

37th ESNR ANNUAL MEETING

21st Advanced Course in Diagnostic Neuroradiology
5th Advanced Course in Interventional Neuroradiology

FRANKFURT, GERMANY
September 28-October 1, 2013

President
Friedhelm E. Zanella

FINAL PROGRAM



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ESNR 2013

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Welcome Message

It is my great honour and privilege to welcome you in Frankfurt, to the 37th Annual Meeting of the European Society of Neuroradiology.

The 37th Meeting will include two parallel courses, the 21st Advanced Course in Diagnostic Neuroradiology and the 5th Advanced Course in Interventional Neuroradiology to be held on September 28, while the Annual Meeting will be held from September 29 to October 1. The highest purpose of the ESNR annual event is calling European and non-European experts to meet and debate the state of the art of our branch of medicine confirming the high level of science and education in neuroradiology.

Both the advanced courses and the Meeting offer a great opportunity for neuroradiologists and other professionals to interact and exchange ideas with their colleagues from Europe and beyond.

As President of the Congress, it is a pleasure to underline the strenght of our society. Thanks to the presence of many world renowned speakers there will be updates in key clinical areas of diagnostic and interventional neuroradiology.

Shorter communications will offer opportunity for younger neuroradiologists to present their scientific work. The daily poster sessions will be also an important part of this congress. Besides the refresher courses embedded within the scientific program there will be the workshops which are focused on special topics of the diagnostic and interventional neuroradiology. A hot topic session will present the important future of this exciting speciality. Last but not least time to meet the experts, either during the scientific sessions or at the social events is also fundamental in our Meeting to know people and share the relevant experiences.

Frankfurt is a modern and technologically advanced metropolis that can be easily reached by plane, train or car. This exciting city, located in the center of Germany, offers a lot of interesting things to do and places to be visited, beside our scientific commitments. You will see the world known skyline of Frankfurt which mainly is a result of a lot of towers of different German and European banks. There are many fascinating museums and galleries and, if you like music, there are different kinds of performances from the well-known opera to live music in different pubs, which represent an important part of the exciting night-life of this international city.

The somehow unusual timing of the Congress, from Saturday to Tuesday (instead of Thursday-Sunday) is caused by the famous fairs that will take place in the city, the IAA (International Automobile Fair) held just before the congress and the International Book Fair that will be held straight after.

Again I am delighted to welcome you in Frankfurt and I hope that this event will remain in your memory for a long time.

*Prof. Friedhelm E. Zanella
President of the 37th ESNR Annual Meeting*



37th ESNR ANNUAL MEETING

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37th ESNR ANNUAL MEETING

Program at a glance

SATURDAY, SEPTEMBER 28						
ADVANCED COURSE DIAGNOSTIC / ADVANCED COURSE INTERVENTIONAL						
	Room HZ 2	Room HZ 3	Room HZ 4	Room HZ 5	Room HZ 15	
8:45-10:15	Diagnostic - Beyond morphology: advanced imaging modalities Trauma		8:45-10:00	Interventional - Chronic ischemia of the brain and revascularization Anatomical and pathophysiological basics		
10:15-10:45		Coffee Break	10:00-10:30		Coffee Break	
10:45-12:15	Diagnostic Brain tumors: new biological MR-techniques		10:30-12:15	Interventional Clinical findings and imaging of chronic ischemia		
12:15-14:00			Lunch			
14:00-15:20	Diagnostic Neuroinflammation		14:00-15:20	Interventional Treatment strategies in the light of recent randomized trials		
15:20-15:50			Coffee Break			
15:50-16:30	Diagnostic Pain and epilepsy: can we image it?		15:50-17:30	Interventional Update on carotid and intracranial stenting after the RCTs		
16:30-17:45	Diagnostic Neurodegeneration: MR-modalities against biomarkers					
17:30			Welcome reception			

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Program at a glance

SUNDAY, SEPTEMBER 29					
Room HZ 2	Room HZ 3	Room HZ 4	Room HZ 5	Room HZ 15	
08:00-09:00	08:00-09:00 Refresher Course Diagnostic Pediatric imaging	Refresher Course Interventional Intracranial aneurysms			
09:00-10:00	Plenary session: Brain tumors				
Coffee Break					
10:00-10:30					
10:30-11:30	10:30-11:30 Diagnostic special focus - Spinal imaging	10:30-11:30 Interventional special focus - Interventional stroke treatment			
11:30-12:00	Opening ceremony				
12:00-12:30	Honorary Membership Ceremony				
12:30-14:00	Lunch		12:30-14:00 Lunch	12:30-14:00 Poster Presentation Session	
14:00-15:30	ESNR Awards and European Diplomas Ceremony	13:00-13:30 PENUMBRA Symposium	13:00-14:00 BRACCO Symposium		
		14:00-15:40 Parallel scientific session Stroke diagnostic	14:00-15:30 Parallel scientific session with introductory invited presentation Interventional stroke and revascularization	13:30-15:30 Parallel scientific session with introductory invited presentation Interventional aneurysms: new implants	13:30-15:30 Workshop Stroke treatment
Coffee Break					
15:30-16:00					
16:00-18:00	16:00-18:00 Parallel scientific session with introductory invited presentation Diagnostic advanced MRI-techniques	16:00-18:00 Parallel scientific session with introductory invited presentation White matter diseases	16:00-18:00 Parallel scientific session with introductory invited presentation Spinal imaging	16:00-18:00 Parallel scientific session with introductory invited presentation Interventional AVM and AVF	

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Program at a glance

MONDAY, SEPTEMBER 30									
Room HZ 2		Room HZ 3		Room HZ 4		Room HZ 5		Room HZ 15	
08:00-09:00	Refresher Course Diagnostic Dementias beyond Alzheimer and psychiatric disorders	08:00-09:00	Refresher Course Interventional SAH and vasospasm			09:00-11:00	Workshop MRI spectroscopy: what does that have to do with alcohol?		Workshop Stroke treatment
09:00-10:00	Future MRI	09:00-10:00	Parallel scientific session Stroke Aneurysm/AVM			09:00-11:30			
10:00-10:30		Coffee Break							
10:30-11:30	Diagnostic special focus Inflammatory disease	10:30-11:30	Interventional special focus - Clinical outcome after interventional procedures						
11:30-13:00	Neuroradiology: from the past to the future. Dedicated to Hans Hacker	11:30-13:00	Parallel scientific session Brain tumors 1	11:30-13:00	Parallel scientific session Pediatrics				
13:00-14:00	Lunch	13:00-14:00	MICROVENTION Symposium	13:00-13:30	SIEMENS Symposium	13:00-14:00	Lunch	13:00-14:00	Poster Presentation Session
14:00-15:00	ESNR General Assembly								
15:00-18:00	ESNR Interventional HOT TOPICS	15:00-16:30	Parallel scientific session Brain Tumors 2	15:00-16:30	Joint session on pediatric neuroradiology with the ASPNR Monothematic minicourse "Advances in the understanding of brain malformations"	15:00-16:30	Parallel scientific sessions with introductory invited presentation Spine	15:00-16:30	Parallel scientific sessions with introductory invited presentation Head and neck
		16:30-17:00		Coffee Break					
		17:00-18:30	Parallel scientific session Stroke recanalization	17:00-18:30	Parallel scientific session Inflammatory disease	17:00-18:30	Parallel scientific session Free topics	17:00-18:30	Parallel scientific session Advanced imaging: epilepsy and consciousness

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Program at a glance

TUESDAY, OCTOBER 1					
	Room HZ 2	Room HZ 3	Room HZ 4	Room HZ 5	Room HZ 15
08:00-09:00	Refresher Course Diagnostic Epilepsy, head and neck	08:00-09:00 Refresher Course Interventional Advanced angiographic imaging and radiation protection			
09:00-10:00	Paediatric	09:00-10:00 Imaging in psychiatry			
10:00-10:30	Coffee Break				
10:30-12:00	ESNR - ASNR Joint session	10:30-12:00 Parallel scientific session Advanced imaging "Future Techniques in neuroradiology "			
12:00-13:00	Closing ceremony				

SCIENTIFIC INFORMATION

21st ADVANCED COURSE IN DIAGNOSTIC NEURORADIOLOGY

Beyond morphology: advanced imaging modalities

5th ADVANCED COURSE IN INTERVENTIONAL NEURORADIOLOGY

Chronic ischemia of the brain and revascularization

The Courses take place on September 28 in Room HZ 2 and HZ 4 at the Hörsaalzentrum.

37th ESNR Annual Meeting

The ESNR Meeting takes place from September 29 to October 1 in Room HZ 2, HZ 3, HZ 4, HZ 5 and HZ 15 at Hörsaalzentrum.

Oral Presentations and Poster Session

There are 19 sessions in which the selected abstracts have been slotted. Abstracts received for poster presentation will be displayed in the Poster Session. All the abstracts are published on the dedicated issue of *Neuroradiology*, the official Journal of the European Society of Neuroradiology. The best poster will be selected by a Jury and will be awarded at the end of the Meeting.

POSTER PRESENTATION SESSIONS					
Sunday, September 29			Monday, September 30		
Slot time	Poster number	Chair	Slot time	Poster number	Chair
12:30 - 13:05	P.1.114 - P.1.120	A. Dörfler (Germany)	13:00 - 13:40	P.1.010 - P.1.017	M. Essig (Germany)
12:30 - 13:15	P.1.001 - P.1.009	E. Hattingen (Germany)	13:00 - 13:45	P.1.043 - P.1.051	L. Porto (Germany)
12:30 - 13:40	P.1.018 - P.1.031	M. Mack (Germany)	13:00 - 13:50	P.1.033 - P.1.042	A. Rovira (Spain)
12:45 - 13:45	P.1.052 - P.1.066	H. Lanfermann (Germany)	13:00 - 13:50	P.1.121 - P.1.130	M. Wagner (Germany)
12:45 - 13:55	P.1.067 - P.1.080	W. Kurre (Germany)	13:15 - 14:00	P.1.104 - P.1.113	B. Kress (Germany)
12:50 - 13:55	P.1.081 - P.1.093	B. Yan (Australia)			
13:00 - 13:50	P.1.094 - P.1.103	B. Schuknecht (Switzerland)			

(NEW!) Hot topics and Workshops

To increase the role of the ESNR-meeting as a forum for discussion of recent trends in Interventional Neuroradiology this year, two new formats are offered to participants:

Interventional Hot-Topics

Deals with actual controversies in the field of AVM, stroke and aneurysm treatment.

ARUBA, IMS III, ISAT and current status of the clipping/coiling debate as well as hypes with new devices are discussed after controversial statements by well known experts.

- **Monday, September 30, hrs 15:00 - 18:00**

SCIENTIFIC INFORMATION

Hands-on-Workshop Interventional Stroke Treatment

Six companies have been invited to prepare vascular models or simulators to demonstrate the basic techniques and handling of stent-retrievers and aspiration catheters for participants who think about having an interventional stroke service in the future.

Experienced neuroradiologists are available as instructors for technical and clinical discussions.

- **Sunday, September 29, hrs 13:30 - 15:30 room HZ 15**
- **Monday, September 30, hrs 09:00 - 11:00 room HZ 15**

Please note that the number of participants is limited to 24 persons per session. Please check for availability at the registration desk.

Technical Equipments for Speakers and Authors of Oral presentations

Both PC and Mac data projection are available at the Meeting. Each Room is provided with a laptop. Use of one's personal laptop is not allowed. Speakers with their personal laptop are kindly requested to go to the Speaker Slide Center at least 2 hours before the presentation to have their presentation copied.

For any special requirement, please contact the Secretariat.

Speakers are invited to be in the assigned Room for presentation at least 10 minutes before the beginning of the Session and respect the timing assigned to their presentation.

Official Language

English is the official language of the Meeting. Simultaneous translation will not be provided.

Certificate of Attendance

The electronic copy of the certificate of attendance will be sent to all the attendees after the Meeting.

UEMS - European Union of Medical Specialists

The Meeting has received 15 UEMS credits; the two Advanced Courses have received 6 UEMS credits each. Credits are valid all over Europe, the United States and Canada (for reciprocity agreement with the American Medical Association). The certificate will be sent by email after the Meeting to all the attendees, who have filled in the feedback form.

In order to guarantee the regularity and transparency of the accreditation procedure, all the Conflict of Interest Disclosure Forms signed by speakers are available for consultation at the Secretariat Desk.

GENERAL INFORMATION

Venue

Campus Westend
Goethe Universität Frankfurt am Main
Grüneburgplatz 1
60323 Frankfurt - Germany

Registration Desk opening hours

- September 27 - hrs 16.00 - 19.00
- September 28 - hrs 7.30 - 18.00
- September 29 - hrs 7.30 - 18.00
- September 30 - hrs 7.30 - 18.30
- October 01 - hrs 7.30 - 13.00

Admission to the Meeting

Name badges are used as passes. All participants are requested to wear their name badge during the Meeting and social events.

Badges are distinguished as follows:

ESNR Meeting Delegate	No Color
Advanced Courses Delegates	Blue
Invited Speakers and Chairs	Red
Exhibitors	Yellow

On-site Registrations (VAT included)

	September 28, 2013 Advanced Courses (1 day)	September 28-October 1, 2013 Advanced Courses + ESNR Meeting (4 days)	September 29 October 01, 2013 ESNR Meeting (3 days)
Member	€ 370,00	€ 775,00	€ 675,00
Non Member	€ 550,00	€ 995,00	€ 895,00
Junior Member	€ 350,00	€ 520,00	€ 450,00
Institutional Member	€ 540,00	€ 985,00	€ 885,00
Daily Registration Member	€ 250,00		
Daily Registration Non-Member	€ 350,00		
Gala Dinner	€ 60,00	€ 60,00	€ 60,00
ESNR membership	€ 140,00		

Registration fee includes: admission to the selected Courses and/or Meeting, congress kit, daily coffee break, lunch, welcome reception and UEMS credits.

How to get registered

Onsite Payment is possible by:

- Cash (Euro)
- Credit Card: all major credit cards are accepted (American Express, VISA, Eurocard/Master Card)

Lunch

Lunches will be served in the exhibition area and at the entrance of the rooms

Exhibition

Exhibition area will be open throughout the Meeting

Insurance

Meeting organizers cannot accept liability for personal injuries or for damage or loss of property belonging to Meeting participants, either during or as a result of the Meeting. Please check the validity of your own insurance.

SOCIAL EVENTS

Saturday, September 28 - hrs 17.30 - 19.00

Welcome Reception

The Welcome Reception will take place at Campus Westend. This is an informal evening open to all delegates attending the Advanced Course and/or ESNR Meeting.

Sunday, September 29 - hrs 19.30

ESNR Gala Dinner

Palmengarten Gesellschaftshaus
Palmengartenstraße 11
60325 Frankfurt am Main

The Gala Dinner will be held at the Palmengarten Gesellschaftshaus in Frankfurt. This beautiful building is one of the most important and historical buildings in Frankfurt. You will have the chance to admire the Festsaal together with its gallery presented in new splendour. Sumptuous ornamental details in the Neo-Renaissance style and the well-preserved walls give the Festsaal its distinctive character. Its special atmosphere is also owed to two classical chandeliers and the beauty of the historical parquet floor. Palmengarten is located in the popular botanic garden, „Garden of Palms“, located near by the Goethe University Campus

After dinner a well-known band will offer the chance of dancing until midnight.

This evening is open to all delegates at a fee of € 60,00.

SCIENTIFIC PROGRAM

Saturday, September 28, 2013

21st Advanced Course in Diagnostic Neuroradiology
"Beyond morphology: advanced imaging modalities"

3rd Advanced Course in Interventional Neuroradiology
"Chronic ischemia of the brain and revascularization"

ROOM HZ 2

08:45 - 10:15

DIAGNOSTIC • Beyond morphology: advanced imaging modalities

Trauma

Chair: F.E. Zanella (Germany)

Traumatic brain injury

P.M. Parizel (Belgium)

Trauma from the perspective of the neurosurgeon

C. Renner (Germany)

MRI of spinal injury

J. van Goethem (Belgium)

Room HZ 4

08:45 - 10:00

INTERVENTIONAL • Chronic ischemia of the brain and revascularization

Anatomical and pathophysiological basics

Chair: M. Knauth (Germany)

Delayed and chronic ischemia of the brain - an underestimated feature?

M. Söderman (Sweden)

Vascular borderzones, microcirculation and collateral supply

A. Valavanis (Switzerland)

Basics of cerebral hemodynamics and metabolism in acute and chronic ischemia

J. Sobesky (Germany)

10:00 - 10:45

Coffee Break

Room HZ 2

10:45 - 12:15

DIAGNOSTIC • Beyond morphology: advanced imaging modalities

Brain tumors: new biological MR-techniques

Chair: H. Lanfermann (Germany)

Requests from neurooncologist

J. Steinbach (Germany)

Susceptibility weighted techniques

R. Gasparotti (Italy)

MR derived biomarkers for quantification of microvascular disease in the ageing brain and neurodegenerative disorders

A. Jackson (United Kingdom)

Diffusion techniques

P. M. Parizel (Belgium)

SCIENTIFIC PROGRAM

Saturday, September 28, 2013

Room HZ 4

10:30 - 12:15

INTERVENTIONAL • Chronic ischemia of the brain and revascularization

Clinical findings and imaging of chronic ischemia

Chair: B. Yan (Australia)

Clinical and neuropsychological findings in patients with hemodynamic ischemia

H. Steinmetz (Germany)

Imaging patterns of ischemic lesions and differential diagnosis

B. Schuknecht (Switzerland)

Advanced imaging-techniques in chronic hypoperfusion of the brain

M. Wagner (Germany)

Challenges of brain perfusion measurement

M. Wintermark (USA)

Discussion

12:15 - 14:00

Lunch

Room HZ 2

14:00 - 15:20

**DIAGNOSTIC • Beyond morphology: advanced imaging modalities
Neuroinflammation**

Chair: L. Penev (Bulgaria)

MR imaging in non-MS inflammation: immune-mediated diseases

T. Yousry (United Kingdom)

MR imaging in non-MS neuroinflammation: granulomatous diseases

F. Bonneville (France)

MR imaging: neuroinflammation in immunocompromised patients

A. Rovira (Spain)

Discussion

Room HZ 4

14:00 - 15:20

INTERVENTIONAL • Chronic ischemia of the brain and revascularization

Treatment strategies in the light of recent randomized trials

Chair: G. Schroth (Switzerland)

Revascularization in hemodynamic ischemia: which evidence do we have?

L.J. Kappelle (The Netherlands)

Medical therapy of patients with hemodynamic impairment.

Can the brain survive without vessels?

B. Yan (Australia)

Neurointerventional revascularization techniques

J. Gralla (Switzerland)

EC-IC-Bypass in ischemic patients?

M. Czabanka (Germany)

15:20 - 15:50

Coffee Break

SCIENTIFIC PROGRAM

Saturday, September 28, 2013

Room HZ 2

15:50 - 16:30

**DIAGNOSTIC • Beyond morphology: advanced imaging modalities
Pain and epilepsy: can we imagine it?**

Chair: G. Krumina (Latvia)

Imaging pain

H. Boecker (Germany)

MRI in focal, non-lesional epilepsy

S. Knake (Germany)

Room HZ 2

16:30 - 17:45

**DIAGNOSTIC • Beyond morphology: advanced imaging modalities
Neurodegeneration: MR-modalities against biomarkers**

Chair: R. Vanninen (Finland)

Neurodegeneration: inflammatory reaction or vascular disorder

M. Heneka (Germany)

Imaging in Parkinson and other extrapyramidal disorders

T. Stošić-Opinčal (Serbia)

Case presentation and discussion

S. Weidauer (Germany), M. Wagner (Germany)

Room HZ 4

15:50 - 17:30

**INTERVENTIONAL • Chronic ischemia of the brain and
revascularization**

Update on carotid and intracranial stenting after the RCTs

Chair: J. Trenkler (Austria)

Carotid stenting in neuroradiology today: standard or niche indication?

O. Jansen (Germany)

Stenting of intracranial stenoses after SAMMPRIS

C. Cognard (France)

**Periinterventional stroke, hemorrhage and hyperperfusion: how to avoid
and manage complications during and after revascularisation**

I. Szikora (Hungary)

How dangerous is revascularization? Cases and complications session

D. Rüfenacht (Switzerland)

SCIENTIFIC PROGRAM

Sunday, September 29, 2013

37th ESNR Annual Meeting

Room HZ 2

08:00 - 09:00

REFRESHER COURSE DIAGNOSTIC: Pediatric imaging

Chair: P. Due-Tønnessen (Norway)

Differential diagnosis of pediatric brain tumors

L. Porto (Germany)

Real time MR Technique for fetuses and neonates

T. Feygin (USA)

Room HZ 3

08:00 - 09:00

REFRESHER COURSE INTERVENTIONAL: Intracranial aneurysms

Chair: J. Rusalleda Nadal (Spain), M. Söderman (Sweden)

Coiling vs. clipping in ruptured and unruptured aneurysms: long-term-efficacy and status of the debate

A. Molyneux (United Kingdom)

How to coil an aneurysm. Individual skill or reliable standards?

L. Pierot (France)

Room HZ 2

09:00 - 10:00

Brain tumors

Chair: P.M. Parizel (Belgium), M. Buruian (Romania)

Lymphomatoid spectrum disorders, update 2013

A. Osborn (USA)

Advanced tumor MRI

M. Essig (Germany)

10:00 - 10:30

Coffee Break

Room HZ 2

10:30 - 11:30

DIAGNOSTIC SPECIAL FOCUS • Spinal Imaging

Chair: F.E. Zanella (Germany)

Advanced techniques for spine and spinal cord imaging

T. Krings (Canada)

High field strength at the spine, really a step forward?

U. Attenberger (Germany)

Differential diagnosis of acute myelopathy

M.M. Thurnher (Austria)

Room HZ 3

10:30 - 11:30

INTERVENTIONAL SPECIAL FOCUS • Interventional stroke treatment

Chair: R. von Kummer (Germany)

Randomized trials ahead: predictors for successful interventional stroke treatment

R. Wiest (Switzerland)

CT or MRI? Imaging for proper patient selection

A. Dörfler (Germany)

Materials, technical standards and procedural safety

G. Schroth (Switzerland)

SCIENTIFIC PROGRAM

Sunday, September 29, 2013

Room HZ 2

11:30 - 12.00 **OPENING CEREMONY**

12:00 - 12.30 **HONORARY MEMBERSHIP CEREMONY**

12:30 - 14.00 *Lunch*

Room HZ 2

14:00 - 14.45 **ESNR AWARDS AND EUROPEAN DIPLOMAS CEREMONY**

14:45 - 15.30 **EDINR CEREMONY**

Room HZ 15

13:30 - 15.30 **Workshop "Stroke treatment"**
J. Berkefeld (Germany), G. Schroth (Switzerland)

Room HZ 3

14:00 - 15.40 **Parallel scientific session**

Stroke diagnostic

Chair: R. Wiest (Switzerland), M. Wagner (Germany)

NONINVASIVE EVALUATION OF CEREBRAL ARTERIOVENOUS MALFORMATIONS BY 4D-CT ANGIOGRAPHY USING 320-DETECTOR ROW CT

*H. Tajiri, L. Jin, T. Tsukiyama, T. Okabe, H. Kamide, S. Sekine, T. Shimizu, T. Ohiwa
Shonan Kamakura General Hospital, Kamakura, Japan*

TEMPORAL CHANGES OF DIFFUSION KURTOSIS IMAGING IN STROKE PATIENTS

*P. Raab¹, M. Heeren², F. Donnerstag¹, E. Bültmann¹, P. Dellani¹, M. Hennig²,
K. Weißenborn², H. Lanfermann¹*

*¹Neuroradiology, Hannover Medical School, Hannover, Germany, ²Neurology,
Hannover Medical School, Hannover, Germany*

REGIONAL LEPTOMENINGEAL SCORE (RLMS) ON COMPUTED TOMOGRAPHY ANGIOGRAPHY/PERFUSION (CTA-CTP) CAN PREDICTS CLINICAL OUTCOMES IN PATIENTS WITH ACUTE ISCHEMIC STROKE (AIS)

E. Puglielli¹, M. Varrassi¹, M. Fuschi¹, V. Di Egidio²

*¹Interventional and Vascular Radiology, G. Mazzini Hospital, Teramo, Italy, ²General and
Interventional Radiology, S. Spirito Hospital, Pescara, Italy*

FALSE ISCHEMIC PENUMBRAS IN CT BRAIN PERFUSION STUDIES IN PATIENTS WITH ACUTE ISCHEMIC STROKE (AIS)

E. Puglielli¹, M. Varrassi¹, M. Fuschi¹, V. Di Egidio²

*¹Interventional and Vascular Radiology, G. Mazzini Hospital, Teramo, Italy, ²General and
Interventional Radiology, S. Spirito Hospital, Pescara, Italy*

MOTOR FUNCTION RECOVERY PREDICTION IN PATIENT WITH ACUTE ISCHEMIC STROKE USING DIFFUSION TENSOR IMAGING

T. Popova, R. Konovalov, M. Maksimova, M. Krotenkova

FSBI «Research Center of Neurology» under the RAMS, Moscow, Russia

DISTINCTION BETWEEN EXTRAVASATED IODINATED CONTRAST AGENT AND PARENCHYMAL HAEMORRHAGE IN MR IMAGING - AN IN-VITRO AND ANIMAL STUDY

*O. Nikoubashman¹, F. Jablawi³, E. Yousefian¹, L. Tanrikulu³, A. Woitok², T. Stopinski²,
R. Tolba², J. Schulz⁴, H. Clusmann³, M. Wiesmann¹*

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Uniklinik Aachen, Aachen, Germany*

SCIENTIFIC PROGRAM

Sunday, September 29, 2013

HAEMORRHAGE/CONTRAST STAINING AREAS AFTER MECHANICAL INTRA-ARTERIAL THROMBECTOMY IN ACUTE ISCHEMIC STROKE: IMAGING FINDINGS AND CLINICAL SIGNIFICANCE

O. Nikoubashman^{1,2}, M. Gindullis², K. Frohnhofer¹, R. Pjontek¹, M. Brockmann¹, A. Reich², J. Schulz², M. Wiesmann¹

¹ University Hospital Aachen, Department of Diagnostic and Interventional Neuroradiology, Aachen, Germany, ² University Hospital Aachen, Department of Neurology, Aachen, Germany

INTRACRANIAL ANEURYSM AS AN ATHEROSCLEROTIC DISEASE

A. Grams¹, B. Glodny², E. Maenner², E. Schoenherr², R. Helbok³, J. Petersen²

¹ Department of Neuroradiology, Innsbruck Medical University, Innsbruck, Austria,

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BOLD-BASED MRI REVEALS HYPOXIC AREAS IN PATIENTS WITH STROKE OR SEVERE ARTERIAL STENOSIS

A. Gersing¹, M. Ankenbrank¹, V. Toth¹, S. Wunderlich², C. Zimmer¹, C. Preibisch¹

¹ Department of Neuroradiology, Technical University Munich, Munich, Germany,

² Department of Neurology, Technical University Munich, Munich, Germany

Room HZ 4

14:00 - 15:40

Parallel scientific session with introductory invited presentation

Interventional stroke and revascularization

Chair: I. Szikora (Hungary)

New devices and techniques

O. Jansen (Germany)

INITIAL CLINICAL EXPERIENCE WITH THE ADAPT TECHNIQUE: A DIRECT ASPIRATION FIRST PASS TECHNIQUE FOR STROKE THROMBECTOMY

D. Frei¹, A.S. Turk², A. Spiotta³, J. Mocco⁴, B. Baxter⁵, D. Fiorella⁶, A. Siddiqui⁷, M. Mokin⁷, M. Dewan⁴, H. Woo⁶, R. Turner³, H. Hawk², A. Miranpuri², I. Chaudry²

¹ Swedish Medical Centre, Department of Radiology, Englewood, CO, USA, ² Medical University of South Carolina, Department of Radiology, Charleston, SC, USA, ³ Medical University of South Carolina, Department of Neurosciences, Charleston, SC, USA,

⁴ University of Vanderbilt, Department of Radiology and Radiological Sciences, Nashville, TN, USA, ⁵ Erlanger Health System, Department of Radiology, Chattanooga, TN, USA, ⁶ Stony Brook University, Department of Neurosurgery, Stony Brook, NY, USA, ⁷ University at Buffalo, Department of Neurosurgery, Buffalo, NY, USA

SOLVING THE ISSUE OF RESTENOSIS AFTER STENTING OF INTRACRANIAL STENOSES: EXPERIENCE WITH TWO THIN STRUT DRUG ELUTING STENTS (DES) - TAXUS ELEMENT™ (BOSTON SCIENTIFIC) AND RESOLUTE INTEGRITY™ (MEDTRONIC INC.)

W. Kurre¹, M. Aguilar-Pérez¹, S. Fischer¹, G. Arnold², E. Schmid³, H. Bänzner³, H. Henkes¹

¹ Klinikum Stuttgart, Department of Neuroradiology, Stuttgart, Germany, ² Klinikum Sindelfingen, Department of Neurology, Sindelfingen, Germany, ³ Klinikum Stuttgart, Department of Neurology, Stuttgart, Germany

MECHANICAL RECANALIZATION OF ACUTE M1 OCCLUSIONS WITH THE PRESET® STENTRETRIEVER IN 48 PATIENTS - TECHNICAL SUCCESS AND CLINICAL OUTCOME

S. Prothmann¹, F. Kober¹, S. Wunderlich², J. Kleine¹, K. Kreiser¹, T. Boeckh-Behrens¹, C. Zimmer¹, H. Poppert²

¹ Klinikum rechts der Isar, Department of Neuroradiology, Munich, Germany, ² Klinikum rechts der Isar, Department of Neurology, Munich, Germany

Sunday, September 29, 2013

MECHANICAL THROMBECTOMY WITH DOUBLE SOLITAIRE STENTS

M. Stauder, M. Heddier, H. Nordmeyer, C.P. Stracke, R. Chapot
Alfried-Krupp Hospital, Essen, Germany

HIGH CLOT BURDEN IN ACUTE EMBOLIC STROKE IN THE ANTERIOR CIRCULATION: COMPARISON OF NEUROTHROMBECTOMY AND SYSTEMIC THROMBOLYSIS

A. Rohr¹, J. Meyne², P. Zimmermann², C. Riedel¹, F. Papengut², R. Stingle³, O. Jansen¹, G. Deuschl², A. Binder²

¹ UKSH Institute of Neuroradiology, Kiel, Germany, ² UKSH Department of Neurology, Kiel, Germany, ³ DRK Clinic Köpenick Department of Neurology, Berlin, Germany

THERAPY: A PROSPECTIVE, RANDOMIZED, CONTROLLED TRIAL TO EVALUATE THE ROLE OF MECHANICAL THROMBECTOMY AS ADJUNCTIVE TREATMENT TO IV RTPA FOR ACUTE ISCHEMIC STROKE THERAPY

R. von Kummer¹, J. Gerber¹, J. Mocco², P. Khatri³, O. Zaidat⁴, R. Gupta⁵

¹ Universitätsklinikum Dresden, Abteilung Neuroradiologie, Dresden, Germany, ² Vanderbilt University, Department of Neurological Surgery, Nashville, TN, USA, ³ University of Cincinnati, Department of Neurology, Cincinnati, OH, USA, ⁴ Medical College of Wisconsin, Department of Neurology, Neurosurgery & Radiology, Milwaukee, WI, USA, ⁵ Grady Memorial Hospital, Department of Neurology, Neurosurgery and Radiology, Atlanta, GA, USA

New ways of high resolution imaging in interventional practice*

L. Spelle (France)

Room HZ 5

14:00 - 15:30

Parallel scientific session with introductory invited presentation

Interventional aneurysms: new implants

Chair: L. Pierot (France), C. Cognard (France)

New implants for aneurysm treatment

S. Cekirge (Turkey)

STENT-ASSISTED COIL EMBOLIZATION WITH A CLOSED CELL STENT DEVICE

C. Taschner¹, W. Reith², J. Gralla³, R. Du Mesnil De Rochemont⁴, O. Singer⁴, C. Hader¹, S. Meckel¹, P. Papanagiotou², C. Roth², H. Körner², E. Dabew², U. Yilmaz², S. Zubler³, G. Schroth³, M. Schumacher¹, J. Berkefeld⁴

¹ Dept. of Neuroradiology, University Hospital Freiburg, Freiburg, Germany, ² Dept. of Neuroradiology, University Hospital Homburg/Saar, Homburg, Germany, ³ Dept. of Neuroradiology, University Hospital Bern, Bern, Switzerland, ⁴ Dept. of Neuroradiology, University Hospital Frankfurt, Frankfurt, Germany

FLOW DIVERTER STENTS IN BIFURCATION ANEURYSMS

S. Saleme, J.A. Mejia Nunez, S. Ponomarjova, D. Ayoub, T. Dinh, C. Mounayer
CHU de Limoges, Department of Neuroradiology, Limoges, France

INTENSIFYING PLATELET INHIBITION IN POOR RESPONDERS TO CLOPIDOGREL ACCORDING TO THE MULTIPLATE® ANALYZER DURING INTRACRANIAL FLOW-DIVERTING STENT IMPLANTATION

I. Oran¹, C. Cinar¹, H. Bozkaya¹, M. Korkmaz²

¹ Ege University Medical School Department of Radiology, Izmir, Turkey, ² Dumlupinar University Medical School Department of Radiology, Kutahya, Turkey

*Refer to pag. 55

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REOSTENTING TECHNIQUE: COMBINED USE OF DOUBLE LUMEN REMODELLING BALLOONS WITH LOW PROFILE STENTS: LVIS JR, LEO BABY AND ACCLINO

K. Kadziolka, L. Estrade, L. Pierot

CHU Reims, Interventional Neuroradiology Department, Reims, France

PIPELINE FLOW DIVERTING STENTS REDUCE ANEURYSM INFLOW WITHOUT RELEVANTLY AFFECTING STATIC INTRA-ANEURYSMAL PRESSURE

M. Brockmann¹, H.U. Kerl², H. Boll², T. Fiebig², G. Figueiredo², A. Förster², I.S. Nölte², C. Groden²

¹ *University Hospital of the RWTH Aachen, Department of Diagnostic and Interventional Neuroradiology, Aachen, Germany,* ² *University Medical Center Mannheim, Department of Neuroradiology, Mannheim, Germany*

COST EFFICIENCY AND FOLLOW-UP DATA USING THE PENUMBRA COIL 400 COMPARED TO ORBIT/GALAXY FOR TREATMENT OF ANEURYSMS IN THE CEREBROVASCULAR SYSTEM

J. Milburn¹, A.L. Pansara¹, R.C. Martinez², G. Vidal³

¹ *Ochsner Medical Center, Department of Radiology, New Orleans, LA, USA,* ² *Louisiana State University, Department of Neurology, New Orleans, LA, USA,* ³ *Ochsner Medical Center, Department of Neurology, New Orleans, LA, USA*

15:30 - 16.00 *Coffee Break*

Room HZ 2

16:00 - 18:00

Parallel scientific session with introductory invited presentation

Diagnostic advanced MRI-techniques

Chair: E. Hattingen (Germany), I. Pronin (Russia)

Diagnostic advanced MRI-techniques

R. Deichmann (Germany)

USE OF BOLD SEQUENCES AND HYPEROXIA IN THE ASSESSMENT OF BRAIN TUMOR VIABILITY

J. Martinez Barbero¹, A. Luna Alcala¹, L. Alcala Mata¹, T. Martin Noguero¹, J. Sanchez²

¹ *Clinica Las Nieves, Sercosa, Grupo Health Time, Jaen, Spain,* ² *Philips Healthcare España, Madrid, Spain*

SUPERSELECTIVE PCASL - FIRST CLINICAL RESULTS WITH A NOVEL MRI METHOD FOR INDIVIDUAL CHARACTERIZATION OF INTRACEREBRAL PERFUSION

V. Tóth¹, M. Helle², A. Förschler¹, C. Zimmer¹, C. Preibisch¹

¹ *Dep. of Neuroradiology, Klinikum rechts der Isar, Munich, Germany,* ² *Philips Technologie GmbH, Innovative Technologies, Research Laboratories, Hamburg, Germany*

DIFFUSION KURTOSIS IMAGING IN GRADING OF BRAIN GLIOMA MALIGNANCY

A. Tonoyan¹, I. Pronin¹, L. Fadeeva¹, D. Pitskhelauri¹, L. Shishkina¹, A. Ektova¹, F. Grinberg², E. Farrher², V. Kornienko¹

¹ *Burdenko Neurosurgery Institute, Neuroradiology, Moscow, Russia,* ² *Forschungszentrum Juelich, Institute of Neuroscience and Medicine 4, Medical Imaging Physics, Juelich, Germany*

REGIONAL SPECIFICITY OF fMRI, DTI, AND MRS DATA IN SUBSTANTIA NIGRA (SN) FOR CHARACTERISTICS OF THE LEVEL OF COGNITIVE IMPAIRMENT (CI) IN PATIENTS WITH PARKINSON'S DISEASE (PD)

Z. Rozhkova¹, O. Omelchenko¹, I. Karaban², N. Karasevich²

¹ *Medical Clinic BORIS, Department of Radiology, Kiev, Ukraine,* ² *Institute of Gerontology, Department of Extrapramidal Disorders, Kiev, Ukraine*

Sunday, September 29, 2013

USEFULNESS OF BRAIN PERFUSION MAPS OBTAINED WITH ARTERIAL SPIN LABELING IN REFRACTORY EPILEPSY

N. Bargallo¹, A. Sierra², X. Setoain¹, M. Carreño², A. Donaire², J. Rumia²

¹ *CDIC. Hospital Clinic i Provincial, Barcelona, Spain*, ² *Institut de Neurociències, Hospital Clinic i Provincial, Barcelona, Spain*

ARTERIAL SPIN-LABELING MR IMAGING IN MENINGOENCEPHALITIS

T. Noguchi, M. Nishihara, Y. Hara, T. Hirai, H. Irie

Department of Radiology, Faculty of Medicine, Saga University, Saga City, Japan

INTRAVOXEL INCOHERENT MOTION DIFFUSION-WEIGHTED MR IMAGING OF GLIOMAS: FEASIBILITY OF THE METHOD AND INITIAL RESULTS

S. Bisdas¹, C. Roder², C. Braun³, U. Klose¹, E. Ernemann¹

¹ *University of Tübingen, Department of Neuroradiology, Tübingen, Germany*, ² *University of Tübingen, Department of Neurosurgery, Tübingen, Germany*, ³ *University of Tübingen, Department of Neurology, Tübingen, Germany*

POTENTIAL CLINICAL APPLICATIONS OF ULTRA-HIGH-FIELD MRI (7T) OF THE CENTRAL NERVOUS SYSTEM

J. Johnson, J. Polimeni, E. Ratai, B. Keil, L. Wald, S. Stufflebeam, B. Rosen, J. Romero

Massachusetts General Hospital, Boston, MA, USA

Room HZ 3

16:00 - 18:00

Parallel scientific session with introductory invited presentation

White Matter Diseases

Chair: L. Markovic (Denmark)

Diagnostic white matter diseases: how to approach?

F. Bonneville (Toulouse, France)

MAGNETIC CHARACTERISTICS OF MULTIPLE SCLEROSIS MEASURED BY QUANTITATIVE SUSCEPTIBILITY MAPPING (QSM)

Y. Wang, W. Chen, S. Gauthier, T. Liu, J. Communale, A. Gupta

Cornell University, New York, NY, USA

ASSOCIATION OF MR FEATURES AND CLINICAL PRESENTATION, LEVELS OF ADVANCED OXIDATION PROTEIN PRODUCTS AND TOTAL THIOL CONTENT IN PLASMA AND CSF IN PATIENTS WITH CLINICALLY ISOLATED SYNDROME AND RELAPSING REMITTING MULTIPLE SCLEROSIS

D. Stojanov¹, S. Ljubisavljevic², S. Vojinovic², I. Stojanovic³

¹ *Center of Radiology, Clinical Center Nis, Nis, Serbia*, ² *Clinic of Neurology, Clinical Center Nis, Nis, Serbia*, ³ *Institute for Biochemistry, Faculty of Medicine University of Nis, Nis, Serbia*

BRAINSTEM WHITE MATTER LESIONS ON MRI IN PATIENTS WITH TRIGEMINAL NEURALGIA WITHOUT MULTIPLE SCLEROSIS, OUR CASE SERIES AND REVIEW OF LITERATURE

F. D'Arco, A. D'amico, C. Russo, F. Caranci, B. Carotenuto, N. Di Paolo, M. Marseglia, A. Brunetti

University Federico II Department of Diagnostic Imaging and Radiotherapy, Naples, Italy

SUSCEPTIBILITY SIGNAL WITHIN DEMYELINATING PLAQUES IN CLINICALLY ISOLATED SYNDROMES

A. Rovira, C. Auger, M. Tintore, J. Canahuri, G. Santana, C. Montealegre,

G. Arrambide, E. Huerga, R. Mitjana, X. Aymerich, X. Montalban

Hospital Universitari Vall d'Hebron, Barcelona, Spain

Sunday, September 29, 2013

INFLAMMATORY PERFUSION CHANGES CORRELATE WITH EXECUTIVE FUNCTION DEFICITS IN PATIENTS WITH CLINICALLY ISOLATED SYNDROME

E. Papadaki¹, P. Simos², T. Panou³, V. Mastorodemos³, T. Maris⁴, A. Karantanas¹, A. Plaitakis³
¹ University Hospital, Department of Radiology, Heraklion, Greece, ² University Hospital, Department of Psychiatry, Heraklion, Greece, ³ University Hospital, Department of Neurology, Heraklion, Greece, ⁴ University Hospital, Department of Medical Physics, Heraklion, Greece

GLUCOSE METABOLISM IN ADULT-ONSET AUTOSOMAL DOMINANT LEUKODYSTROPHY (ADLD) WITH AUTONOMIC SYMPTOMS

J. Finnsson¹, I. Savitcheva², M. Lubberink⁴, A. Melberg³, R. Raininko¹
¹ Department of Radiology, Uppsala University, Uppsala, Sweden, ² Department of Radiology, Karolinska University Hospital, Huddinge, Stockholm, Sweden, ³ Department of Neurosciences/Neurology, Uppsala University, Uppsala, Sweden, ⁴ Department of Nuclear Medicine & PET, Uppsala University, Uppsala, Sweden

SIGNAL INTENSITY CHANGES IN MEDIAL TEMPORAL LOBE STRUCTURES IN ALZHEIMER DISEASE AND NORMAL AGING AND THEIR CORRELATION WITH ATROPHY AND CLINICAL MEASURES

M. Martucci¹, J. Alonso¹, J. Corral¹, D. Pareto¹, X. Guri¹, A. Palasi², F. Pujadas², C. Auger¹, A. Rovira¹
¹ MR Unit, Radiology Department, Vall d'Hebron University Hospital, Barcelona, Spain, ² Neurology Department, Vall d'Hebron University Hospital, Barcelona, Spain

STRUCTURAL AND FUNCTIONAL CHANGES IN MULTIPLE SCLEROSIS PATIENTS DURING THE RELAPSE WITH MOTOR DISORDERS AND IN THE FOLLOW-UP

S. Kulikova, V. Bryukhov, A. Peresedova, O. Trifonova, M. Krotenkova, I. Zavalishin
Research Center of Neurology RAMS, Moscow, Russia

THE TIMELINE OF MEDIAL TEMPORAL LOBE ATROPHY DEPENDS ON THE CLINICAL SUBTYPE OF MULTIPLE SCLEROSIS - A VOXEL BASED MORPHOMETRY STUDY

L. Kozák¹, A. Iljicsov², M. Simó², D. Bereczki², G. Rudas¹, P. Barsi¹
¹ Semmelweis University, MR Research Center, Budapest, Hungary, ² Semmelweis University, Department of Neurology, Budapest, Hungary

Room HZ 4

16:00 - 18:00

Parallel scientific session with introductory invited presentation

Spinal Imaging

Chair: L. Weise (Germany), M. Muto (Italy)

DTI of the spinal cord (technique and clinical applications)

M. Sasiadek (Poland)

WHAT IS MISSED WHEN REPORTING MRI LUMBAR SPINES - MOST COMMON FALSE NEGATIVE ERRORS AND HOW TO LOWER THEIR INCIDENCE

C. Schorlemmer, E. Thimansson
Telemedicine Clinic, Barcelona, Spain

TUBERCULOUS SPINE - VARIED PRESENTATION

U. Rashid
Post Graduate Medical Institute, Lahore, Pakistan

Sunday, September 29, 2013

DIFFUSION TENSOR IMAGING INDEXES CORRELATE WITH CONVENTIONAL MRI FOR LUMBAR INTERVERTEBRAL DISC DEGENERATION

J. Puig¹, G. Blasco¹, J. Daunis-I-Estadella², X. Molina¹, C. Guergue¹, S. Pedraza¹
¹ Department of Radiology (IDI), Girona Biomedical Research Institute (IDIBGI), Hospital Universitari Dr Josep Trueta, Girona, Spain, ² Department of Computer Science, Applied Mathematics and Statistics, University of Girona, Girona, Spain

SAFETY ASPECT AND OUTCOME IN INTRATHECALLY APPLIED GADOLINIUM CONTAINING CONTRAST MEDIA FOR THE DIAGNOSIS OF INTRACRANIAL HYPOTENSION SYNDROME

F. Donnerstag¹, P. Raab¹, E. Bültmann¹, F. Götz¹, R. Pul², H. Lanfermann¹
¹ Institute of Diagnostic and Interventional Neuroradiology, Hannover Medical School, Hannover, Germany, ² Department of Neurology, Hannover Medical School, Hannover, Germany

DYNAMIC CONTRAST ENHANCEMENT MAGNETIC RESONANCE PERFUSION OF THE SPINAL CORD AND ADJACENT LESIONS

V. Cuvinciu¹, M. Viallon², F. Herrmann³, S. Haller¹, M.I. Vargas¹, K.O. Lovblad¹
¹ University Hospitals of Geneva, Imaging Department, Neuroradiology Unit, Geneva, Switzerland, ² University Hospitals of Geneva, Imaging Department, Radiology Unit, Geneva, Switzerland, ³ University Hospitals of Geneva, Department of Internal Medicine, Rehabilitation and Geriatrics, Geneva, Switzerland

INITIAL EXPERIENCE WITH DOUBLE INVERSION RECOVERY IN THE DETECTION OF MULTIPLE SCLEROSIS LESIONS IN THE CERVICAL CORD: A COMPARISON WITH PROTON DENSITY WEIGHTED AND T2 WEIGHTED SEQUENCES AT 1.5 TESLA

A. Chong, E. Roberts, R.V. Chandra, K. Chuah, S. Stuckey
Monash Medical Centre, Melbourne, Australia

UNDERSTANDING THE BAASTRUP'S DISEASE SPECTRUM: FROM KISSING SPINE TO INTERSPINOUS BURSTITIS

A. Bourgeois, A. Faulkner, J. Boyd, P. Campbell, R. Daker
University of Tennessee Medical Center, Knoxville, TN, USA

Room HZ 5

16:00 - 18:00

Parallel scientific session with introductory invited presentation
Interventional AVM and AVF

Chair: C. Stapf (France), J. Gralla (Switzerland)

Onyx in AVM and AVF: real complication rate

L. Spelle (France)

BRAIN ARTERIOVENOUS MALFORMATION TREATMENT BY VENOUS APPROACH

S. Saleme, D. Ayoub, S. Ponomarjova, J.A. Mejia Nunez, T. Dinh, C. Mounayer
CHU de Limoges, Department of Neuroradiology, Limoges, France

ONYX EMBOLIZATION OF CEREBRAL ARTERIOVENOUS MALFORMATIONS BY MENINGEAL ARTERY APPROACH

H. Nordmeyer, M. Heddier, M. Stauder, P. Schoss, P. Stracke, R. Chapot
Alfried Krupp Hospital, Essen, Germany

Sunday, September 29, 2013

THE RADIOGRAPHIC OUTCOME OF SILENT MICROEMBOLISM ON DIFFUSION-WEIGHTED IMAGING IS IDENTICAL BETWEEN MICROSURGICAL CLIPPING AND ENDOVASCULAR COILING

T. Matsushige¹, Y. Kiura¹, S. Sakamoto¹, T. Okazaki¹, K. Shinagawa¹, N. Ichinose¹, M. Takasu², Y. Akiyama², K. Kurisu¹

¹ Department of Neurosurgery, Graduate School of Biomedical and Health Sciences, Hiroshima University, Hiroshima, Japan, ² Department of Diagnostic Radiology, Hiroshima University Hospital, Hiroshima, Japan

COIL EMBOLIZATION OF ANEURYSMS INCORPORATING A BRANCH INTO THE SAC, SAFETY, DURABILITY, SINGLE CENTER EXPERIENCE

O. Mansour^{1,2,3}, M. Megahed¹

¹ Alexandria University, Interventional Neurology Division, Alexandria, Egypt, ² Tanta University, Neuroradiology Center, Tanta, Egypt, ³ Freiburg Uniklinikum, Eurozentrum, Neuroradiologie Abt., Freiburg, Germany

HYPOGLOSSAL CANAL DAVF: SYSTEMATIC REVIEW ON IMAGING ANATOMY, CLINICAL FINDINGS, AND ENDOVASCULAR MANAGEMENT

S. Meckel¹, S. El Sharifi¹, C. Hader^{1,2}, T.P. Singh³, D. San Millán Ruíz⁴, B. Spittau⁵

¹ University Hospital Freiburg, Neuroradiology, Freiburg, Germany, ² Cantonal Hospital St. Gallen, Neuroradiology, St. Gallen, Switzerland, ³ Sir Charles Gairdner Hospital, Neurological Intervention and Imaging Service of Western Australia (NIISWA), Perth, Australia, ⁴ Hospital of Sion, Valais, Neuroradiology Unit, Sion, Switzerland, ⁵ University of Freiburg, Institute for Anatomy and Cell Biology, Department of Molecular Embryology, Freiburg, Germany

CLINICAL EXPERIENCE AND RESULTS IN A SERIES OF 27 ANEURYSMS TREATED WITH PENUMBRA PC 400 COILS

J. Massó Romero, A. Lüttich Uroz, J. Larrea Peña, E. Pardo Zudaire, A. Masso Ordiozola, S. Cervantes Ibañez

Hospital Donostia San Sebastián Servicio de Neuroradiología Paseo dr begiristain Donostia, San Sebastián, Spain

VENO-SINUS HEMODYNAMICS OF DAVF: THE CLINICAL IMPLICATION OF QUANTITATIVE DSA

W. Guo¹, C.J. Lin^{1,2}, S.C. Hung^{1,2}, F.C. Chang^{1,2}, W.F. Chu¹, H.M. Wu^{1,2}, C.B. Luo^{1,2}, W.Y. Chung^{1,3}

¹ Taipei Veterans General Hospital, Department of Radiology, Taipei, Taiwan, ² School of Medicine, National Yang-Ming University, Taipei, Taiwan, ³ Taipei Veterans General Hospital, Department of Neurosurgery, Taipei, Taiwan

RESOLUTIVE ENDOVASCULAR TREATMENT OF CAROTID-CAVERNOUS FISTULA WITH DETACHABLE BALLONS

J. Figueroa, A. Martinez-ponce De Leon

University Hospital Jose Eleuterio González UANL - Neurosurgery Service and Endovascular Neurological Therapy, Monterrey, Mexico

SAFETY AND EFFICACY OF A NEW DEVICE FOR THE TREATMENT OF WIDE NECK BIFURCATION ANEURYSMS (PCONUS) - PRELIMINARY EXPERIENCE

M. Aguilar Pérez¹, W. Kurre¹, S. Felber², E. Donauer³, N. Hopf⁴, H. Bätzner⁵, H. Henkes¹

¹ Klinikum Stuttgart, Department of Neuroradiology, Stuttgart, Germany, ² Stiftungsklinikum Mittelrhein, Department of Neuroradiology, Koblenz, Germany, ³ Mediclin Krankenhaus, Department of Neurosurgery, Plau Am See, Germany, ⁴ Klinikum Stuttgart, Department of Neurosurgery, Stuttgart, Germany, ⁵ Klinikum Stuttgart, Department of Neurology, Stuttgart, Germany

SCIENTIFIC PROGRAM

Monday, September 30, 2013

37th ESNR Annual Meeting

Room HZ 2

08:00 - 09:00

REFRESHER COURSE DIAGNOSTIC: Dementias beyond Alzheimer and psychiatric disorders

Chair: N. Sadeghi (Belgium)

Dementias beyond Alzheimer

P. Scheltens (The Netherlands)

Advanced imaging in psychosis

S. Weidauer (Germany)

Advanced imaging in vertigo

Z. Merhemc (Bosnia and Herzegovina)

Room HZ 3

08:00 - 09:00

REFRESHER COURSE INTERVENTIONAL: SAH and vasospasm

Chair: V. Seifert (Germany)

Imaging assessment of patients with cerebral vasospasm after SAH

J. Byrne (United Kingdom)

Vasospasm: clinical concepts, therapeutic options and evidence

H. Vatter (Germany)

Interventional treatment of vasospasm: indication and how to do it

J. Berkefeld (Germany)

Room HZ 2

09:00 - 10:00

Future MRI

Chair: R. Deichmann (Germany)

Possibilities and limitations of functional MRI

R. Göbel (The Netherlands)

Clinical application ahead: quantitative imaging and multinuclear spectroscopy

E. Hattingen (Germany)

Real-time MRI: recent advances and future potential

J. Frahm (Germany)

Room HZ 3

09:00 - 10:00

Parallel scientific session

Stroke Aneurysm/AVM

Chair: J. Byrne (United Kingdom), M.S. Khangure (Australia)

RECONSTRUCTIVE THERAPY WITH STENT FOR PARTIALLY THROMBOSED ANEURYSMS IN THE POSTERIOR CIRCULATION

T. Nakazawa, K. Higuchi, T. Yokoi, M. Tanimoto, H. Kimura, K. Takagi, N. Nitta, J. Jito, T. Fukami, K. Nozaki

Shiga University of Medical Science, Otsu, Japan

IS PREOPERATIVE STATIN THERAPY EFFECTIVE ON REDUCING DWI POSITIVE MICROEMBOLISM DURING COILING OF UNRUPTURED CEREBRAL ANEURYSMS?

T. Matsushige¹, Y. Kiura¹, S. Sakamoto¹, T. Okazaki¹, K. Shinagawa¹, N. Ichinose¹, M. Takasu², Y. Akiyama², K. Kurisu¹

¹ Department of Neurosurgery, Graduate School of Biomedical and Health Sciences, Hiroshima University, Hiroshima, Japan, ² Department of Diagnostic Radiology, Hiroshima University Hospital, Hiroshima, Japan

Monday, September 30, 2013

RELIABILITY OF USING QUANTITATIVE DIGITAL SUBTRACTION ANGIOGRAPHY TO MONITOR CEREBRAL HEMODYNAMIC IN PATIENTS WITH SUBARACHNOID HEMORRHAGE-A PILOT STUDY

C. Lin¹, W. Guo¹, S. Hung¹, C. Lin², B. Hsu², W. Chu¹

¹ Taipei Veterans General Hospital, Radiology Department, Taipei, Taiwan, ² Taipei Veterans General Hospital, Neurosurgery Department, Taipei, Taiwan

TREATMENT OF DISSECTING ANEURYSMS OF THE POSTERIOR INFERIOR CEREBELLAR ARTERY: ANATOMICAL CONSIDERATIONS AND CLINICAL CONSEQUENCES

R. Van Den Berg, T.C. Doorschodt, M.E.S. Sprengers, W.P. Vandertop

Academic Medical Center, Amsterdam, Netherlands

ENDOVASCULAR REPAIR OF POSTERIOR COMMUNICATING ARTERY ANEURYSMS, ASSOCIATED WITH OCULOMOTOR NERVE PALSY: A REVIEW OF NERVE RECOVERY

M. Sheehan, S. Looby

Beaumont Hospital, Department of Radiology, Dublin, Ireland

INTRA-ANEURYSMAL FLOW DISRUPTION: A NEW APPROACH FOR THE ENDOVASCULAR TREATMENT OF INTRACRANIAL ANEURYSMS. FRENCH CLINICAL EXPERIENCE

L. Pierot¹, A.C. Januel², H. Raoult³, L. Spelle⁴, C. Papagiannaki⁵, H. Desal⁶, P. Courtheoux⁷, K. Kadziolka¹, J.Y. Gauvrit³, J. Moret⁴, D. Herbreteau⁵, C. Cognard²

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Room HZ 15

09:00 - 11:00 **Workshop "Stroke treatment"**

J. Berkefeld (Germany), G. Schroth (Switzerland)

Room HZ 5

09:00 - 11:30 **Workshop "MR spectroscopy: what does that have to do with alcohol?"**

G. Ende (Germany), U. Pilatus (Germany)

10:00 - 10:30 *Coffee Break*

Room HZ 2

10:30 - 11:30 **DIAGNOSTIC SPECIAL FOCUS - Inflammatory disease**

Chair: G. Wilms (Belgium)

MRI in the diagnosis of MS: challenges and new evidences

A. Rovira (Spain)

Congenital infections

A. Rossi (Italy)

Imaging of vasculitis

P. Sundgren (Sweden)

SCIENTIFIC PROGRAM

Monday, September 30, 2013

Room HZ 3

10:30 - 11:30

INTERVENTIONAL SPECIAL FOCUS - Clinical outcome after interventional procedures

Chair: D. Rüfenacht (Switzerland)

New and rare techniques for aneurysm treatment: how to manage the risk of complications

I. Saatci (Turkey)

Aneurysms and AV-fistulae with cranial nerve deficits

C. Cognard (France)

Incidental aneurysms and vascular malformations

C. Stapf (France)

Room HZ 2

11:30 - 13:00

Neuroradiology: from the past to the future - Dedicated to Hans Hacker

Chair: F.E. Zanella (Germany)

Neuroanatomy and high-resolution MRI

R. Göbel (The Netherlands)

Imaging in neuroscience

W. Singer (Germany)

Perspectives for neuroradiologists

M. Leonardi (Italy)

Room HZ 3

11:30 - 13:00

Parallel scientific session

Brain tumors 1

Chair: R. Colen (USA)

COMPARISON OF ARTERIAL SPIN LABELLING AND DYNAMIC SUSCEPTIBILITY-WEIGHTED CONTRAST-ENHANCED MR PERFUSION IMAGING IN BRAIN TUMOURS

Y. Ozsunar Dayanir¹, S. Ata¹, Y. Durum¹, M. Turgut²

¹ Adnan Menderes University Faculty of Medicine, Department of Radiology, Aydin, Turkey, ² Adnan Menderes University Faculty of Medicine, Department of Neurosurgery, Aydin, Turkey

PROTON MR SPECTROSCOPY COULD BE USEFUL IN THE DIAGNOSIS OF PRIMARY CENTRAL NERVOUS SYSTEM LYMPHOMA (PCNSL)

P. Mora¹, M. Cos², A. Camins², A. Muntané¹, C. Aguilera², C. Majós²

¹ Neuroradiology and Neurointerventional Department, Hospital Universitari de Bellvitge, Barcelona, Spain, ² Institut Diagnòstic per la Imatge (IDI), Hospital Universitari de Bellvitge, Barcelona, Spain

PH CHANGES IN RECURRENT GLIOBLASTOMAS DURING BEVACIZUMAB MEASURED WITH 31P MR SPECTROSCOPY

U. Pilatus¹, V. Voelker¹, M. Hardt¹, O. Baehr², E. Hattingen¹

¹ Neuroradiology, Goethe University, Frankfurt, Germany, ² Dr. Senckenberg Institute of Neurooncology, Goethe University, Frankfurt, Germany

FACTORS CONTRIBUTING TO ITSS-MORPHOLOGY IN PATIENTS WITH GLIOBLASTOMA MULTIFORME

D. Fahrendorf¹, V. Hesselmann¹, W. Schwindt¹, J. Wölfer², H. Kooijman³, H. Kugel¹, W. Heindel¹, A. Bink¹

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Monday, September 30, 2013

BENEFITS OF CONTRAST-ENHANCED SWI IN PATIENTS WITH GLIOBLASTOMA MULTIFORME

D. Fahrendorf¹, W. Schwindt¹, J. Wölfer², A. Jeibmann³, H. Kooijman⁴, H. Kugel¹, O. Grauer⁵, W. Heindel¹, V. Hesselmann¹, A. Bink¹

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DIFFERENTIATION OF VASOGENIC EDEMA FROM TUMOR-INFILTRATED EDEMA USING DTI, RCBV AND MR SPECTROSCOPY. A PROSPECTIVE STUDY OF 25 PATIENTS

F. De Belder¹, M. De Belder², C. Venstermans¹, J. Van Goethem¹, L. van den Hauwe¹, T. Van Der Zijden¹, M. Voormolen¹, P.M. Parizel¹

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CORRELATION OF EXTRAVASCULAR EXTRACELLULAR SPACE OF TREATED GLIOBLASTOMAS BETWEEN DYNAMIC CONTRAST ENHANCEMENT MAGNETIC RESONANCE PERFUSION AND DIFFUSION TENSOR IMAGING

V. Cuvinciu¹, A. Varoquaux², M. Viallon², O. Gurer², I. Barnaure Nachbar², M.I. Vargas¹, S. Haller¹, K.O. Lovblad¹

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MR PERFUSION IN AND AROUND THE CONTRAST-ENHANCEMENT OF PRIMARY CNS LYMPHOMAS

S. Blasel¹, A. Jurcoane¹, O. Baehr², L. Weise³, P.N. Harter⁴, E. Hattingen¹

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Germany, ⁴ Edinger Institute, Institute of Neurology, Goethe-University Frankfurt, Frankfurt, Germany

ASSESSMENT OF PROGRESSION-FREE-SURVIVAL AND THERAPY RESPONSE IN GLIOBLASTOMAS BY INTRATREATMENT DYNAMIC CONTRAST-ENHANCED MRI

S. Bisdas¹, U. Smrdel², F. Bajrovic³, K. Surlan-Popovic⁴

¹ University of Tübingen, Department of Neuroradiology, Tübingen, Germany, ² Oncology

Institute, Department of Radiation Therapy, Ljubljana, Slovenia, ³ University of Ljubljana,

Department of Neurology, Ljubljana, Slovenia, ⁴ University of Ljubljana, Department of

Neuroradiology, Ljubljana, Slovenia

Room HZ 4

11:30 - 13:00

Parallel scientific session

Pediatrics

Chair: A. Rossi (Italy)

THE NEURONAL CORRELATES OF MIRROR ILLUSION IN CHILDREN WITH HEMIPARESIS: A PILOT STUDY USING FUNCTIONAL MRI

C. Weisstanner¹, S. Saxer^{4,5}, A. Kaelin-Lang², C.J. Newman³, M. Zbinden¹, R. Wiest¹, M. Steinlin⁴, S. Grunt⁴

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Bern, Switzerland, ⁵ Institute of Human Movement Sciences and Sport, ETH Zürich, Zürich, Switzerland

Monday, September 30, 2013

DIFFERENT PATTERNS OF CEREBELLAR ABNORMALITY AND HYPOMYELINATION BETWEEN POLR3A AND POLR3B MUTATIONS

H. Tada¹, J. Takanashi², H. Mori³, H. Terada⁴, A. J. Barkovich⁵

¹ Department of Pediatrics, Chibaken Saiseikai Nrashino Hospital, Narashino, Japan, ² Department of Pediatrics, Kameda Medical Center, Kamogawa, Japan, ³ Department of Radiology, University of Tokyo, Tokyo, Japan, ⁴ Department of Radiology, Toho University Sakura Medical Center, Sakura, Japan, ⁵ Department of Radiology and Biomedical Imaging, University of California San Francisco, San Francisco, CA, USA

DIFFERENT IMAGING ASPECTS IN MALFORMATIONS OF CORTICAL DEVELOPMENT DEPENDING ON MYELINATION AND AGE - PICTORIAL ESSAY AND LITERATURE REVIEW

M. Sarpi, L. Silva, L. Godoy, H. Lee, M. Docema, M. Martin, T. Lyra, D. Delgado
Hospital Sírío Libanês, São Paulo, Brazil

RADIOLOGICAL AND CLINICAL MANIFESTATIONS OF MEGALENCEPHALY-CAPILLARY MALFORMATION (M-CM) SYNDROME

A. Sanchez-Montanez¹, P.A. Parra Ramirez¹, S. Boronat Guerrero², I. Delgado Alvarez¹, P. Cano Granda³, E. Vazquez Mendez¹

¹ Vall d'Hebron University Hospital, Diagnostic Imaging, Barcelona, Spain, ² Vall d'Hebron University Hospital, Pediatric Neurology, Barcelona, Spain, ³ Vall d'Hebron University Hospital, Neurosurgery, Barcelona, Spain

RESTRICTED DIFFUSION IN CHILDREN, SECONDARY TO CEREBRAL HYPOXIA: IDENTIFYING MRI SIGNS OF GOOD NEUROLOGICAL OUTCOME

N. Pyatigorskaya, I. Haegy, R. Richard, D. Siahou, J. Bataille, R. Carlier
Raymond Poincaré, Garches, France

CONVENTIONAL MAGNETIC RESONANCE IMAGING IN THE DIFFERENTIATION BETWEEN HIGH AND LOW GRADE BRAIN TUMOURS IN PAEDIATRIC PATIENTS

L. Porto¹, A. Jurcoane¹, D. Schwabe², E. Hattingen¹

¹ Goethe University, Neuradiology Department, Frankfurt, Germany, ² Goethe University, Pediatric oncology Department, Frankfurt, Germany

VALUE OF 18F-DOPA PET/MRI FUSION IN PEDIATRIC PATIENTS WITH SUPRATENTORIAL INFILTRATIVE ASTROCYTOMAS

G. Morana¹, A. Piccardo², M.L. Garre³, M. Puntoni⁴, P. Nozza⁵, A. Cama⁶, D. Zefiro⁷, M. Cabria², A. Rossi¹

¹ Istituto G. Gaslini - U.O. Neuroradiologia, Genova, Italy, ² Ospedali Galliera - S.C Medicina Nucleare, Genova, Italy, ³ Istituto G. Gaslini - U.O. Neuro-oncologia, Genova, Italy, ⁴ Ospedali Galliera - Direzione Scientifica, Genova, Italy, ⁵ Istituto G. Gaslini - U.O. Anatomia Patologica, Genova, Italy, ⁶ Istituto G. Gaslini - U.O. Neurochirurgia, Genova, Italy, ⁷ Ospedali Galliera - S.C. Fisica Sanitaria, Genova, Italy

MR IMAGING FINDINGS IN PEDIATRIC HEAD AND NECK RHABDOMYOSARCOMA

I. Delgado Alvarez, J.L. Horteaga Garcia, A. Sanchez Montanez, L. Gros Subias, E. Vazquez Mendez

Hospital Universitario Vall d'Hebron, Barcelona, Spain

AUDIO-VISUAL REAR-PROJECTION SYSTEM IN MAGNETIC RESONANCE FOR PEDIATRIC POPULATION

A. Sanchez-Montanez, I. Delgado, J.P. Salazar, J.F. Corral, E. Vazquez, G. Enriquez
Vall d'Hebron University Hospital, Diagnostic Imaging, Barcelona, Spain

13:00 - 14:00 Lunch

SCIENTIFIC PROGRAM

Monday, September 30, 2013

Room HZ 2

14:00 - 15:00 **ESNR General Assembly**

Room HZ 2

15:00 - 18:00 **ESNR Interventional Hot Topics**

Chair: H. Brückmann (Germany)

First results of ARUBA: end of invasive AVM-treatment? Neurological perspective

C. Stapf (France)

Lessons to learn from ARUBA: consequences for interventional treatment?

R. Chapot (Germany)

Discussion

Interventional stroke treatment: are we the good guys?

R. von Kummer (Germany)

Interventional stroke treatment: perspectives for better study results

J. Gralla (Switzerland)

Discussion

Clipping vs. coiling still a matter of debate? Neurosurgical perspective

V. Seifert (Germany)

Coiling after ISAT: a single lucky study or basis for reliable clinical application?

A. Molyneux (United Kingdom)

Discussion

New materials and perspectives for interventional aneurysm treatment

I. Szikora (Hungary)

Do we need better rules for device approval in Europe?

E. Houdart (France)

Discussion

Room HZ 3

15:00 - 16:30 **Parallel scientific session**

Brain tumors 2

Chair: P. Sundgren (Sweden)

PREOPERATIVE DIFFERENTIATION OF HIGH GRADE GLIOMAS, METASTASES AND PRIMARY CENTRAL NERVOUS SYSTEM LYMPHOMAS USING PERFUSION AND DIFFUSION WEIGHTED MR IMAGING

*A. Zimny, M. Neska-Matuszewska, J. Bladowska, M. Guzinski, M. Sasiadek
Wroclaw Medical University, Department of Radiology, Wroclaw, Poland*

COMPARISON OF THREE DIFFERENT MR-PERFUSION TECHNIQUES AND MR-SPECTROSCOPY FOR DISTINGUISHING RECURRENT HIGH-GRADE GLIOMAS FROM RADIATION INJURY

A. Seeger¹, C. Braun², F. Paulsen³, M. Skardelly⁴, U. Ernemann¹, S. Bisdas¹

¹ Diagnostic and Interventional Neuroradiology, Tuebingen, Germany, ² Department of Neurology, Tuebingen, Germany, ³ Department of Radiation Oncology, Tuebingen, Germany, ⁴ Department of Neurosurgery, Tuebingen, Germany

Monday, September 30, 2013

**INTERNAL CAROTID ARTERIAL SHIFT AFTER TRANSSPHEOIDAL SURGERY
IN PITUITARY ADENOMAS WITH CAVERNOUS SINUS INVASION**

Y. Sasagawa¹, O. Tachibana¹, M. Doai², T. Akai¹, H. Tonami², H. Iizuka¹

¹ Department of Neurosurgery, Kanazawa Medical University, Ishikawa, Japan, ² Department of Diagnostic and Therapeutic Radiology, Kanazawa Medical University, Ishikawa, Japan

**IMAGING EVALUATION OF GLIOBLASTOMA MULTIFORME (GBM) DURING TREATMENT
WITH AVASTIN® (BEVACIZUMAB) - A DIVERSITY OF FINDINGS YET TO BE UNDERSTOOD**

M. Sarpi, T. Lyra, L. Godoy, D. Delgado, M. Docema, H. Lee, M. Martin, L. Silva

Hospital Sirio Libanês, São Paulo, Brazil

**MRI FEATURES OF MULTIFOCAL AND MULTICENTRIC GBM TO AID DIFFERENTIATION
FROM CEREBRAL METASTASES AND PRIMARY CNS LYMPHOMA**

E. Ryan, N. Adams, P. Brennan, M. Thornton, A. O'Hare, S. Looby

Department of Neuroradiology, Beaumont Hospital, Dublin, Ireland

**GROWTH PATTERNS OF GLIOBLASTOMA: COMBINED VISUALIZATION OF ADC
DIFFUSION MAPS AND CBV PERFUSION MAPS**

A. Radbruch¹, K. Deike¹, M. Graf², C. Reimer¹, B. Wiestler³, R. Floca², W. Wick³,
M. Bendszus¹, S. Heiland¹

¹ University of Heidelberg, Department of Neuroradiology, Heidelberg, Germany, ² German Cancer Research Center, Department of Radiology, Heidelberg, Germany, ³ University of Heidelberg, Department for Neurooncology, Heidelberg, Germany

**DIFFERENTIATION OF PSEUDOPROGRESSION AND REAL PROGRESSION
IN GLIOBLASTOMA USING ADC PARAMETRIC RESPONSE MAPS**

A. Radbruch¹, C. Reimer¹, M. Graf², J. Fladt¹, K. Deike¹, R.O. Floca², S. Heiland¹,
H.P. Schlemmer², W. Wick³, B. Wiestler³

¹ University of Heidelberg, Department of Neuroradiology, Heidelberg, Germany, ² German Cancer Research Center, Department for Radiology, Heidelberg, Germany, ³ University of Heidelberg, Department of Neurooncology, Heidelberg, Germany

**INTRAVOXEL INCOHERENT MOTION MR IMAGING IN GLIOBLASTOMA: COMPARISON
WITH DYNAMIC SUSCEPTIBILITY CONTRAST-ENHANCED AND IMPACT ON SURVIVAL
PREDICTION**

J. Puig¹, J. Sánchez-González², G. Blasco¹, J. Daunis-I-Estadella³, M. Essig⁴, R. Jain⁵,
S. Pedraza¹

¹ Department of Radiology (IDI), Girona Biomedical Research Institute (IDIBGI), Hospital Universitari Dr Josep Trueta, Girona, Spain, ² Philips Ibérica, Madrid, Spain, ³ Department of Computer Science, Applied Mathematics and Statistics, Girona, Spain, ⁴ Diagnostic Radiology and Neuroradiology, Department of Neuroradiology, University of Erlangen, Erlangen, Germany, ⁵ Division of Neuroradiology, Department of Radiology, Henry Ford Health System, Detroit, MI, USA

**BLOOD POOL CONTRAST AGENT MR ANGIOGRAPHY TO ASSESS GLIOBLASTOMA
VASCULARITY: FEASIBILITY AND CORRELATION WITH SURVIVAL**

J. Puig¹, G. Blasco¹, J. Daunis-I-Estadella², S. Remollo¹, D. Hernández¹,

J. Sánchez-González³, M. Essig⁴, R. Jain⁵, S. Pedraza¹

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SCIENTIFIC PROGRAM

Monday, September 30, 2013

Room HZ 4

15:00 - 16:30

Paediatrics - Joint Session with the American Society of Pediatric Neuroradiology
Monothematic mini-course "Advances in the understanding of brain malformations"

Chair: A. Rossi (Italy), D. Shaw (USA)

Antenatal MRI: pushing the edge for early recognition

A. Righini (Italy)

DTI for brain malformations: does it help?

T. A. Huisman (USA)

Genetic/neuroradiological correlations in 2013

N. Girard (France)

Hindbrain / midbrain malformations: the new classification

A.J. Barkovich (USA)

Discussion

Room HZ 5

15:00 - 16:30

Parallel scientific session with introductory invited presentation

Spine

Chair: M. Muto (Italy), J. Walecki (Poland)

MRI of peripheral nerves and plexuses: imaging techniques and key findings

M. Pham (Germany)

Interventional spine: percutaneous treatment of disc and bone

M. Muto (Italy)

EFFICACY AND UTILITY OF CT-GUIDED SPINAL BIOPSY AS A DIAGNOSTIC TOOL

R. Brennan, A. O'Hare, J. Thornton, P. Brennan, S. Looby

Beaumont Hospital, Department of Academic Radiology, Dublin, Ireland

BONE MINERAL DENSITY MEASUREMENTS OF THE SPINE DERIVED FROM SAGITTAL REFORMATIONS OF MDCT

J. Bauer¹, T. Baum², C. Zimmer¹

¹ *Dep. of Neuroradiology, TUM, Munich, Germany,* ² *Dep. of Radiology, Munich, Germany*

IMPROVING THE ACCURACY OF TRANSPEDICULAR SCREW PLACEMENT IN THE LUMBAR SPINE WITH 3-D STEREOTACTIC NAVIGATION: A REVIEW OF 518 CONSECUTIVE PATIENTS

A. Bourgeois, A. Faulkner, J. Gash, W. Reid

University of Tennessee Medical Center, Knoxville, TN, USA

Monday, September 30, 2013

Room HZ 15

15:00 - 16:30

Parallel scientific session with introductory invited presentation

Head and neck

Chair: M. Mack (Germany), S. Kösling (Germany)

Diagnostic head and neck: vascular lesions temporal bone

S. Kösling (Germany)

ACUTE TENSION ORBITAL EMPHYSEMA: MECHANISM AND TREATMENT WITH NEEDLING DECOMPRESSION

A. Simonovich¹, S. Levartovsky², W. Wehbby², E. Aloni²

¹ Barzilai Medical Center, Radiology Department, Faculty of Sciences at the Ben Gurion University of the Negev, Israel, Ashkelon, Israel, ² Barzilai Medical Center, Ophthalmology Department, Faculty of Sciences at the Ben Gurion University of the Negev, Israel, Ashkelon, Israel

COMPARISON OF ECHO-PLANAR DIFFUSION-WEIGHTED MRI AND HIGH-RESOLUTION CT IN THE STUDY OF PEDIATRIC CHOLESTEATOMA

A. Sanchez-Montanez¹, J.P. Salazar¹, F. Pumarola², I. Delgado¹, M. Pellicer², E. Martinez³, E. Vazquez¹

¹ Vall d'Hebron University Hospital, Diagnostic Imaging, Barcelona, Spain, ² Vall d'Hebron University Hospital, ENT Surgery, Barcelona, Spain, ³ Vall d'Hebron University Hospital, Pathology Department, Barcelona, Spain

DIAGNOSTIC VALUE OF 3TESLA HIGH RESOLUTION IMAGING OF THE TEMPORAL BONE IN CI CANDIDATES

P. Raab¹, F. Götz¹, S. Lyutenski², E. Bültmann¹, T. Lenarz², H. Lanfermann¹, A. Giesemann¹

¹ Hannover Medical School, Neuroradiology, Hannover, Germany, ² Hannover Medical School, Department of ENT, Hannover, Germany

NEW PRE-SURGICAL GRADING SYSTEM FOR ACTIVE MIDDLE EAR IMPLANTS IN PATIENTS WITH CONGENITAL AURAL ATRESIA

C. Mohr¹, G. Sprinzl², G. Widmann³, D. Petersen¹, B. Wollenberg⁴, H. Frenzel⁴

¹ Institute of Neuroradiology, University Hospital Schleswig, Holstein Lübeck, Lübeck, Germany, ² Department of Otorhinolaryngology, University Hospital Innsbruck, Innsbruck, Germany, ³ Department of Radiology, University Hospital Innsbruck, Innsbruck, Germany, ⁴ Department of Otorhinolaryngology and Facial Plastic Operations, University Hospital Schleswig, Holstein Lübeck, Lübeck, Germany

NASOPHARYNGEAL CANCER, A NEURORADIOLOGICAL DIAGNOSIS.

HOW OFTEN IS SKULL BASE AFFECTED?

B. Kress¹, S. Babu², N. Ravindranathan³, P. Varghese⁴, A. Gottschalk^{1,4}

¹ Institute of diagnostic and interventional Neuroradiology, Krankenhaus Nordwest, Frankfurt, Germany, ² The Brunei Cancer Center, Bandar Seri Beghawan, Brunei, ³ Department of oro-maxilla-facial surgery, Ripas Hospital, Bandar Seri Beghawan, Brunei, ⁴ Department of diagnostic Neuroradiology, Bandar Seri Beghawan, Brunei

HIGH-RESOLUTION DIFFUSION-WEIGHTED IMAGING USING READOUT-SEGMENTED ECHO-PLANAR IMAGING IN THE DIAGNOSIS OF TEMPORAL BONE ESPECIALLY FOR MIDDLE EAR CHOLESTEATOMAS

T. Kodama¹, T. Yano¹, S. Tamura¹, D. Porter²

¹ Faculty of Medicine, University of Medicine, Department of Radiology, Miyazaki, Japan, ² Siemens AG - Healthcare Sector, Erlangen, Germany

16:30 - 17:00

Coffee Break

Monday, September 30, 2013

Room HZ 3

17:00 - 18:30

Parallel scientific session

Stroke recanalization

Chair: I. Saatci (Turkey)

MULTIMODAL APPROACH IN THE INTRA-ARTERIAL TREATMENT OF ACUTE ISCHEMIC STROKE

E. Puglielli¹, M. Varrassi¹, M. Fuschi¹, V. Di Egidio²

¹ *Interventional and Vascular Radiology, G. Mazzini Hospital, Teramo, Italy,* ² *General and Interventional Radiology, S. Spirito Hospital, Pescara, Italy*

SUBARACHNOID HAEMORRHAGE AFTER MECHANICAL INTRA-ARTERIAL THROMBECTOMY IN ACUTE ISCHEMIC STROKE: IMAGING FINDINGS AND CLINICAL SIGNIFICANCE

O. Nikoubashman¹, M. Gindullis², K. Frohnhofen¹, R. Pjontek¹, M. Brockmann¹, A. Reich², J. Schulz², M. Wiesmann¹

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IMPORTANCE OF PRE-TREATMENT NEUROIMAGING IN IDENTIFYING ACUTE STROKE PATIENTS WITH LARGE INFARCTS WHO ARE UNLIKELY TO RESPOND TO IA THERAPY

D. Frei¹, A. Yoo², D. Heck³, F. Hellinger II⁴, V. Mccollum⁵, D. Fiorella⁶, A.S. Turkli III⁷, T. Malisch⁸, O. Zaidat⁹, Z. Chaudry², R. Gonzalez², L. Barraza¹⁰, S.P. Sit¹⁰, A. Bose¹⁰

¹ *Swedish Medical Center, Englewood, CO, USA,* ² *Massachusetts General Hospital, Boston, MA, USA,* ³ *Forsyth Medical Center, Winston-salem, NC, USA,* ⁴ *Florida Hospital, Orlando, FL, USA,* ⁵ *Mercy Health Center, Oklahoma City, OK, USA,* ⁶ *Stony Brook Medical Center, Stony Brook, NY, USA,* ⁷ *Medical University of South Carolina, Charleston, SC, USA,* ⁸ *Alexian Brothers Medical Center, Elk Grove Village, IL, USA,* ⁹ *Medical College of Wisconsin, Milwaukee, WI, USA,* ¹⁰ *Penumbra, Inc., Alameda, CA, USA*

LONG TERM OUTCOME AFTER INTRACRANIAL ANGIOPLASTY AND STENTING FOR ATHEROSCLEROTIC DISEASE

W. Kuker, U. Schulz, D. Briley, P. Rothwell

Nuffield Department of Clinical Neuroscience, University of Oxford, Oxford, United Kingdom

ENDOVASCULAR TREATMENT IN "BENIGN" INTRACRANIAL HYPERTENSION.

CLINICAL RESULT AND LONG-TERM FOLLOW-UP

M. Aguilar Pérez¹, K. Kurre¹, S. Fischer¹, D. Horward-Rizea¹, R. Unsöld², H. Bätzner³, H. Henkes¹

¹ *Klinikum Stuttgart, Department of Neuroradiology, Stuttgart, Germany,* ² *Privatpraxis für Augenheilkunde, Düsseldorf, Germany,* ³ *Klinikum Stuttgart, Department of Neurology, Stuttgart, Germany*

SIMPLE AND EASY WAY USING TIME-INTENSITY CURVE OF PERFUSION-WEIGHTED IMAGES TO FIND SALVAGEABLE PENUMBRA IN STROKE PATIENTS WITHIN 3.5 HOURS OF THE ONSET DUE TO THE CAROTID AND MIDDLE CEREBRAL ARTERY OCCLUSION

T. Mori, T. Iwata, Y. Miyazaki, S. Kasakura, Y. Tanno, K. Yoshioka

Shonan Kamakura General Hospital Stroke Center, Kamakura, Japan

PERIINTERVENTIONAL SAH DURING MECHANICAL THROMBECTOMY WITH STENTRETRIEVERS IN ACUTE STROKE. A RETROSPECTIVE CASE-CONTROL STUDY

U. Yilmaz¹, S. Walter², H. Körner¹, P. Papanagiotou³, C. Roth³, A. Simgen¹, S. Behnke², A. Ragoschke-Schumm², K. Fassbender², W. Reith¹

¹ *Saarland University Hospital, Department of Neuroradiology, Homburg, Germany,* ² *Saarland University Hospital, Department of Neurology, Homburg, Germany,* ³ *Klinikum Bremen Mitte, Department of Neuroradiology, Bremen, Germany*

Monday, September 30, 2013

THROMBUS DENSITY DOES NOT PREDICT ANGIOGRAPHIC RESULTS OF MECHANICAL THROMBECTOMY WITH STENTRETRIEVERS

U. Yilmaz¹, C. Roth², W. Reith¹, P. Papanagiotou²

¹ Saarland University Hospital, Department of Neuroradiology, Homburg, Germany, ² Klinikum Bremen Mitte, Department of Neuroradiology, Bremen, Germany

SUSEPTIBILITY WEIGHTED IMAGING (SWI) TO IDENTIFY IRREVERSIBLE INFARCTION

E. Tsai¹, H.W. Kao², Y. Tsui³, C. Chen¹

¹ Taipei Medical University, Taipei, Taiwan, ² Triservice General Hospital of National Defense Medical College, Taipei, Taiwan, ³ Taipei Medical University, Chi-Mei Hospital, Taipei, Taiwan

Room HZ 4

17:00 - 18:30

Parallel scientific session

Inflammatory disease

Chair: T. Ogawa (Japan)

CAN QUANTITATIVE MRI PREDICT CONTRAST ENHANCEMENT IN MULTIPLE SCLEROSIS?

E. Hattingen¹, U. Ziemann², M. Hirschmann¹, M. Wagner¹, C. Schmidt¹, A. Jurcoane¹

¹ Neuroradiology, Goethe University Frankfurt, Frankfurt, Germany, ² Neurology, University Tübingen, Tübingen, Germany

REDUCED DIFFUSION ON MRI IN ACUTE MS LESIONS IS ASSOCIATED WITH CSF PLEOCYTOSIS

P. Eisele, K. Szabo, M. Griebel, M. Wolf, M.G. Hennerici, A. Gass

Dept. of Neurology, University Hospital Mannheim, Mannheim, Germany

MRI FINDINGS IN PATIENTS WITH NEWLY DIAGNOSED NEUROPSYCHIATRIC LUPUS. A SYSTEMATIC APPROACH

N. Sarbu¹, P. Toledano², S. Capurro¹, M.I. Sarbu³, G. Espinosa², R. Cervera², N. Bargalló¹

¹ Hospital Clinic of Barcelona, Department of Radiology, Barcelona, Spain, ² Hospital Clinic of Barcelona, Department of Internal Medicine and Autoimmune Diseases, Barcelona, Spain, ³ Consorci Mar Parc de Salut de Barcelona, Department of Rheumatology, Barcelona, Spain

LOCALIZED SCLERODERMA NEUROLOGICAL MANIFESTATIONS

R. Carvalho¹, F. Sousa², J. Rocha², J. Fernandes¹, J. Rocha¹

¹ Neuroradiology Department, Hospital de Braga, Braga, Portugal, ² Neurology Department, Hospital de Braga, Braga, Portugal

COMBINED USE OF CONVENTIONAL MRI AND SPECTROSCOPY INCREASES DIAGNOSTIC ACCURACY IN AMYOTROPHIC LATERAL SCLEROSIS

A. Cervo¹, S. Coccozza¹, F. Saccà², S.M.D.A. Giorgio¹, V. Brescia Morra², E. Tedeschi¹, A. Marsili², G. Vacca², A. Brunetti¹, M. Quarantelli³

¹ Federico II University, Department of Advanced Biomedical Sciences, Naples, Italy, ² Federico II University, Department of Neurosciences, Reproductive Sciences and Odonto-Stomatology, Naples, Italy, ³ National Research Council, Biostructure and Bioimaging Institute, Naples, Italy

CORRELATION OF EARLY CEREBRAL METABOLIC ALTERATIONS WITH IMMUNOLOGIC DATA AND COGNITIVE TESTS RESULTS IN NEUROLOGICALLY ASYMPTOMATIC HIV-1 POSITIVE AND HCV-POSITIVE PATIENTS

J. Bładowska¹, A. Zimny¹, B. Knysz¹, K. Malyszczak¹, A. Koltowska¹, P. Szewczyk¹,

J. Gasiorowski¹, M. Furdal², M. Sasiadek¹

¹ Wrocław Medical University, Wrocław, Poland, ² Regional Specialistic Hospital, Wrocław, Poland

Monday, September 30, 2013

DIFFUSION-WEIGHTED IMAGING APPEARANCE OF BALO'S CONCENTRIC SCLEROSIS: MULTIPLE STUDIES OF THREE INDIVIDUAL CASES

R. Bert¹, L. Gaido², J. Corboy¹

¹ *University of Colorado Denver, Anschutz Medical Campus, Aurora, CO, USA,* ² *Denver Health, Denver, CO, USA*

EVALUATION OF BRAIN VASCULARITY IN TB MENINGITIS USING MRI/MRA

F. Abu Bakar¹, K. Rahmat¹, N. Ramli¹, S. Tai Mi², C. Tan²

¹ *Department of Biomedical Imaging, University Malaya Medical Centre, Kuala Lumpur, Malaysia,* ² *Department of Medical, University Malaya Medical Centre, Kuala Lumpur, Malaysia*

AGE-RELATED DTI CHANGES IN THE DEEP GRAY NUCLEI

C. Lee¹, K.M. Ng², R. Helmut¹, C.S. Yeoh¹, E.K. Tan^{2,3}, L.L. Chan^{1,2}

¹ *Department of Radiology, Singapore General Hospital, Singapore, Singapore,* ² *Duke-NUS Graduate Medical School, Singapore, Singapore,* ³ *Department of Neurology, National Neuroscience Institute (SGH-Campus), Singapore, Singapore*

Room HZ 5

17:00 - 18:30

Parallel scientific session

Free topics

Chair: J.T. Wilmink (The Netherlands)

MR FINDINGS AND IMAGING TYPES OF FOCAL CORTICAL DYSPLASIA

M. Zhu, D. Zhao, T. Du, L. Wang, X. Zhang, X. Chen

Dept. of Neuroradiology, Beijing Sanbo Brain Hospital, Beijing, China

EXTRA CRANIAL VENOUS ABNORMALITIES IN PATIENTS WITH MULTIPLE SCLEROSIS (MS): A TRUE PATHOLOGICAL FINDING OR AN ANATOMICAL VARIANT?

C. Torres¹, M. Hogan¹, C. Lum¹, S. Chakraborty¹, S. Patro¹, H. Dabirzadeh¹, T. Nguyen¹, M. Bussiere², M. Freedman¹, R. Thornhill¹, L. Kingstone¹, S. Belanger¹, B.A. Schwarz¹

¹ *Ottawa Hospital, University of Ottawa, Ottawa, Canada,* ² *Grey Nuns Community Hospital, Edmonton, Canada*

NSSAFE STUDY: OBSERVATIONAL STUDY ON THE INCIDENCE OF NEPHROGENIC SYSTEMIC FIBROSIS IN RENAL IMPAIRED PATIENTS FOLLOWING GADOTERIC ACID ADMINISTRATION

B. Kress, A. Gottschalk

Institute of Diagnostic and interventional Neuroradiology, Krankenhaus Nordwest, Frankfurt, Germany

A COMBINED LONG TERM MRI AND BEHAVIORAL STUDY ON STATUS-EPILEPTICUS INDUCED NEURODEGENERATION IN RAT: NEUROPROTECTION AND ALLEVIATED EPILEPSY-ASSOCIATED CO-MORBIDITIES BY ADD-ON TREATMENT WITH PHENOBARBITAL

X. Ding¹, J.P. Bankstahl², M. Meier^{3,4}, M. Bankstahl⁵, X. Tang¹, H.J. Hedrich³, W. Löscher⁵, H. Lanfermann¹

¹ *Institute of Diagnostic and Interventional Neuroradiology, Hannover Medical School, Hannover, Germany,* ² *Department of Nuclear Medicine, Hannover Medical School, Hannover, Germany,* ³ *REBIRTH Unit^{8,4}, Hannover Medical School, Hannover, Germany,* ⁴ *Institute of Laboratory Animal Science, Hannover Medical School, Hannover, Germany,* ⁵ *Department of Pharmacology, Toxicology and Pharmacy, University of Veterinary Medicine, Hannover, Germany*

THE RELATIONSHIP BETWEEN HOUNSFIELD UNIT VALUES OBTAINED FROM SKULL BASE CT IMAGES AND DEXA FINDINGS

M. Varer, M. Gursoy, M. Apaydin, E. Uluç, O. Oyar

Department of Radiology, Katip Celebi University Ataturk Education and Training, Izmir, Turkey

Monday, September 30, 2013

EFFICACY AND RELIABILITY ANALYSIS OF 3D-SPACE SEQUENCE IN THE EVALUATION OF PATIENTS WITH HYDROCEPHALUS

G. Kartal ¹, M.S. Ugurel ², O. Algin ¹

¹ Ataturk Training and Research Hospital, Ankara, Turkey, ² Gulhane Military Medical Academy, Ankara, Turkey

NOVEL DEVICE AND PROCEDURE FOR THE TREATMENT OF EPIPHORA

H. Maan ¹, C. Oliver ², B. Willoughby ³, J. Steele ⁴, D. Schomer ¹

¹ Banner MD Anderson Cancer Center, Gilbert, AZ, USA, ² Colorado Head and Neck Specialists, Denver, CO, USA, ³ University of Colorado School of Medicine, Denver, CO, USA, ⁴ MD Anderson Cancer Center, Houston, TX, USA

NOVEL APPLICATION OF A NEW EPIPHORA THERAPY TO TREAT RHINOSINUSITIS

H. Maan ¹, C. Olivier ², B. Willoughby ³, J. Steele ⁴, D. Schomer ¹

¹ Banner MD Anderson Cancer Center, Gilbert, AZ, USA, ² Colorado Head and Neck Specialists, Denver, CO, USA, ³ University of Colorado School of Medicine, Denver, CO, USA, ⁴ MD Anderson Cancer Center, Houston, TX, USA

DRUG-RESISTANT TEMPORAL LOBE EPILEPSY: ROLE OF MAGNETIC RESONANCE IN THE STUDY OF FOCAL CORTICAL DYSPLASIA ASSOCIATED WITH LOW-GRADE TUMOR

F. Toni ¹, A.F. Marliani ¹, F. Bartiromo ¹, A. Tarsi ¹, G. Marucci ², M. Martinoni ³, L. Volpi ⁴, P. Riguzzi ⁴, G. Rubboli ⁴, R. Michelucci ⁴, M. Giulioni ³

¹ IRCCS Istituto delle Scienze Neurologiche di Bologna, Neuroradiology Department, Bellaria Hospital, Bologna, Italy, ² IRCCS Istituto delle Scienze Neurologiche di Bologna, Department of Pathology, Bellaria Hospital, Bologna, Italy, ³ IRCCS Istituto delle Scienze Neurologiche di Bologna, Division of Neurosurgery, Bellaria Hospital, Bologna, Italy, ⁴ IRCCS Istituto delle Scienze Neurologiche di Bologna, Division of Neurology, Bellaria Hospital, Bologna, Italy

Room HZ 15

17:00 - 18:30

Parallel scientific session

Advanced imaging: epilepsy and consciousness

Chair: P. Barsi (Hungary)

FUNCTIONAL MRI OF PATIENTS WITH DISORDERS OF CONSCIOUSNESS

L. Hermoye ¹, L. Tshibanda ², W. Gradkowski ¹, V. Katsaros ³, A. Vanhauudenhuysse ², S. Laureys ²

¹ Imagily, Brussels, Belgium, ² Liege University, Coma Science Group, Liege, Belgium, ³ Athens University, Athens, Greece

CHANGES OF GABA AND GLUTAMINE IN JUVENILE MYOCLONIC EPILEPSY MEASURED BY MR SPECTROSCOPY

C. Lueckerath ¹, U. Pilatus ¹, S. Knake ², M. Kieslich ³, E. Hattingen ¹

¹ Neuroradiology, Goethe University Frankfurt, Frankfurt, Germany, ² Centrum of Epilepsy Hessen, Marburg, Germany, ³ Pediatric Neurology, Goethe University Frankfurt, Frankfurt, Germany

LIMBIC DYSCONNECTIVITY IN DISORDERS OF CONSCIOUSNESS

C. Di Perri ¹, S. Bastianello ², A. Bartsch ³, C. Pistarini ⁴, G. Maggioni ⁴, L. Magrassi ⁵,

R. Imberti ⁵, A. Pichiecchio ², S. Laureys ¹, F. Di Salle ⁶

¹ Coma Science Group, Liege, Belgium, ² Mondino, Pavia, Italy, ³ University of Heidelberg, Heidelberg, Germany, ⁴ Maugeri, Pavia, Italy, ⁵ S Matteo, Pavia, Italy, ⁶ University of Salerno, Salerno, Italy

Monday, September 30, 2013

OPTIC PATHWAY INVOLVEMENT IN ALSTROM SYNDROME: A MRI MULTIMODALITY STUDY

V. Citton¹, A. Favaro², J. Marshall³, V. Bettini⁴, N.A. Greggio⁵, F. Favaretto⁴, G. Milan⁴, K. Naggert³, P. Meneguzzo², G. Zorzi², A. Salvalaggio², C. Idotta², L. Weis¹, P. Maffei⁴, R. Manara^{1,6}

¹ *Neuroradiology Unit, IRCCS San Camillo Hospital, Venice, Italy,* ² *Department of Neurosciences, University of Padua, Padua, Italy,* ³ *The Jackson Laboratory, Bar Harbor, ME, USA,* ⁴ *Internal Medicine³, Dept. of Medicine, University Hospital of Padua, Padua, Italy,* ⁵ *Pediatric Endocrinology Unit, Dept. of Pediatrics, University Hospital of Padua, Padua, Italy,* ⁶ *Neuroradiology Unit, University of Salerno, Salerno, Italy*

RESTING-STATE FMRI IN AN INTRAOPERATIVE MR-SETTING:

FEASIBILITY AND PRELIMINARY RESULTS

S. Bisdas¹, C. Roder², E. Charyasz¹, U. Klose¹, M.S. Tatagiba², U. Ernemann¹

¹ *Eberhard Karls University, Neuroradiology, Tübingen, Germany,* ² *Eberhard Karls University, Neurosurgery, Tübingen, Germany*

ASSESSMENT OF THIRD VENTRICULOSTOMY PATENCY WITH 3D-SPACE TECHNIQUE: A MULTICENTER RESEARCH STUDY

O. Algin¹, M. Ucar², M.G. Kartal¹, A. Börcek², P.A. Ozisik³, E. Ozmen¹, T. Tali²

¹ *Ataturk Training and Research Hospital, Ankara, Turkey,* ² *Gazi University, Medical Faculty, Ankara, Turkey,* ³ *Koru Hospital, Ankara, Turkey*

ROLE OF COMBINED STRUCTURAL MR IMAGING AND SPECT CT IN THE MANAGEMENT OF REFRACTORY EPILEPSY

K. Rahmat, H. Taha, N. Ramli, F. Fadzli, K.S. Lim

University of Malaya, Kuala Lumpur, Malaysia

CAPABILITIES OF MRI IN ASSESSMENT OF RESULTS OF FOCAL CRYOABLATION OF THE MAMMALIAN BRAIN (EXPERIMENTAL WORK)

S. Osipov, V.V. Khovrin, T.N. Galyan, S.A. Vasiliev, S.B. Pesnya-Prosolov

Petrovsky National Research Center of Surgery, Moscow, Russia

SCIENTIFIC PROGRAM

Tuesday, October 1, 2013

37th ESNR Annual Meeting

Room HZ 2

08:00 - 09:00 **REFRESHER COURSE DIAGNOSTIC • Epilepsy, head and neck**

Chair: E.T. Tali (Turkey)

Tumors in epilepsy

A. Osborn (USA)

Cranial nerve palsies in head and neck diseases

M. Mack (Germany)

Room HZ 3

08:00 - 09:00 **REFRESHER COURSE INTERVENTIONAL • Advanced angiographic imaging and radiation protection**

Chair: J. Berkefeld (Germany)

Beyond fluoroscopy and DSA: indications for new neuroangiographic features

A. Dörfler (Germany)

Radiation dose in interventional neuroradiology

M. Söderman (Sweden)

Radiation protection in interventional neuroradiology

R. Anxionnat (France)

Room HZ 2

09:00 - 10:00 **Paediatric**

Chair: C. Hoffman (Israel)

Diagnostic Pediatrics: epilepsy in malformations of the cerebral cortex

N. Colombo (Italy)

Uncommon pediatric tumors

M. Warmuth-Metz (Germany)

Room HZ 3

09:00 - 10:00 **Imaging in Psychiatry**

Chair: G. Wilms (Belgium)

The role of neuroradiology in clinical psychiatry

J. Pantel (Germany)

MICROARCHITECTURE OF HIPPOCAMPUS: HOW MUCH CAN BE RESOLVED ON CLINICAL 3T MRI?

V. Gupta, P. Vibhute

Mayo Clinic, Radiology, Jacksonville, FL, USA

NO DIFFERENCE OF GREY MATTER DISTRIBUTION COMPARED TO CONTROLS BUT REGIONALLY ACCENTUATED REVERSIBLE BRAIN GREY MATTER REDUCTION IN ULTRA MARATHON RUNNERS DETECTED BY VOXEL BASED MORPHOMETRY

W. Freund¹, S. Faust¹, F. Birklein², C. Billich¹, A. Wunderlich¹, U. Schuetz¹

¹ *Diagnostic and Interventional Radiology, University Hospitals Ulm, Ulm, Germany,* ² *Neurology, University Medical Centre Mainz, Mainz, Germany*

10:00 - 10:30 *Coffee Break*

SCIENTIFIC PROGRAM

Tuesday, October 1, 2013

Room HZ 2

10:30 - 12:00

ESNR - ASNR joint session

Chair: E.T. Tali (Turkey)

Advanced imaging of brain tumors with a focus on molecular characterization

R. Colen (USA)

MEG and MRI of the cognitive consequences of traumatic brain injury

R. Lee (USA)

Advanced imaging of stroke

G. Zaharchuk (USA)

Room HZ 3

10:30 - 12:00

Parallel scientific session

Advanced imaging: future techniques in neuroradiology

Chair: R. Siemund (Sweden)

EVALUATION OF THE PONTINE PERFORATORS OF THE BASILAR ARTERY USING DIGITAL SUBTRACTION ANGIOGRAPHY IN HIGH RESOLUTION AND 3D-ROTATION TECHNIQUE

S. Lescher, T. Samaan, J. Berkefeld

Institute of Neuroradiology, Frankfurt Am Main, Germany

A COMPARATIVE PHANTOM STUDY ON RADIATION EFFECTIVE DOSES OF CEREBRAL HEMODYNAMICS MEASUREMENT BETWEEN DYNA CT AND MULTIDETECTOR CT

W. Guo¹, C. Lin^{1,2}, W. Chen³, S. Hung^{1,2}, W. Chu¹, C. Chiu¹, T. Wu³

¹ Taipei Veterans General Hospital, Taipei, Taiwan, ² School of Medicine, National Yang-Ming University, Taipei, Taiwan, ³ Department of Biomedical Imaging and Radiological Sciences, National Yang-Ming University, Taipei, Taiwan

NEUROSURGICAL ICU: ULTRA-LOW DOSE SAFIRE BASED HEAD CT SATISFACTORY FOR REPEATED SURVEILLANCE EXAMS

I. Corcuera-Solano, A. Noor, A. Doshi, L. Tanenbaum

Icahn School of Medicine at Mount Sinai, New York, NY, USA

CORONAL OBLIQUE ORIENTATION OFFERS IMPROVED VISUALIZATION OF NEUROFORAMINA IN CERVICAL SPINE MAGNETIC RESONANCE IMAGING

W. Freund¹, S. Klessinger², M. Mueller¹, M. Halatsch³, G. Hoepner¹, B. Schmitz⁴

¹ Diagnostic and Interventional Radiology, University Hospitals Ulm, Ulm, Germany, ² Neurosurgery, Nova Clinic, Biberach, Germany, ³ Neurosurgery, University Hospitals Ulm, Ulm, Germany, ⁴ Neuroradiology, University Hospitals Ulm, Ulm, Germany

QUANTITATIVE CEREBRAL ANGIOGRAPHY TO EVALUATE HYPERPERFUSION POSTCAROTID STENTING

E. Tsai¹, B.C.J. Lin², F.C. Chang², W.Y. Guo^{1,2}, D.Y.T. Chen¹

¹ Taipei Medical University, Imaging Research Center, Taipei, Taiwan, ² Taipei Veterans General Hospital, Radiology Department, Taipei, Taiwan

DIFFERENTIAL DIAGNOSIS OF BRAIN LESIONS USING MRI, PROTON MR SPECTROSCOPY (MRS) AND INTERPRET DECISION SUPPORT SYSTEM (DSS). A COMPARATIVE STUDY

R. Romanos-Zapata, F. Ortiz-Nieto, R. Raininko

Uppsala University, Department of Radiology, Uppsala, Sweden

Tuesday, October 1, 2013

BRAIN CHANGES IN KALLMANN SYNDROME

A. Salvalaggio¹, R. Manara^{2,3}, A. Favaro¹, V. Palumbo⁴, C. Idotta¹, V. Citton³,
A. D'Errico⁵, A. Elefante⁵, G. Ottaviano⁶, E. Cantone⁵, C. Briani¹, N.A. Greggio⁷, L. Weis³,
S. Rizzati⁸, E. Napoli⁹, G. Coppola¹⁰, A. Brunetti⁵, F. Di Salle², G. Bonanni⁸, A.A. Sinisi⁴
¹ Dept. of Neurosciences, University of Padova, Padova, Italy, ² Neuroradiology, University of Salerno, Salerno, Italy, ³ IRCCS San Camillo, Venezia, Venezia, Italy, ⁴ Endocrinology and Medical Andrology, Second University of Napoli, Napoli, Italy, ⁵ Federico II University, Napoli, Napoli, Italy, ⁶ Otolaryngology Section, Dept of Neurosciences, University of Padova, Padova, Italy, ⁷ UOS di Endocrinologia Pediatrica, Azienda Ospedaliera, Padova, Italy, ⁸ Dept. of Medicine (DIMED), University of Padova, Padova, Italy, ⁹ Medicanova, Diagnostic Center, Battipaglia, Salerno, Italy, ¹⁰ Child and Adolescent Neuropsychiatry, University of Salerno, Salerno, Italy

VISUALIZING PLASTICITY AND ALTERED NEURONAL SIGNALING IN THE INJURED HUMAN SPINAL CORD WITH FMRI

D. Cadotte¹, D. Mikulis², R. Bosma³, P. Stroman³, M. Fehlings¹
¹ University of Toronto, Dept. of Surgery, Division of Neurosurgery, Toronto, Canada, ² University of Toronto, Department of Radiology, Division of Neuroradiology, Toronto, Canada, ³ Queens University, Kingston, Canada

12:00 - 13:00 **Closing Ceremony**

BRAIN TUMORS, DIAGNOSTIC AND INTERVENTIONAL

001 • SELECTIVE EMBOLIZATION OF NECK OF INTRACRANIAL ANEURYSMS WITH PLATINUM COILS

M. Wu¹, C. Shen¹, Y. Tyan¹, H. Wong²

¹ Department of Medical Imaging, Chung Shan Medical University Hospital and Institute of Medicine, CSMU, Taichung, Taiwan, ² Department of Neuroradiology, Chang Gung Memorial Hospital and Chang Gung University, Taoyuan, Taiwan

002 • IMAGING REVIEW OF DYSEMBRYOPLASTIC NEUROEPITHELIAL TUMOR (DNET)

L. Wang¹, B. Jones², K. Dorris²

¹ University Hospital, Cincinnati, OH, USA, ² Cincinnati Children's Hospital Medical Center, Cincinnati, OH, USA

003 • PROGNOSTIC VALUE OF MRI DSC-T2* CEREBRAL PERFUSION IN GBM (GLIOBLASTOMA MULTIFORME) PATIENTS

J. Villanua¹, E. Fernandez¹, J. Larrea², E. Pardo², P. Aldaz³, C. Barrena⁴, E. Carrasco³, E. Sarasqueta⁵, I. Ruiz⁶, A. Matheu³

¹ Unidad Donostia, Osatek Sa. Donostia University Hospital, Donostia-SS, Spain, ² Radiology Department, Donostia University Hospital, Donostia-SS, Spain, ³ Neurooncology Group, Biodonostia Institute, Donostia University Hospital, Donostia-SS, Spain, ⁴ Neurosurgery Department, Donostia University Hospital, Donostia-SS, Spain, ⁵ Epidemiology Department, Donostia University Hospital, Donostia-SS, Spain, ⁶ Pathology Department, Donostia University Hospital, Donostia-SS, Spain

004 • ANEURYSMAL BONE CYST OF SPHENOID BONE AND CLIVUS MISDIAGNOSED AS CHORDOMA: A CASE REPORT

F. Ustabasioglu, I. Yanik, E. Huseynov, M. Asik, Z.I. Hasiloglu

Istanbul University Cerrahpasa Medical Faculty-Department of Radiology, Istanbul, Turkey

005 • DIFFERENTIATION OF PRIMARY AND SECONDARY BRAIN TUMOURS USING DYNAMIC SUSCEPTIBILITY CONTRAST MRI PERFUSION

A. Sprlakova-Pukova¹, M. Kerkovsky¹, J. Stulik¹, R. Jirik², O. Macicek², K. Bartusek²

¹ The University Hospital Brno and Masaryk University, Department of Radiology, Brno, Czech Republic, ² Brno University of Technology, Department of Biomedical Engineering, Brno, Czech Republic

006 • IDENTIFICATION OF TREATMENT VOLUMES FOR RADIOTHERAPY PLANNING OF THE INTRA-AXIAL BRAIN TUMORS USING CT AND MR IMAGES FUSION

L. Sibilla¹, G.B. Ivaldi², S. Montagna¹, P. Tabarelli³, M. Liotta³, L. Moro³, M. Baldi¹

¹ Research Institute S. Maugeri Found, Radiology Dpt., Pavia, Italy, ² Research Institute S. Maugeri Found, Radiotherapy Dpt., Pavia, Italy, ³ Research Institute S. Maugeri Found, Medical Physics Service, Pavia, Italy

007 • ORBITAL CAVERNOUS HEMANGIOMA: DIAGNOSIS WITH CT-PERFUSION

I. Schurova, I. Pronin, V. Kornienko

Burdenko Neurosurgery Institute, Moscow, Russia

008 • 3D-TSE-T1W:A MATTER OF SENSITIVITY

I. Saralegui¹, I. Vicente¹, J.M. Ontañón¹, J. Sanchez², A. Cabrera¹

¹ Galdakao Hospital, OSATEK, Usansolo, Spain, ² MR Clinical Department, Philips Healthcare Iberia, Madrid, Spain

009 • MRI BLOOD POOL CONTRAST AGENTS: IMPROVED IMAGING OF GLIOBLASTOMA

J. Puig¹, G. Blasco¹, W. Chwang², J. Daunis-I-Estadella³, M. Essig⁴, R. Jain², S. Pedraza¹

¹ Department of Radiology (IDI), Girona Biomedical Research Institute (IDIBGI), Hospital Universitari Dr Josep Trueta, Girona, Spain, ² Division of Neuroradiology, Department of Radiology, Henry Ford Health System, Detroit, MI, USA, ³ Department of Computer Science, Applied Mathematics and Statistics, University of Girona, Girona, Spain, ⁴ Diagnostic Radiology and Neuroradiology, Department of Neuroradiology, University of Erlangen, Erlangen, Germany

010 • VALUE OF DIFFUSION TENSOR IMAGING IN DIFFERENTIATING HIGH-GRADE FROM LOW-GRADE GLIOMAS

S. Piyapittayanon¹, O. Chawalparit¹, S. Tritakarn¹, T. Witthiwej², T. Sangruchi³, S. Nanta-Aree², S. Sathornsumete⁴, P. Itthimethin², C. Komoltri⁵

¹ Siriraj Hospital, Department of Radiology, Bangkok, Thailand, ² Siriraj Hospital, Department of Surgery, Bangkok, Thailand, ³ Siriraj Hospital, Department of Pathology, Bangkok, Thailand, ⁴ Siriraj Hospital, Department of Medicine, Bangkok, Thailand, ⁵ Siriraj Hospital, Department of Research Development, Bangkok, Thailand

011 • METASTATIC MELANOMA FOR DUMMIES

J. Nair¹, C.I. Torres¹, J. Chankowsky¹, R. Del Carpio-O'Donovan¹, J. Beegom Mansoor²

¹ Department of Radiology, Montreal General Hospital, McGill University, Montreal, Montreal, Canada, ² Baraha Hospital, Ministry of Health, Dubai, United Arab Emirates

012 • FUNCTIONAL NEUROIMAGING TECHNIQUES IN THE EVALUATION OF CENTRAL NERVOUS SYSTEM TUMORS: A MULTIMODALITY AND COMPREHENSIVE APPROACH

J. Martínez Barbero¹, T. Martín Noguerol¹, M. Navarro-Pelayo Láinez², M. Gómez Río², J. Pastor Rull³

¹ Clínica Las Nieves, Neuroimaging Department, Grupo Health-Time, Jaén, Spain, ² Hospital Universitario Virgen de las Nieves, Servicio de Medicina Nuclear, Granada, Spain, ³ Hospital Universitario Virgen de las Nieves, Servicio de Radiología, Sección de Neuroimagen, Granada, Spain

014 • INTRACRANIAL HEMANGIOPERICYTOMA: CASE REPORT AND REVIEW OF LITERATURE

C. Gagliardo, S. Regalbuto, C. Sarno, F. Cannizzaro, G. La Tona, M. Midiri

DI.BI.MEF, Radiology Section, University of Palermo, Palermo, Italy

015 • DIAGNOSTIC PERFORMANCE OF ADVANCED MRI IN DIFFERENTIATING HIGH-GRADE FROM LOW-GRADE GLIOMAS IN A SETTING OF ROUTINE SERVICE

O. Chawalparit¹, T. Sangruchi², T. Witthiwej³, S. Sathornsumetee⁴, S. Tritrakarn¹, S. Piyapittayanan¹, P. Chaicharoen¹, T. Direksunthorn¹, P. Charnchaowanish¹

¹ Department of Radiology, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand, ² Department of Pathology, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand,

³ Department of Surgery, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand,

⁴ Department of Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand

016 • AMIDE PROTON TRANSFER IMAGING: IS SINGLE REPRESENTATIVE SLICE ANALYSIS SUFFICIENT FOR TUMOR GRADING?

S. Akihiko¹, T. Okada¹, A. Yamamoto¹, M. Kanagaki¹, Y. Fushimi¹, E. Morimoto¹, R. Sakamoto¹, T.H. Mehemed¹, S. Nakajima¹, S. Okuchi¹, T. Kakigi¹, T. Dodo¹, B. Schmitt², K. Murata³, K. Togashi¹

¹ Department of Diagnostic Imaging and Nuclear Medicine, Kyoto University, Kyoto, Japan, ² Siemens AG, Munich, Germany, ³ Siemens Japan, Tokyo, Japan

017 • A CASE REPORT OF GLIOSARCOMA: CT AND MRI FINDINGS

K. Suzuki¹, M. Hori², H. Suzuki¹, M. Kobayashi¹, J. Kodera¹, Y. Okada¹, S. Mizumura¹, N. Shiraga¹, H. Terada³, T. Nagao³, T. Kuroki³, W. Tokuyama³, H. Hiruta³, E. Kohta⁴

¹ Toho University Omori Medical Center, Tokyo, Japan, ² Juntendou University, Tokyo, Japan, ³ Toho University Sakura Medical Center, Chiba, Japan, ⁴ Toho University School of Medicine, Tokyo, Japan

HEAD AND NECK IMAGING

018 • ADULT PAROTID TUMORS: A RADIOPATHOLOGIC CORRELATION

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067 • PHASE-CONTRAST SYNCHROTRON X-RAY MICROTOMOGRAPHY OF CEREBRAL PROTECTION DEVICE RETRIEVED AFTER CAROTID ARTERY STENTING

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C. Luo¹, Y. Tsai³, F. Chang^{1,2}, M. Teng^{1,2}, C. Lin^{1,2}, W. Guo^{1,2}

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Monday, September 30

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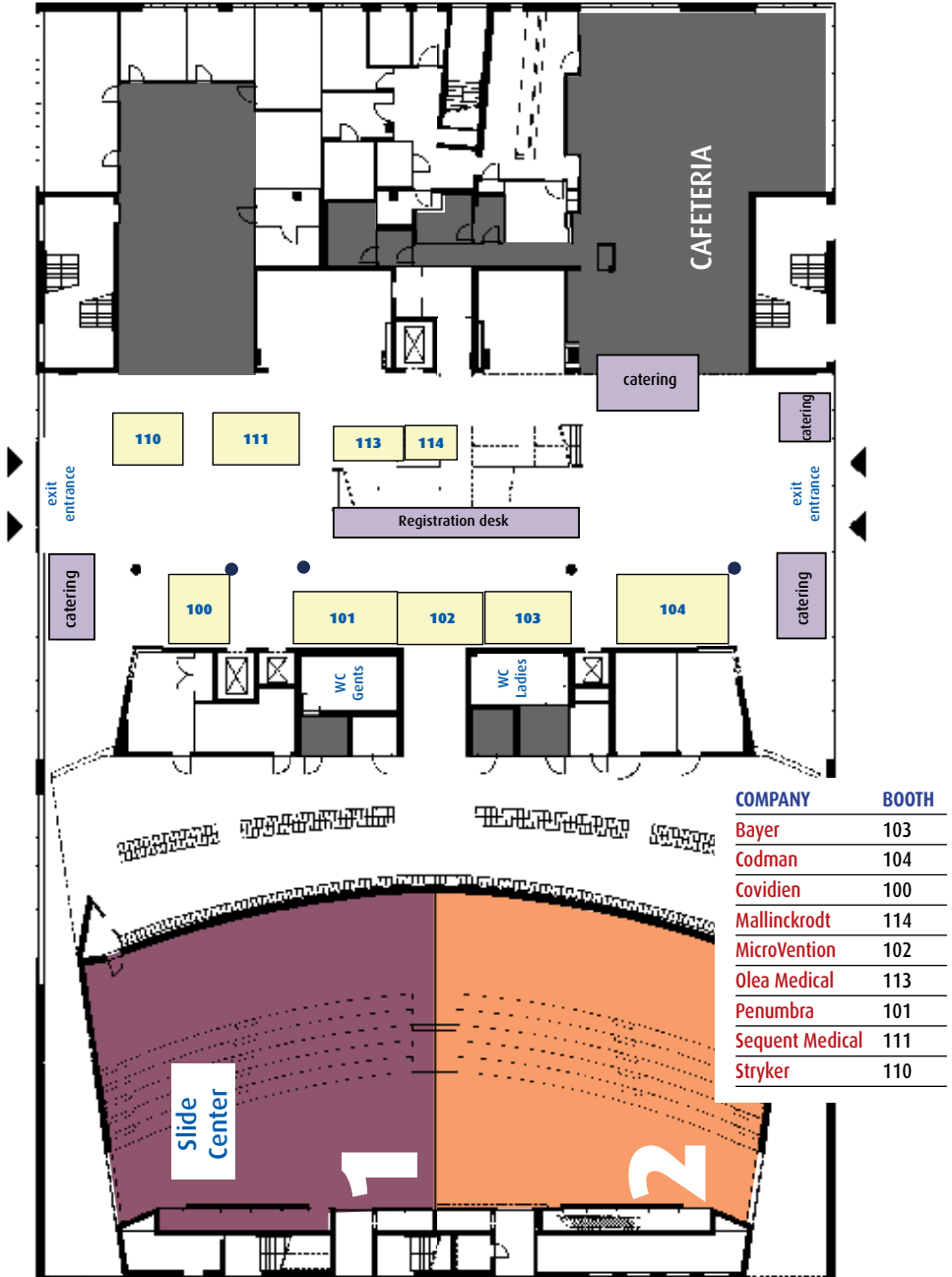
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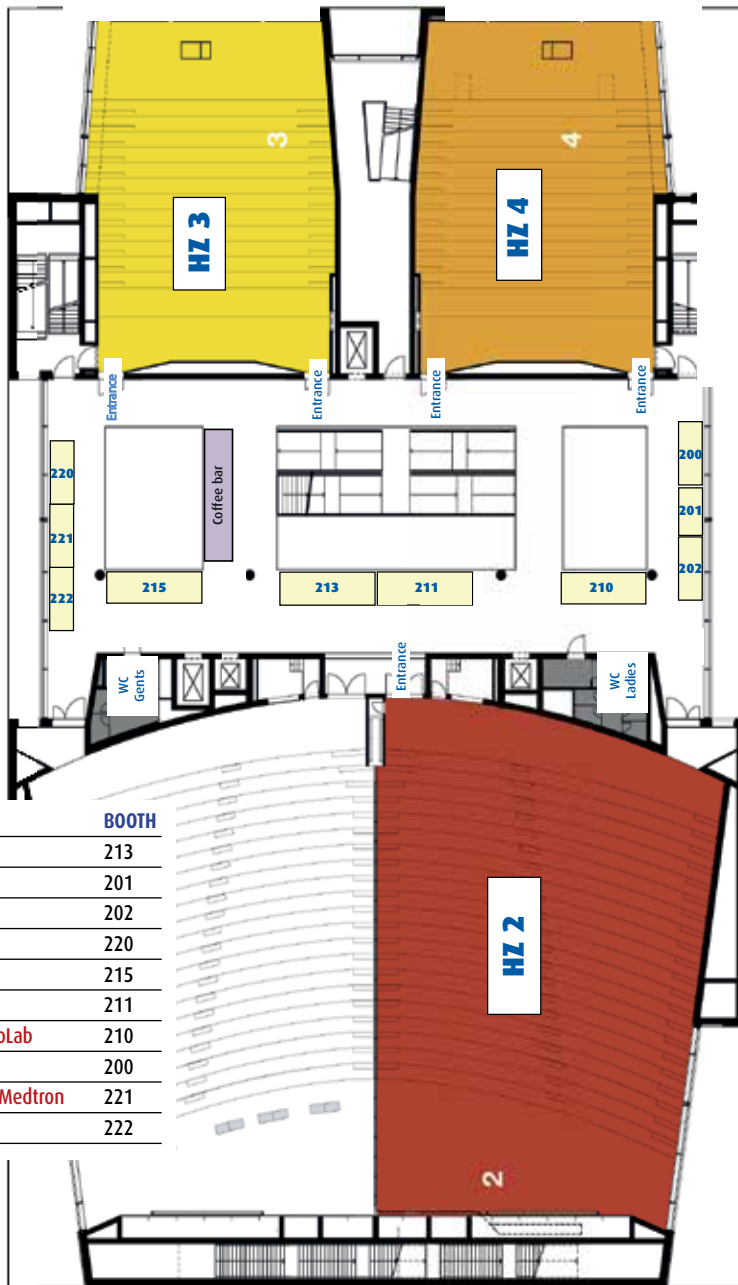
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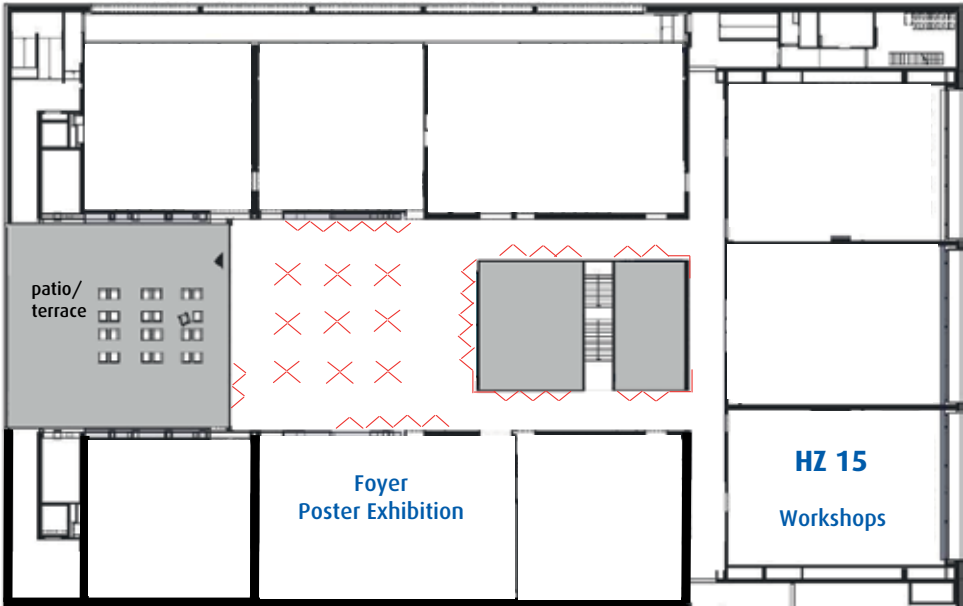
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