHIO(1), A. MUSACCHIO(2), R. LANGHI(2), L. LANGHI(2)

(1)Hôpitaux Civils de Colmar - Interventional Neuroradiology Colmar FRANCE, (2)Sanatorio Santa Fe - Interventional Neuroradiology, Santa Fe ARGENTINA

**IN-VIVO EVALUATION OF THE PHENOX CRC FOR MECHANICAL THROMBECTOMY IN ACUTE VESSEL OCCLUSION**

P. MORDASINI(1), M. Hiller(1), C. Brekenfeld(1), M. Arnold(2), G. Schroth(1), J. Gralla(1)

(1)Institute of Diagnostic and Interventional Neuroradiology, University Hospital - Inselspital Bern SWITZERLAND, (2)Department of Neurology, University Hospital - Inselspital Bern SWITZERLAND

**INTRACRANIAL ANGIOPLASTY AND STENTING FOR CREBRAL ARTEROSCLEROSIS : RESULTS OF 93 CONSECUTIVE PATIENTS**

D. HWANG(1), I. Kang(1), I. Lee(1), K. Kim(1), C. Hur(2), I. Kim(2)

(1)Hangang Sacred Heart Hospital Seoul SOUTH KOREA, (2)Seoul Saint Mary Hospital Seoul SOUTH KOREA

**VERTEBROBASILAR THROMBECTOMY USING THE MERCI-SYSTEM: THE KAROLINSKA EXPERIENCE**

T. Andersson(1), S. Holmin(1), M. von Euler(2), M. Söderman(1)

(1)Department of Clinical Neuroscience, Karolinska Institutet and Department of Neuroradiology, Karolinska University Hosp Stockholm SWEDEN, (2)Department of Clinical Neuroscience, Karolinska Institutet and Department of Neurology, Karolinska University Hosp Stockholm SWEDEN

**INTRACRANIAL PTA AND STENTS IN STROKE PREVENTION**

S. BAKKE, T. Nome

(1)Oslo University Hospital Rikshospitalet Oslo NORWAY

**TREATMENT OF STENOSES OF THE VERTEBRAL ARTERY ORIGIN USING SHORT DRUG-ELUTING CORONARY STENTS: IMPROVED FOLLOW-UP RESULTS**

Z. Vajda(1), E. Miloslavski(1), T. Guethe(2), S. Fischer(1), G. Albes(1), E. Schmid(3), H. Henkes(1)

(1)Klinik fuer Neuroradiologie Stuttgart GERMANY, (2)Klinik fuer Kardiologie Stuttgart GERMANY, (3)Klinik fuer Neurologie Stuttgart GERMANY

**TREATMENT OF NEUROVASCULAR IN-STENT STENOSES USING A CORONARY PACLITAXEL ELUTING BALLOON (SEQUENT PLEASE, B. BRAUN)**

Z. Vajda(1), T. Guethe(2), E. Miloslavski(1), S. Fischer(1), E. Schmid(3), B. Scheller(4), H. Henkes(1)

(1)Klinik fuer Neuroradiologie Stuttgart GERMANY, (2)Klinik fuer Kardiologie Stuttgart GERMANY, (3)Klinik fuer Neurologie Stuttgart GERMANY, (4)Klinik fuer Innere Medizin / Kardiologie Homburg / Saar GERMANY

**ACUTE STROKE TREATMENT USING A MECHANICAL APPROACH WITH THE PENUMBRA SYSTEM**

C. ROTH(1), I. Grunwald(2), S. Walter(3), P. Papanagiotou(1), K. Faßbender(3), W. Reith(1)  
(1)Department of diagnostic and interventional Neuroradiology, Saarland University Homburg GERMANY, (2)Department of Neuroradiology, University of Oxford Oxford UNITED KINGDOM, (3)Department of Neurology, Saarland University Homburg GERMANY

*13:30-15:00 Lunch*

**14:00-14:30 BAYER SCHERING PHARMA SYMPOSIUM**

**MRI Contrast Media with HIGH Concentration, HIGH Relaxivity and HIGH Stability: - Evident and Possible advantages**  
Nicoletta Anzalone (Italy)

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*Afternoon*

**15:00-16:50 LECTURE AND SCIENTIFIC PAPERS**

*Chairpersons : Pedro Vilela (Portugal), Karl Olof Lovblad (Switzerland)*

15:00-15:25        **Stroke in the young adult etiology and imaging**  
W. K. Kling Chong (United Kingdom)

15:25-16:50        **Scientific Papers (HE5): Cerebrovascular disease imaging I**

**CT ANGIOGRAPHY COVERING CERVICAL AND CEREBRAL ARTERIES ON A 64-ROW SYSTEM WITH CONTRAST AND FLUSH DOSES DETERMINED BY PATIENT WEIGHT**

K. TSUCHIYA, M. IMAI, M. YOSHIDA, A. FUJIKAWA, M. KOYANAGI, T. NITATORI  
(1)Kyorin University, Department of Radiology Tokyo JAPAN

**TRANSCRANIAL DOPPLER SONOGRAPHY AS A CONFIRMATORY TEST IN THE DIAGNOSIS OF BRAIN DEATH**

T. SOLDATOS(1), D. KARAKITSOS(2), C. CHATZIMICHAIL(3), M. PAPATHANASIOU(3), A. GOULIAMOS(4), A. KARABINIS(2)

(1)Department of Radiology and Imaging, G.Gennimatas General State Hospital Athens GREECE, (2)Intensive Care Unit, G.Gennimatas General State Hospital Athens GREECE, (3)Second Department of Radiology, University of Athens, Attikon Hospital Athens GREECE, (4)First Department of Radiology, University of Athens, Aretaieio Hospital Athens GREECE

**CAROTID AND VERTEBROBASILAR ARTERIAL DISSECTION: IMAGING FINDINGS IN CTA AND MRA WITH PATHOLOGIC CORRELATION**

S. Benakis(1), I.G. Skouras(1), V. Ouranos(1), K. Stefanidis(1), E. Testebasi(1), V. Vantali(1), C. Louizakis(1), V. Savvopoulou(2), D. Chondros(1)

(1)GENERAL HOSPITAL EVANGELISMOS ATHENS GREECE, (2)GENERAL HOSPITAL THRIASIO ELEFSINA GREECE

**VESSEL HYPERDENSITY IN PATIENTS WITH ACUTE BRAIN ISCHEMIA ASSESSED BY MEANS OF MULTI-DETECTOR CT: CORRELATION WITH DWI**

A. ROMANO, V. FINOCCHI, O. GAGLIARDO, S. METAMBOU, S. PUGLIESE, L.M. FANTOZZI, A. BOZZAO

(1)NEURORADIOLOGY S.ANDREA HOSPITAL UNIVERSITY SAPIENZA, ROME, ITALY

**ANGIOGRAPHIC FLAT-PANEL COMPUTED TOMOGRAPHY AFTER INTRAVENOUS CONTRAST AGENT APPLICATION: A NON-INVASIVE FOLLOW-UP TOOL AFTER INTRACRANIAL ANGIOPLASTY AND STENTING**

M. PSYCHOGIOS(1), P. Schramm(1), JH. Buhk(2), M. Knauth(1)  
(1)Neuroradiology, University Hospital Goettingen Goettingen GERMANY, (2)Diagnostic Radiology, University Hospital Hamburg Hamburg GERMANY

**THE APPLICATION OF ANGIOGRAPHIC COMPUTED TOMOGRAPHY IN THE POSTINTERVENTIONAL CEREBRAL DIAGNOSTIC IMAGING. FINAL RESULTS AFTER 82 CASES**

M. PSYCHOGIOS(1), P. Schramm(1), JH. Buhk(2), M. Knauth(1)  
(1)Neuroradiology, University Hospital Goettingen Goettingen GERMANY, (2)Diagnostic Radiology, University Hospital Hamburg Hamburg GERMANY

**EVALUATION OF CEREBRAL ANEURYSMS WITH THREE-DIMENSIONAL CT ANGIOGRAPHY**

T. SOLDATOS, E. KROMMIDA, P. LAMPROPOULOU, A. MIKA, D. KARAKYKLAS, C. SAMARA, G. ZOIS, C. DROSSOS  
(1)Department of Radiology and Imaging, G.Gennimatas General State Hospital Athens GREECE

**DWI LESIONS AND THEIR INFLUENCE ON COGNITIVE PERFORMANCE AFTER CAS**

S. PILGRAM-PASTOR(1), K. Wasser(2), P. Weber(1), J. Knauf(2), A. Kastrup(2), M. Knauth(1)  
(1)Dep. of Neuroradiology, University Hospital Göttingen GERMANY, (2)Dep. of Neurology, University Hospital Göttingen GERMANY

**CAN THE STATIN THERAPY REDUCE THE RISK OF STROKE AFTER CAS?**

P. PAPANAGIOTOU, C. Roth, C. Krick, M. Politi, C. Kraus, W. Reith  
(1)Clinic for Diagnostic and Interventional Neuroradiology Homburg GERMANY

**EARLY CT SIGN OF ISCHEMIA: DO THEY ALWAYS DOT A STROKE?**

R. MARASCO(1), V. CITTON(1), C. BRIANI(2), M. CALDERONE(1), S. DAL POS(1), L. SANTELLI(3), A. VIDALI(2), R. MANARA(1)  
(1)U.O Neuroradiologia, Ospedale Civile di Padova PADOVA ITALY, (2)Clinica Neurologia I, Ospedale civile di Padova PADOVA ITALY, (3)Clinica Neurologica II, Ospedale Sant'Antonio di Padova PADOVA ITALY

**INTRAVENOUS ACETYLSALICYLIC ACID AS A PROPHYLACTIC AND FIRST LINE "RESCUE" AGENT IN THE MANAGEMENT OF THROMBOEMBOLIC COMPLICATIONS DURING INTRACRANIAL ANEURYSM COIL EMBOLIZATION**

K. LOBOTESIS, D. BUTTERISS, D. MITRA, D. BIRCHALL, V. JAYAKRISHNAN, A. GHOLKAR  
(1)Neuroradiology Department, Regional Neurosciences Centre, The Newcastle upon Tyne Hospitals NHS Foundation Trust, Newcastle upon Tyne, UNITED KINGDOM

**COMPUTED TOMOGRAPHY ANGIOGRAPHY FOR THE EVALUATION OF PATIENTS WITH NON-TRAUMATIC SUBARACHNOID HAEMORRHAGE IN A REFERRAL CENTER**

P. ZAMPAKIS(1), C. KALOGEROPOULOU(1), P. KRANIOTIS(1), V. PANAGIOTOPOULOS(2), D. KONSTANTINOU(2), T. PETSAS(1), D. SIABLIS(1)  
(1)UNIVERSITY HOSPITAL OF PATRAS. RADIOLOGY DEPARTMENT PATRAS GREECE, (2)UNIVERSITY HOSPITAL OF PATRAS. NEUROSURGERY DEPARTMENT PATRAS GREECE

**CAROTID STENOSIS. EVALUATION WITH MULTI DETECTOR COMPUTED TOMOGRAPHY ANGIOGRAPHY (MDCTA) – HISTOPATHOLOGICAL CORRELATION. PRELIMINARY RESULTS OF A PROSPECTIVE STUDY**

P. ZAMPAKIS(1), C. KALOGEROPOULOU(1), G. MOSCHOPOULOS(1), A. TSAMANTAS(2), P. KRANIOTIS(1), I. TSOLAKIS(3), T. PETSAS(1), D. SIABLIS(1)  
(1)UNIVERSITY HOSPITAL OF PATRAS. RADIOLOGY DEPARTMENT PATRAS GREECE, (2)UNIVERSITY HOSPITAL OF PATRAS, PATHOLOGY DEPARTMENT PATRAS GREECE, (3)UNIVERSITY HOSPITAL OF PATRAS, VASCULAR SURGERY DEPARTMENT,

PATRAS, GREECE

**16:50- 17:15 Break**

**17:15-18:30 LECTURE AND SCIENTIFIC PAPERS**

*Chairpersons : Marek Sasiadek (Poland), Zulejha Merhemic (Bosnia & Herzegovina)*

17:15-17:40        **Sellar and parasellar lesions**  
                         Antonios Drevelegas (Greece)

17:40-18:30        **Scientific Papers (HE6): Pediatric neuroradiology II**

**MRI EVALUATION OF SURGICAL DAMAGE TO THE PROXIMAL EFFERENT CEREBELLAR PATHWAY IN PEDIATRIC PATIENTS WITH CEREBELLAR MUTISM**

Z. PATAY(1), N. Miller(1), E. Reddick(1), J. Glass(1), M. Kocak(2), Q. Ji(1), U. Loebel(1), B. Morris(3), A. Gajjar(3)

(1)St. Jude Children's Research Hospital, Department of Radiological Sciences, Memphis, TN USA, (2)St. Jude Children's Research Hospital, Department of Biostatistics, Memphis, TN USA, (3)St. Jude Children's Research Hospital, Department of Oncology, Memphis, TN, USA

**EVALUATING PEDIATRIC COCHLEAR IMPLANT CANDIDATES WITH LOW-DOSE TEMPORAL BONE COMPUTED TOMOGRAPHY: IMAGE QUALITY AND EFFECTIVE DOSES**

C. NAUER(1), A. RIEKE(1), C. ZUBLER(1), P. SENN(2)

(1)University Hospital, Institute for Diagnostic and Interventional Neuroradiology Berne SWITZERLAND, (2)University Hospital, Department of Otolaryngology, Head and Neck Surgery Bern, SWITZERLAND

**CYCLOSPORINE (CS) NEUROTOXICITY IN PEDIATRIC PATIENTS UNDERGOING HEMATOPOIETIC STEM CELL TRANSPLANTATION (HSCT): CONVENTIONAL MR AND DIFFUSION-WEIGHTED IMAGING FINDINGS**

G. MORANA(1), M. FARACI(2), A. ROSSI(1)

(1)G.GASLINI CHILDREN'S RESEARCH INSTITUTE, DEPARTMENT OF NEURORADIOLOGY GENOA ITALY, (2)G.GASLINI CHILDREN'S RESEARCH INSTITUTE, DEPARTMENT OF HEMATOLOGY, GENOA ITALY

**MULTINATIONAL CLINICAL EVALUATION OF GADOBENATE DIMEGLUMINE FOR CONTRAST-ENHANCED MR NEUROIMAGING IN CHILDREN**

M. KUHN(1), E. Cianciulli(2), C. Fonda(3), M. Pasowicz(4), P-Y. Gao(5)

(1)University of Illinois at Peoria Peoria, IL USA, (2)Santobono Pausillipon Childrens Hospital Naples ITALY, (3)Anna Meyer Pediatric Hospital Florence ITALY, (4)Krakow Hospital John Paul II Krakow POLAND, (5)Beijing Tian Tan Hospital Beijing CHINA

**INVESTIGATING SPONTANEOUS "FLUCTUATIONS" OF CONTRAST ENHANCEMENT IN CHILDHOOD PILOCYTIC ASTROCYTOMAS: OUR EXPERIENCE**

S. GAUDINO, T. Tartaglione, G.M. Di Lella, A.M. Costantini, F.R. Quaglio, R. Calandrelli, C. Colosimo

Department of Bioimaging and Radiological Sciences, Catholic University Rome ITALY

**CEREBRAL VASCULAR INVOLVEMENT IN LEMIERRE'S SYNDROME IN CHILDREN**

M. SEVERINO(1), S. Liyanage(1), V. Novelli(2), L. Carr(3), D.E. Saunders(1), R. Gunny(1)

(1)Department of Radiology - Great Ormond Street Hospital London UNITED KINGDOM, (2)Department of Infectious Diseases – Great Ormond Street Hospital London UNITED KINGDOM, (3)Department of Neurology - Great Ormond Street Hospital London UNITED KINGDOM

**Saturday, September 19, 2009**  
*Morning*

11:10-12:10      **Scientific Papers (TH4): Imaging of brain tumors-multimodality approach II**

**EVALUATION OF WHOLE-BRAIN PERFUSION COMPUTED TOMOGRAPHY IN THE DIAGNOSIS OF INTRA-AXIAL TUMORS**

A. XYDA(1), P. Schramm(1), C. Bock(2), R. Finzel(1), E. Klotz(3), G. Erb(4), M. Knauth(1)  
(1)Department of Neuroradiology, University Goettingen Medical Center Goettingen GERMANY,  
(2)Department of Neurosurgery, University Goettingen Medical Center Goettingen GERMANY,  
(3)Siemens Health Care Sector, Computed Tomography Forchheim, GERMANY, (4)Bracco Imaging Konstanz GERMANY

**DIFFUSION WEIGHTED IMAGING DOES NOT PREDICT HISTOLOGICAL GRADING IN MENINGIOMAS**

L. SANTELLI(1), G. Ramondo(1), A. Della Puppa(2), R. Scienza(2), M. Ermani(3), D. D'Avella(2), R. Manara(1)  
(1)Neuroradiology Department Padova ITALY, (2)Neurosurgery Department Padova ITALY,  
(3)Neurological Clinic Padova ITALY

**PRE-SURGICAL PLANNING AND MR-TRACTOGRAPHY UTILITY IN BRAIN TUMOR RESECTION**

A. ROMANO(1), V. FINOCCHI(1), M. BONAMINI(1), G. TRASIMENI(1), V. CIPRIANI(1), L. SALAMANCA(1), L. FERRANTE(2), L.M. FANTOZZI(1), A. BOZZAO(1)  
(1)NEURORADIOLOGY S.ANDREA HOSPITAL UNIVERSITY SAPIENZA, ROME, ITALY,  
(2)NEUROSURGERY S.ANDREA HOSPITAL UNIVERSITY SAPIENZA, ROME, ITALY

**PERFUSION MR IMAGING IN DIFFERENTIATING HIGH-GRADE FROM LOW-GRADE GLIOMAS**

G. Sparacia(1), L. Filosto(2), G. Cavarretta(1), P. Purpura(1), M. Midiri(1)  
(1)DI.BI.MEL, Sezione di Radiologia P. Cignolini Palermo ITALY, (2)Casa di Cura di Alta Specialità La Maddalena, Palermo, ITALY

**CHANGES IN 1H-MRS IN GLIOMA PATIENTS BEFORE AND AFTER RADIATION THERAPY**

G. Sparacia(1), L. Filosto(2), G. Cavarretta(1), P. Purpura(1), M. Midiri(1)  
(1)DI.BI.MEL, Sezione di Radiologia P. Cignolini Palermo ITALY, (2)Casa di Cura di Alta Specialità La Maddalena, Palermo, ITALY

**INCIDENCE AND CLINICAL SIGNIFICANCE OF HEMORRHAGIC LESIONS IN DIFFUSE PONTINE GLIOMAS ASSESSED BY 2D T2\*-WEIGHTED AND 3D SUSCEPTIBILITY-WEIGHTED IMAGING**

U. Löbel(1), J. Sedlacik(1), M. Kocak(2), A. Broniscer(3), C. Hillenbrand(1), Z. Patay(1)  
(1)St. Jude Children's Research Hospital, Department of Radiological Sciences Memphis, TN, USA,  
(2)St. Jude Children's Research Hospital, Department of Biostatistics Memphis, TN, USA, (3)St. Jude Children's Research Hospital, Department of Oncology, Memphis, TN, USA

**QUANTITATIVE CHARACTERIZATION OF T2 HYPOINTENSE FOCI IN DIFFUSE PONTINE GLIOMAS USING DYNAMIC SUSCEPTIBILITY-WEIGHTED CONTRAST-ENHANCED PERFUSION MR AND DIFFUSION-WEIGHTED IMAGING**

U. Löbel(1), J. Sedlacik(1), Q. Ji(1), M. Kocak(2), A. Broniscer(3), C. Hillenbrand(1), E. Reddick(1), Z. Patay(1)  
(1)St. Jude Children's Research Hospital, Department of Radiological Sciences, Memphis, TN, USA,  
(2)St. Jude Children's Research Hospital, Department of Biostatistics, Memphis, TN, USA, (3)St. Jude Children's Research Hospital, Department of Oncology, Memphis, TN, USA

**QUANTITATIVE LONGITUDINAL EVALUATION OF DIASCHISIS-RELATED CEREBELLAR PERFUSION AND DIFFUSION PARAMETERS IN PATIENTS WITH SUPRATENTORIAL HEMISPHERIC HIGH-GRADE GLIOMAS AFTER SURGERY**

Z. PATAY(1), C. Parra(1), A. George(1), M. Scoggins(1), A. Broniscer(2), R. Ogg(1)  
(1)St. Jude Children's Research Hospital, Department of Radiological Sciences Memphis, TN USA,  
(2)St. Jude Children's Research Hospital, Department of Oncology Memphis, TN USA

**DETERMINATION OF HIGH GRADE GLIOMA TREATMENT VOLUMES FOR  
RADIOTHERAPY BY MEAN OF DTI AND PWI METRICS**

A. STECCO(1), MC. PISANI(2), D. BELDI'(2), L. MASINI(2), S. ZIZZARI(1), R. QUARTA(1), M.  
BRAMBILLA(3), M. KRENGLI(1), A. CARRIERO(2)  
(1)SCDU RADIOLOGIA - AOU MAGGIORE CARITA', NOVARA ITALY, (2)SCDU  
RADIOTERAPIA- AOU MAGGIORE CARITA', NOVARA, ITALY, (3)SCDO FISICA  
SANITARIA - AOU MAGGIORE CARITA', NOVARA, ITALY

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## *Afternoon*

*Chairpersons: Rudiger Von Kummer (Germany), Majda Thurnher (Austria)*

15:25-16:50      **Scientific Papers (TH5): Cerebrovascular disease imaging II**

**HOW USEFUL IS MAGNITUDE SUSCEPTIBILITY WEIGHTED IMAGING (SWIM) IN  
THE DETECTION OF DEVELOPMENTAL VENOUS ANOMALIES?**

J. MUNUERA DEL CERRO, S. Mechó, R. Mitjana, C. Auger, L. Frascheri, A. Rovira  
(1)Magnetic Resonance UNit, Department of Radiology (IDI), Hospital Universitario Vall d'Hebron  
Barcelona SPAIN

**EXAMINING STENOSIS OF THE EXTRACRANIAL CAROTID ARTERY USING  
MULTIMODAL CT- AND MR-ANGIOGRAPHY WITH 3.0 TESLA MRI AND  
MULTISLICE-CT**

O. MOSKE-EICK(1), R. Macharzina(2), H. Mast(1), R. Schwarzwald(1), G. Ihorst(3), CHR.  
Taschner(1), M. Schumacher(1), J. Weber(1)  
(1)Neuroradiology, Neurocenter, University Medical Center, Freiburg. GERMANY, (2)Heart-Center  
at Bad Krotzingen Bad Krotzingen GERMANY, (3)Center of Clinical Trials, University Medical  
Center, Freiburg, GERMANY

**64-SLICE CT ANGIOGRAPHY IN THE DETECTION OF INTRACRANIAL ANEURYSMS:  
COMPARISON WITH DSA AND SURGICAL FINDINGS**

S. MILOSEVIC MEDENICA(1), M. RAKIC(2), Z. MARKOVIC(1), V. VUCKOVIC(1), B.  
PRSTOJEVIC(1), J. KOSTIC(1), B. MILATOVIC(1)  
(1)Institute of Radiology, Department of Neuroradiology, Clinical Center of Serbia Belgrade  
SERBIA, (2)Institute of Neurosurgery, Clinical Center of Serbia Belgrade SERBIA

**DETECTION OF CEREBRAL ANEURYSMS BY CT ANGIOGRAPHY IN PATIENTS WITH  
NON-TRAUMATIC SUBARACHNOID HEMORRHAGE**

P. MARTHINSEN, T. Nome, S.J. Bakke, E.A. Jacobsen  
Oslo University Hospital - Rikshospitalet Oslo NORWAY

**ADVANCED IMAGING OF ACUTE AND SUBACUTE STROKE BY MAGNETIZATION  
TRANSFER RATIO APPLYING A BSSFP-PROTOCOL**

F. JAX(1), O. Bieri(2), M. Gloor(2), G. Sommer(1), K. Scheffler(2), E-W. Radue(1), S. Wetzel(1)  
(1)Division of Neuroradiology, University of Basel Hospital Basel SWITZERLAND, (2)Division of  
Radiological Physics, University of Basel Hospital Basel SWITZERLAND

**SUSCEPTIBILITY-WEIGHTED IMAGING: CLINICAL ROLES IN HYPERACUTE  
ISCHEMIC STROKE**

M. IDA, Y. KUBO, S. SUGAWARA, K. HINO, N. YOROZU, Y. KAWAGUCHI  
(1)Tokyo Metropolitan Ebara Hospital - Department of Radiology Tokyo JAPAN

**DIAGNOSING DELAYED CEREBRAL ISCHEMIA WITH DIFFERENT CT MODALITIES  
IN SAH PATIENTS WITH CLINICAL DETERIORATION**

J. DANKBAAR, N. de Rooij, B. Velthuis, C. Frijns, G. Rinkel, I. van der Schaaf

(1)University Medical Center Utrecht Utrecht THE NETHERLANDS

**USEFULNESS OF SWAN SEQUENCE (T2 STAR-WEIGHTED ANGIOGRAPHY) AT 3T IN VASCULAR DISEASES**

F. CATTIN(1), A. DAVID(1), C. BILLON-GRAND(1), S. CHAPUY(1), M. PERRIN(2), JF. BONNEVILLE(1)

(1)DEPARTMENT OF NEURORADIOLOGY, UNIVERSITY HOSPITAL OF BESANCON BESANCON FRANCE, (2)GE HEALTHCARE VELIZY FRANCE

**ANGIO CT OF THE NORMAL BASAL VEIN. VARIABILITY AND DIAGNOSTIC IMPORTANCE**

M. BRAUN(1), P. NAVEL(2), A.L. DERELLE(1), M. PEREZ(2, 3), T. HAUMONT(2), R. ANXIONNAT(1,3), S. BRACARD(1,3)

(1)University Hospital - department of Neuroradiology Nancy FRANCE, (2)Nancy Université - Anatomy department Nancy FRANCE, (3)IADI -INSERM - U 947 Nancy FRANCE

**NON-INVASIVE MR IMAGING OF CEREBRAL PERFUSION IN PATIENTS WITH A SYMPTOMATIC CAROTID ARTERY STENOSIS**

R. BOKKERS(1), H.B. van der Worp(2), W.M. Mali(1), J. Hendrikse(1)

(1)University Medical Center Utrecht - Department of Radiology Utrecht THE NETHERLANDS  
(2)University Medical Center Utrecht - Department of Neurology Utrecht THE NETHERLANDS

**DVA - UNUSUAL PRESENTATIONS**

J. LUCKMAN(1,2), S. MAIMON(3)

(1)Assuta medical center Tel Aviv ISRAEL, (2)Rabin medical cent Petah Tikva ISRAEL, (3)soraski medical center Tel Aviv ISRAEL

**ACCIDENT AND EMERGENCY BRAIN CT PERFUSION AND ANGIO CT IN PATIENTS WITH ACUTE STROKE ELIGIBLE FOR THROMBOLITIC THERAPY**

M. MALAGOLI, M. Cobelli, S. Vallone, P. Carpeggiani

(1)Unità sanitaria di Modena Nuovo ospedale Civile S.Agostino Estense, Unità Operativa di Neuroradiologia Modena ITALY

**MR IMAGING OF BILATERAL PARAMEDIAN THALAMIC AND MESENCEPHALIC INFARCTIONS**

G. Sparacia, E. Di Giovanna, G. Cavarretta, V. Mularo, ME. Fiamma

(1)University of Palermo - DIBIMEL - Department of Radiology, Palermo, ITALY

**INCIDENCE OF INTRACRANIAL VERTEBROBASILAR DISSECTION IN OUTPATIENTS WITH NO OR MINOR SYMPTOMS**

H. MANABE(1), K. Yonezawa(1), T. Kato(2), M. Izumo(3), H. Tanifuji(3)

(1)National Hakodate Hospital, Department of clinical reserch Hakodate JAPAN, (2)Hakodate Shintoshil Hospital, Department of Neurosugery Hakodate JAPAN, (3)Hakodate Shintoshi Hospital, Devision of Radiology, Hakodate, JAPAN

**Sunday, September 20, 2009**

***Morning***

***Lecture Hall "TERPSICHORE"***

**08:15 - 09:30 REFRESHER COURSE D IV: Epilepsy**

*Chairpersons : Peter Barsi (Hungary), Spyros Sgouros (Greece)*

- |             |  |
|-------------|--|
| 08:15-08:35 | <b>MR imaging in the presurgical workup of patients with drug resistant epilepsy</b><br>Matilda Papathanasiou (Greece) |
| 08:35-08:55 | <b>Novel contrasts to reveal more about the brain in epilepsy</b><br>Fergus J. Rugg-Gunn (United Kingdom)              |
| 08:55-09:15 | <b>Functional neuroimaging in the preoperative evaluation of language indrug</b>                                       |

09:15-09:30 **-resistant epilepsy**  
Elio Maccagnano (Italy)  
Discussion

**09:30 - 10:00 LECTURE**

*Chairperson : Lambros Vlahos (Greece)*

**Hearing loss; imaging of the auditory pathway**  
Jan Casselman (Belgium)

**10:00-10:30 Break**

**10:30-12:00 LECTURE AND SCIENTIFIC PAPERS**

*Chairpersons : Tatjana Stosic Opincal (Serbia), Jan Casselman (Belgium)*

10:30 -10:55 **Paradigm shift in CSF circulation: CSF absorption by brain capillaries instead of arachnoid granulations**  
Dan Greitz (Sweden)

10:55-12:00 **Scientific Papers (TE7): Head and Neck imaging and intervention**

**IMAGING FEATURES OF TYRANOSCLEROSIS**

N. CHOTAI, PAUL. See, GOH. Julian, LOKE. SC  
(1)TAN TOCK SENG HOSPITAL SINGAPORE SINGAPORE

**ORGAN PRESERVING CONCURRENT INTRA-ARTERIAL CHEMORADIATION THERAPY FOR ADVANCED LARYNGEAL CARCINOMA**

N. TANAKA(1), T. ABA(1), Y. UCHIYAMA(1), G. SUZUKI(1), M. TSUJI(1), T. NAKASHIMA(2), N. HAYABUCHI(1)  
(1)Department of Radiology, Kurume University Hospital Kurume JAPAN, (2)Department of otolaryngology, head and neck surgery, Kurume University Hospital Kurume JAPAN

**STANDARD UPTAKE VALUE MEASUREMENTS IN THE EVALUATION OF RESIDUAL / RECURRENT SQUAMOUS CELL CARCINOMA OF THE ORAL CAVITY AND OROPHARYNX WITH [18F] FLUORODEOXYGLUCOSE POSITRON-EMISSION TOMOGRAPHY**

M. SPAMPINATO(1), MG. Matheus(1), S. Bisdas(2), G. Goldsberry(1), Z. Rumboldt(1)  
(1)Medical University of South Carolina Charleston, SC USA, (2)Diagnostic and Interventional Neuroradiology Karls Eberhard University Tübingen GERMANY

**DIFFERENCES IN THE DIAMETER OF THE SUPERIOR OPHTHALMIC VEIN ON MDCT BETWEEN PATIENTS WITH MINOR AND SEVERE HEAD TRAUMA**

A. MACKINNON(1), K. MISZKIEL(1, 2), J. MADIGAN(1), I. DAVAGNANAM(1, 2)  
(1)NATIONAL HOSPITAL FOR NEUROLOGY AND NEUROSURGERY LONDON UNITED KINGDOM, (2)MOORFIELDS EYE HOSPITAL LONDON UNITED KINGDOM

**VALUE OF PERFUSION ESTIMATION IN SQUAMOUS CELL CARCINOMA OF THE UPPER AERODIGESTIVE TRACT: LONG-TERM RESULTS OF BASELINE PERFUSION CT MEASUREMENTS**

S. BISDAS(1), Z. Rumboldt(2), K. Surlan-Popovic(3), T. Plotas(4), M. Baghi(5), M.G. Mack(5)  
(1)Eberhard Karls University Hospital Tübingen GERMANY, (2)Medical University of South Carolina, Charleston, SC, USA, (3)Clinical Centre Ljubljana, Ljubljana, SLOVENIA, (4)CT and MRI Peloponnissou Corinth GREECE, (5)Johann Wolfgang Goethe University Hospital Frankfurt GERMANY

**PERFUSION CT FOR MONITORING INITIAL RESPONSE IN ADVANCED SQUAMOUS CELL CARCINOMA OF THE HEAD AND NECK TREATED WITH CONCOMITANT CHEMORADIOTHERAPY**

S. BISDAS(1), K. Surlan-Popovic(2), T. Plotas(3), U. Ernemann(1), P. Strojjan(2)  
(1)Eberhard Karls University Hospital Tübingen GERMANY, (2)Clinical Centre Ljubljana Ljubljana

SLOVENIA, (3)CT and MRI  
Peloponnisou Corinth GREECE

**SCLEROTIC INTRAOSSEOUS SPHENOID RIDGE MENINGIOMA: CT AND MRI  
FEATURES OF 24 CASES**

E. ZAN(1), N. Aygun(1), P. Burger(2), I. Izbudak(1)

(1)The Johns Hopkins Medical Institution, Department of Radiology Baltimore, MD USA, (2)The  
Johns Hopkins Medical Institution, Department of Pathology Baltimore, MD USA

**VISUAL LOSS, MRI AND OPTIC NERVE ENHANCEMENT: CLUES TO THE BEST  
DIAGNOSIS**

F. HERAN

Fondation Rothschild Paris FRANCE

**12:30-13:30 CLOSING REMARKS**

**Sunday, September 20, 2009**  
*Morning*

*Lecture Hall "HESPERIDES"*

**8:30-10:00 Scientific Papers (HE7) : Spinal interventions**

*Chairpersons : Cosma Andreula (Italy), Johan van Goethem (Belgium)*

**OZONUCLEOLYSIS IN PROLAPSE CERVICAL DISCS-EXCELLENT RESULTS**

U. RASHID

Lahore General Hospital, Lahore, PAKISTAN

**IMAGE-GUIDED PROCEDURES WITH THE XPERGUIDE SYSTEM IN  
INTERVENTIONAL NEURORADIOLOGY**

C. TASCHNER(1), T. WOLTER(2), J. WEBER(1), A. LINDER(1), U. HAUSER(1), O. MOSKE-  
EICK(1), M. SCHUMACHER(1)

(1)Department of Neuroradiology Freiburg GERMANY, (2)Department of Neurosurgery Freiburg  
GERMANY

**A BI-PHASIC CERAMIC BONE SUBSTITUTE FOR THE TREATMENT OF VERTEBRAL  
COMPRESSION FRACTURES: EARLY CLINICAL RESULTS**

H. HATTEN, JR.

(1)Indian River Radiology, Vero Beach, FL, USA

**CERVICAL VERTEBROPLASTY:INDICATIONS AND RESULTS**

M. MUTO, G. GUARNIERI, G. AMBROSANIO, P. VASSALLO, F. ZECCOLINI, A. LAVANGA  
NEURORADIOLOGY SERVICE CARDARELLI HOSPITAL NAPLES ITALY

**PRELIMINARY EXPERIENCE WITH NEW SYNTHETIC CERAMIC BONE SUBSTITUTE  
-CERAMENT™ SPINE SUPPORT- IN VERTEBRAL COMPRESSION FRACTURE(VCF):  
SHORT TERM FOLLOW-UP AT 3 MONTHS ABOUT 15 CASES**

M. MUTO, G. GUARNIERI, G. AMBROSANIO, P. VASSALLO, A. LAVANGA

(1)NEURORADIOLOGY SERVICE CARDARELLI HOSPITAL NAPLES ITALY

**VERTEBROPLASTY: A MINIMALLY INVASIVE APPROACH TO VERTEBRAL PAIN.  
SINGLE CENTER EXPERIENCE WITH 432 TREATED LEVELS**

I. FRAGATA, J. RAMALHO, J. REIS

(1)CENTRO HOSPITALAR DE LISBOA CENTRAL, EPE; DEPARTMENT OF

NEURORADIOLOGY LISBON PORTUGAL

**INTRAOPERATIVE VERTEBROPLASTY COMBINED WITH POSTERIOR CORD DECOMPRESSION: REPORT OF FIFTEEN CASES**

L. SAITTA(1), L. ALLEGRETTI(1), N. MAVILIO(1), C. SILVESTRO(2), R. SPAZIANTE(2), L. CASTELLAN(1)

(1)Department of Diagnostic and Interventional Neuroradiology, San Martino Hospital Genoa ITALY, (2)Department of Neurosurgery, San Martino Hospital Genoa ITALY

**FREQUENCY AND RISK FACTORS OF ADJACENT FRACTURES AFTER VERTEBROPLASTY**

Z. KULCSAR(1), M. Marosfoi(2), Z. Berentei(2), I. Szikora(2)

(1)Klinik Hirslanden Zurich SWITZERLAND, (2)National Institute of Neurosurgery Budapest HUNGARY

*10:00-10:30 Break*

**10:30-12:30 LECTURES AND SCIENTIFIC PAPERS**

*Chairpersons : Anton Valavanis (Switzerland), Chrysoula Samara (Greece)*

10:30-10:55      **Intracranial DAVMs. Classification, natural history and treatment planning**  
Georges Rodesch (France)

10:55 -11:20      **Transarterial Onyx embolization for the treatment of intracranial DAVMs**  
Christophe Cognard (France)

**11:20-12:30      Scientific Papers (HE8): Advanced imaging modalities II f-MRI, DTI**

**ARTERIAL SPIN LABELLING FOR FUNCTIONAL MRI USING MOTOR TASK**

P. VILELA(1), M. PIMENTEL(2), I. SOUSA(3), P. FIGUEIREDO(3)

(1)HOSPITAL DA LUZ LISBON PORTUGAL, (2)FACULDADE DE CIÊNCIAS E TECNOLOGIA. UNL LISBON PORTUGAL, (3)INSTITUTO SUPERIOR TÉCNICO. UTL, LISBON, PORTUGAL

**NEURORADIOLOGY MEETS NEUROSCIENCE: HOW IS BOLD FMRI DIFFERENT IN THE CLINICAL AND RESEARCH SETTINGS?**

D. SEIXAS(1), M. AYRES BASTO(1), J. ANDERSSON(2)

(1)SAO JOAO HOSPITAL - DEPT. OF NEURORADIOLOGY PORTO PORTUGAL, (2)UNIVERSITY OF OXFORD - OXFORD CENTRE FOR FUNCTIONAL MAGNETIC RESONANCE IMAGING OF THE BRAIN (FMRIB) OXFORD UNITED KINGDOM

**WHITE MATTER ANISOTROPY IN PATIENTS WITH HEREDITARY SPASTIC PARAPLEGIA: SPG11 VERSUS SPG4 MUTATION**

A. MESCHINI(1), P.E. Assako Ondo(1), F.G. Garaci(1), F. Bolacchi(1), G. Manenti(1), S. Marziali(1), R. Floris(1), F. Santarelli(2), G. Simonetti(1)

(1)Università di Roma Tor Vergata - Dipartimento di Diagnostica per Immagini Rome ITALY, (2)Ospedale Bambin Gesù - Roma Rome, ITALY

**INVESTIGATION OF THE MANGINA-TEST WITH FMRI IN CHILDREN AFFLICTED WITH ADHD-COMBINED TYPE**

CA. MANGINA(1), S. KARAKAS(2), Z. BARAN(2), A. OZKAN-CEYLAN(2), E. DOGUTEPE-DINCER(2), HM. KARAKAS(3), E. T. TALI(3), H. BEUZERON-MANGINA(1)

(1)MONTREAL RESEARCH AND TREATMENT CENTER FOR LEARNING ABILITIES AND DISABILITIES - COGNITIVE PSYCHOPHYSIOLOGY LABORATORY, MONTREAL, CANADA, (2)HACETTEPE UNIVERSITY - COGNITIVE PSYCHOPHYSIOLOGY RESEARCH UNIT ANKARA TURKEY, (3)GAZI UNIVERSITY - DEPARTMENT OF RADIOLOGY - SECTION OF NEURORADIOLOGY, ANKARA, TURKEY

**FUNCTIONAL MR IMAGING-DIFFUSION TENSOR IMAGING REVEALS THE SOMATOTOPIC ORGANIZATION OF MOTOR CORTICOSPINAL AND**

### **CORTICOBULBAR TRACTS IN GLIOMA PATIENTS**

Neven Moustafa. Hazzaa(1, 2), Laura Mancini(1), MARIO. Miranda(1), JOHN S. Thornton(1), Tarek A. Yousry(1)

(1)Institute of Neurology- the National Hospital for Neurology & Neurosurgery - University College London Hospitals London UNITED KINGDOM, (2)Menoufia University Hospital - Radiology department Shebeen ElKoom - Menoufia EGYPT

### **NEUROBIOLOGICAL EFFECTS OF ATYPICAL ANTIPSYCHOTICS AND COGNITIVE REMEDIATION**

J. FURTNER(1), A.O. PINTSOV(2), G. KASPRIAN(1), G. SACHS(2), D. PRAYER(1)

(1)Medical University of Vienna, Department of Radiology Vienna AUSTRIA, (2)Medical University of Vienna, Department of Psychiatry Vienna AUSTRIA

### **ANATOMICAL AND FUNCTIONAL ALTERATIONS OF CORTICO-CEREBELLO-CORTICAL LOOPS IN HIGH FUNCTIONING AUTISM**

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### **OPTIC NERVE AND OPTIC RADIATION NEURODEGENERATION IN GLAUCOMA PATIENTS: AN IN VIVO ANALYSIS WITH 3 TESLA MR DIFFUSION TENSOR IMAGING**

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### **EVALUATION OF THE ACTIVITY CHANGES IN THE BRAIN OCCURRING DURING MOTOR TASKS IN PATIENTS WITH MULTIPLE SCLEROSIS BY USING FUNCTIONAL MAGNETIC RESONANCE IMAGING**

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### **PULSE TRIGGERING CAN IMPROVE THE QUALITY OF DIFFUSION TENSOR IMAGING DATA IN NEONATAL SUBJECTS**

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