

ROMANIAN SOCIETY OF ELECTRODIAGNOSTIC NEUROPHYSIOLOGY organizes

the **NATIONAL CONFERENCE OF CLINICAL NEUROPHYSIOLOGY**

24 | 25

September 2011

BUCHAREST

**HOTEL
RAMADA PLAZA**

GUEST OF HONOUR:

Prof.Dr.Paolo Maria ROSSINI

President of the INTERNATIONAL FEDERATION OF CLINICAL NEUROPHYSIOLOGY-IFCN

ABSTRACT BOOK

In partnership with:

International Federation of Clinical Neurophysiology: www.ifcn.info

Romanian Society of Neurology: www.snr.ro

Society for the Study of Neuroprotection and Neuroplasticity: www.ssn.ro

General Information

Conference Venue

HOTEL RAMADA PLAZA BUCHAREST

3-5 Poligrafiei Blvd.,

Bucharest, Romania

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Mob: +40 744 344 790

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ASNER LEADING TEAM:

President: Tudor Dimitrie Lupescu

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Secretary: Bogdan Florea

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Romanian Society of Electrodiagnostic Neurophysiology

Bucharest, Dr. Felix Iacob, nr.2, bl.M4, ap. 187, sector 1

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Registration Desk ASNER

All materials and documentation will be available at the registration desk located at ASNER welcome booth.

The staff will be pleased to help you with all enquiries regarding registration, materials and program.

Please do not hesitate to contact the staff members if there is anything they can do to make your stay more enjoyable.



Invited Speakers

(in alphabetical order)

Florin AMZICA/ Montreal

Silviu BADOIU/ Bucharest

Sandor BENICZKY/ Copenhagen

Dumitru CONSTANTIN/ Bucharest

Irina CONSTANTINESCU/ Geneve

Bogdan FLOREA/ Cluj Napoca

Tudor Dimitrie LUPESCU/ Bucharest

Ioana MINDRUTA/ Bucharest

Mihai MOLDOVAN/ Copenhagen

Mircea MOLDOVAN/ Bucharest

Dafin Fior MURESANU/ Cluj Napoca

Izabela POPA/ Timisoara

Dan PSATTA/ Bucharest

Paolo Maria ROSSINI/ Rome

Andreas SCHILLER/ Zürich

Alexandru SERBANESCU/ Bucharest

Edith SISAK/ Brasov

Ovidiu STEFANESCU/ Bucharest



SATURDAY, the 24th of September, 2011: HOTEL RAMADA PLAZA BUCHAREST, CONFERENCE ROOM EUROPA

Chairpersons: Tudor Lupescu, Ioana Mindruta

08:30 OPENING CEREMONY

Guest of Honour: IFCN President: Paolo Maria ROSSINI

ASNER President: Tudor Dimitrie LUPESCU

9:00 - 10:00 Neurophysiological Correlates of Human Cortical Plasticity : Paolo Maria Rossini

10:00 - 10:45 Trauma – coma – epilepsy: a neurophysiological triangle: part A Florin Amzica

10:45 - 11:15 COFFEE BREAK - Pharmaceutical companies exhibition

Chairpersons: Tudor Lupescu, Mihai Moldovan

11:15 - 12:00 Traumatic Nerve Lesions : Tudor Lupescu

12:00 -12:45 Electrodiagnosis of traumatic nerve injury : Mihai Moldovan

12:45 -13:15 Cerebral lesions on EEG mapping, remote elements after brain trauma : Dan Psatta

13:15-14:15 LUNCH BREAK

Chairpersons: Mihai Moldovan, Edith Sisak

14:15 - 15:00 Brain dynamics across sleep-wake states: a convergent methodological approach using EEG techniques and parasomnialrina Constantinescu

15:00-15:20 Visual Evoked Potentials in acute ischaemic neuropathy : Edith Sisak

15:20 - 15:40 Demyelinating sensory-motor polyneuropathy with , higher CSF proteins and MRI radicular hypertrophy – Case presentationMircea Moldovan

15:40 - 16:00 Traumatic lesions of radial nerve – case presentation : Izabela Popa

16:00-16:30 COFFEE BREAK - Pharmaceutical companies exhibition

Chairpersons: Bogdan Florea, Florin Amzica

16:30 - 17:30 SCORE - Standardised Computer-based Organised Reported EEG : Sandor Beniczky

17:30 - 18:00 Carpal tunnel syndrome - features of surgery : Ovidiu Stefanescu

18:00 - 18:30 Alcohol and Epilepsy: "The Beauty and the Beast" : Bogdan Florea

SUNDAY, the 25th of September, 2011: HOTEL RAMADA PLAZA BUCHAREST, CONFERENCE ROOM EUROPA

Chairpersons: Tudor Lupescu, Bogdan Florea

8:30 - 9:30 Trauma – coma – epilepsy: a neurophysiological triangle: part B : Florin Amzica

9:30 - 10:30 Nerve trauma of the hand: Optimizing management by the use of electrophysiology : Andreas Schiller

10:30 - 11:00 COFFEE BREAK - Pharmaceutical companies exhibition

Chairpersons: Ioana Mindruta, Tudor Lupescu

11:00 - 12:00 Pharmacological support in brain protection and recovery - the role of multimodal molecules and pleiotropic metabolic regulators
Dafin Muresanu

12:00 - 12:30 Clinical - EEG correlations in brain trauma : Dumitru Constantin

12:30 - 13:00 Multiple Sclerosis - scientific debate granted by TEVA: neurophysiology aspects, therapeutics : Tudor Lupescu

13:00 - 13:30 Posters session guided tour : Mihai Moldovan, Tudor Lupescu, Ioana Mindruta, Bogdan Florea

13:30 - 14:00 Closing Remarks on National Conference of Clinical Neurophysiology ; Annual Meeting of the ASNER members



Florin AMZICA

Prof Florin Amzica has graduated the Faculty of Computer Science, Polytechnics Institute Bucharest, Romania, and has earned his PhD in Neurobiology at the Laval University, Quebec, Canada.

Regarding his career, he began as a Research Fellow - design manager in the Laboratory for Biomedical Equipment, Electronics Research Institute in Bucharest (1983-1990), where he was involved in the design and software of electronic medical equipment (evoked potentials, visual stimulation for EP, screening audiometer, cardi tachometer); afterwards he moved to the Institute of Neurology and Psychiatry, Romanian Academy, Bucharest, where he had an important contribution in the application of the evoked potentials in neurosurgery, and the processing of evoked potentials (1990-1991). Between 1991 and 1995 he was a PhD student in Neurophysiology Laboratory at the Laval University. Thereafter, Prof Amzica worked

as a post-doctoral fellow in the same place, where he became Professor; since 2008 Prof Amzica works in the Neurophysiology Laboratory in Montreal University. His activity is based on the research related to neuron-glia activity during sleep and wakefulness, deep brain stimulation, graduate courses and supervision of graduate students, and is also a member of the committee for ethics in health research.

During this time he earned many awards and distinctions.

Professor Amzica is member of the Society For Neuroscience, the American Physiology Society, American Epilepsy Society, and Romanian Clinical Engineering and Computing Medicine Society. He was invited as speaker at many conferences and scientific meetings, and is author of many published articles and chapters in textbooks.

Trauma – coma – epilepsy: a neurophysiological triangle

Prof. Dr. Florin Amzica, Université de Montreal

A traumatic injury constitutes the starting point of numerous pathological conditions. Among these, coma and epilepsy are quite common consequences. In addition, comatose states as those induced by anesthesia are often believed to be associated with, occasionally even inducing, epileptic discharges. Despite the clear temporal causal relationship between trauma and the afore mentioned disorders, the neurophysiological substrates of their respective evolutions remain quite elusive. During my talks I will substantiate the neurophysiological mechanisms that are triggered by trauma at the level of the neurons, glial cells, blood-brain barrier and, particularly, the extracellular milieu, which serves as common environment for all types of cells. In most cases it is safe to assume that the traumatic insult results in an immediate and sudden localized unbalance of ionic concentrations in the interstitial compartment. Glial astrocytic cells, which have a primordial role in buffering ionic concentrations might take two, mutually nonexclusive courses: either 1) they fail or 2) they successfully distribute the disequilibrium over large territories. The former case may lead to local lesions (neuronal death) followed by activation of microglial processes, genesis of scars and eventually epileptic syndromes. The latter situation is often associated with spreading depression, thus coma. Finally, iatrogenic coma, such as induced by anesthesia, may be occasionally accompanied by EEG patterns resembling epileptic discharges. Whether these is true epilepsy or not is still a matter of debate, thus I will present pro and contra arguments. All these modifications have direct consequences on the intensity and orientation of intra-cerebral currents, thus on the genesis of pathognomonic electroencephalographic (EEG) waveforms, which contribute to establishing the clinical diagnostic and ensuing treatment. Beyond the application of pre-established algorithms of patient handling, it is of paramount importance to understand the possible neurophysiological mechanisms generating a given EEG pattern and cerebral disorder.



Silviu Constantin BADOIU

- Medic primar, chirurgie plastica si microchirurgie reconstructiva,
- Coordonatorul Unitatii de Arsi Grav din Spitalul Militar Dr. Agrippa Ionescu, Bucuresti
- Sef de Lucrari Catedra de Anatomie, Coordonatorul Compartimentului de Anatomie si Tehnici Chirurgicale din UMF Carol Davila Bucuresti
- Doctor in medicina din 2001, cu teza "Metode alternative de reconstrucie a defectelor de nervi periferici"
- Cercetare fundamentala privind regenerarea nervilor periferici in cadrul bursei postdoctorale castigate cu tema: "Denaturated allografts versus autografts in bridging sciatic nerve gaps in rats"
- Preocupari de microchirurgia nervilor periferici din 1997
- Coautor al monografiilor: "Anatomia Chirurgicala a Nervilor Cranieni" si "Anatomia chirurgicala a membrului superior" aparute la Editura Universitara Carol Davila in 2007

Abstract:

Peripheral nerve lesions are common in trauma situations and in degenerative diseases. Beginning with Seddon's neurapraxia, going through axonotmesis, until neurotmesis, plastic surgery can help. Microsurgical neurolysis, surgical coaptation or peripheral nerve grafting are ordinary procedures for the plastic surgeon. The fundamental phenomenon behind all these surgical methods of treatment is the degeneration-regeneration "couple". Nowadays we can use, instead of nerve grafts, biological or synthetic conduits, sparing the sensitive nerves.

We are even able to modulate the peripheral nerve regeneration through the "bridging" point or region, using growth factors or immunosuppressive therapy. When the peripheral nerve cannot be reconstructed, we can performe palliative surgical procedures in order to substitute the motor function of the damaged nerve.

And there is still a long way to go...



Sandor BENICZKY

Education: M.D.:

I attended the University of Szeged, Szent-Györgyi Albert Medical School (Hungary).

In 1997 I graduated Summa Cum Laude with a Doctor of Medicine degree.

Ph.D.: I took part in the PhD programme at the University of Szeged. Title of my dissertation:

Functional consequences of basal ganglia pathologies. Date of award: June 2004.

Current positions:

1. Danish Epilepsy Centre, Dianalund (consultant: 01.04.2007 – 28.02.2010; head of Clinical Neurophysiology Department since 01.03.2010).

2. Aarhus University Hospital, Department of Clinical Neurophysiology (Associate Professor, since 01.06.2011)

SCORE / Standardised Computer-based Organised Reporting of EEG

The EEG signal has a high complexity, and the process of extracting clinically relevant features is achieved by visual analysis of the recording. The inter-observer agreement in EEG interpretation is only moderate. This is partly due to the method of reporting the findings in free-text format. The purpose of our endeavour was to create a computer-based system for EEG assessment where the physicians construct the reports by choosing from pre-defined elements for each relevant EEG feature, as well as the clinical phenomena - for video-EEG recordings. Each term is precisely defined and screen-shot examples will be provided. A working group of 25 EEG experts from 14 European countries took part in a consensus workshop in Dianalund, Denmark, in January 2010. The faculty was approved by the Commission on European Affairs of the ILAE. The working group produced a consensus proposal, which underwent a pan-European review, organised by the European Chapter of the IFCN.

The main elements of SCORE are: personal data, referral, recording conditions, background activity, sleep and drowsiness, non-ictal findings, "events" (ictal findings), normal variants and patterns, artefacts, polygraphic channels, interpretation and diagnostic significance. Specific aspects of the neonatal EEGs are scored in a dedicated flowchart. Significance: SCORE will improve quality of the EEG assessment and reporting, it will help incorporating the results of computer-assisted analysis into the report, it will make possible the build-up of a multinational database, and it will help in training young neurophysiologists.



Dumitru CONSTANTIN

Neurologist, Psychiatrist, Professor, Scientist and Novelist – but much more than all these, a real researcher, a restless character, never satisfied with the conventional answers. He graduated in 1962 the Medicine University in Bucharest, then became specialist in neurology and psychiatry; in 1974 created the Neurological Clinic in the Central Military Hospital, Bucharest, Romania. As neurologist, is the author of more than 280 scientific works, and also of the EEG and epileptology manual. Passionate about alternative medicine, he studied in Coreea, India and China. Awarded by the Romanian President in 2000 with the National Order "Steaua Romaniei" as a Commander degree and in 2004 with the National Order "Meritul Sanitar" as Officer degree. In 2005 he worked as visiting Professor in "St. George" University of Toronto, Canada, being involved in stem cells and nanomedicine domains.

He is an active member of Neurological, Psychiatry and Psychological Societies in Romania and abroad.

Corelatii clinic-electroencefalografice in traumatismele creierului

Electroencefalografia (EEG) ramane, alaturi de tehnicile mai noi de investigatii a creierului, un instrument util de evidentiere a efectelor generate de traumatismele cerebrale. In afara de posibilitatea urmaririi clinice, EEG ofera si o cale de orientare asupra aspectelor de ordin medico-legal. Ca ecou EEG se descriu modificarile care pot aparea in perioada initiala – precoce a unui traumatism cranian si o etapa tardiva – dupa luni sau ani dupa ce acesta s-a produs. Se descriu de asemenea modificari EEG determinate in functie de intensitatea traumatismului, a suspendarii sau nu a constiintei, de perioada de timp in care constiinta a fost abolita, de prezenta semnelor neurologice obiective precoce sau sechelare.

The main elements of SCORE are: personal data, referral, recording conditions, background activity, sleep and drowsiness, non-ictal findings, "events" (ictal findings), normal variants and patterns, artefacts, polygraphic channels, interpretation and diagnostic significance. Specific aspects of the neonatal EEGs are scored in a dedicated flowchart. Significance: SCORE will improve quality of the EEG assessment and reporting, it will help incorporating the results of computer-assisted analysis into the report, it will make possible the build-up of a multinational database, and it will help in training young neurophysiologists.



Irina CONSTANTINESCU

Present Resident in Neurology, Geneva University Hospitals

PhD student, Assistant-physician, Dept of Neurosciences, Geneva Neuroscience Center, University of Geneva, Switzerland (PhD thesis title: Influence of sleep-wake states on human memory and underlying neural plasticity: insights from eeg recordings and parasomnia")

Inter-University Diploma "Sleep and its pathology", Fédération des Pathologies du Sommeil, Université Pierre et Marie Curie Paris VI, Pitié-Salpêtrière Hospital (Dr. I.Arnulf), Paris, France

Resident in Neurology, Neurological Department, Rehabilitation Hospital, Iasi, Romania (admitted the 18th of 3000 candidates at the National Residency Contest, November 2005)

Graduation thesis (MD): "Silent Cerebral Infarct" - clinical study on a representative

group of patients from the Neurological Department, Rehabilitation Hospital, Iasi, Romania (10/10 degree)

Graduation from Faculty of Medicine, University of Medicine and Pharmacy "Gr.T.Popa" Iasi, Romania (graduation mark 9.98 /10.00, honors degree)

Brain dynamics across sleep-wake states: a convergent methodological approach using EEG techniques and parasomnia

Irina Constantinescu, MD, PhD 1, 2

1 Department of Neurology and Neuroscience, University Medical Hospital Geneva, University of Geneva, Switzerland

2 Department of Neurology, University of Medicine and Pharmacy "Gr.T.Popa" Iasi
Romania

The study of brain activity across different vigilance states may provide new and fundamental insights into the neural basis of human brain functioning.

The first aim was to study the influence of sleep-wake states on human memory and the underlying neural plasticity by using EEG recordings and neurological models, as parasomnia. A second aim was to bring experimental evidence that sleep may be improved instrumentally and therefore motivate the development of new devices to help sleep.

For the first aim, we observed neural and behavioral phenomena related to the consolidation of recently acquired knowledge across post-training sleep and wakefulness. More precisely, we studied the reactivation during sleep of experience-related neural patterns, using intracranial recordings in pharmaco-resistant epileptic patients, while they procedurally acquired sequences of movements. Our results highlighted the unique value of the intracranial EEG for the study of human brain plasticity. Behavioral re-enactment during post-training sleep was assessed in parasomnia patients, who were trained on sequences of movements. We brought evidence, for the first time to our knowledge, of a learning-related behavioral replay in humans during sleep.

For the second aim, we used a designed swinging-bed during afternoon naps to study if a low and repeated stimulation mimicking rocking modifies sleep architecture in humans. We showed that rocking has a beneficial effect on sleep, by rendering sleep more stable.

The present results propose a multi-level methodological approach on the study of sleep and wakefulness and may contribute to further understanding of the reorganization of brain activity during sleep.



Bogdan FLOREA

Bogdan Florea graduated the "Iuliu Hatieganu" University of Medicine in Cluj-Napoca in 1997. After the five years training in the Neurological Clinic in Cluj Napoca, he became neurologist in 2005. Clinical neurophysiology fellowships in Italy – Modena and Bologna, USA – Mayo Clinic, Sweden – Uppsala doubled by the daily activity in the computerized EEG department of the Neurological Clinic and many teaching courses in this area recommend him as a passionate in neurophysiology. His research interests include also vortex magnetic fields effects on biological systems, neural networks, neuroplasticity.

In 2002 he graduated the educational Master of Sciences program in Kinesiology, Kinetotherapy and Physical Rehabilitation. He earned the Competence in Clinical Neurophysiology in 2005. Dr. Bogdan Florea is member of some professional associations, such the Romanian Society of Neurology, European Neurological

Societies and founder member of the Society for the Study of Neuroprotection and Neuroplasticity, where acts as Medical Programs Coordinator since 2007. Since 2009 he is the secretary of the Romanian Society of Electrodiagnostic Neurophysiology – ASNER.

ALCOHOL and EPILEPSY – “The Beauty and the Beast”

Seizures related to alcohol withdrawal appear usually after alcohol withdrawal. Clinical and experimental data strongly suggest that chronic alcohol consumption might trigger epileptic behavior could be induced also other than through withdrawal. Few studies examined the onset of epilepsy as an independent disease or as being unprovoked by alcohol use (Ng, Leoni). Epileptogenesis in this context involves several mechanisms including an imbalance of excitation/inhibition systems or a kindling effect. Sleep disorders, brain trauma, stroke, infections, other toxics are often associated with alcohol consumption and complicate the clinical picture. As clinicians, differential diagnosis and management of alcohol related seizures is difficult and requires a precise orientation. The aim of my presentation is to provide a practical clinically and EEG oriented overview of the recent studies, guidelines and their recommendations regarding the management of seizures in alcohol-dependent patients.



Tudor Dimitrie LUPESCU

Tudor Lupescu was born on the 21th of March 1964 in Bucharest.

He attended the Carol Davila Medicine University in Bucarest, and graduated in 1989. 1992 he began his training in Neurology at Colentina Hospital in Bucharest, and became a specialist in 1995; since 1996 he works at Agrippa Ionescu Hospital, where in 1999 he became Head of the Neurology Department. In 1998 Dr Tudor Lupescu qualified as Consultant Neurologist.

He shown a special interest in Clinical Neurophysiology, and attended many courses and teaching programs in this field, and in 2000 he earned a Competence in Clinical Neurophysiology (EEG, EMG, Evoked Potentials).

In 1997 he began to use the technique of Transcranial Magnetic Stimulation.

In 2005 Dr Lupescu earned the title of Ph D with the thesis: Motor Evoked Potentials. Transcranial Magnetic Stimulation.

Since 1996 Dr Lupescu was the secretary of the Romanian Society of Clinical Neurophysiology, and since 2008 - president of the Romanian Society of Electrodiagnostic Neurophysiology ASNER.

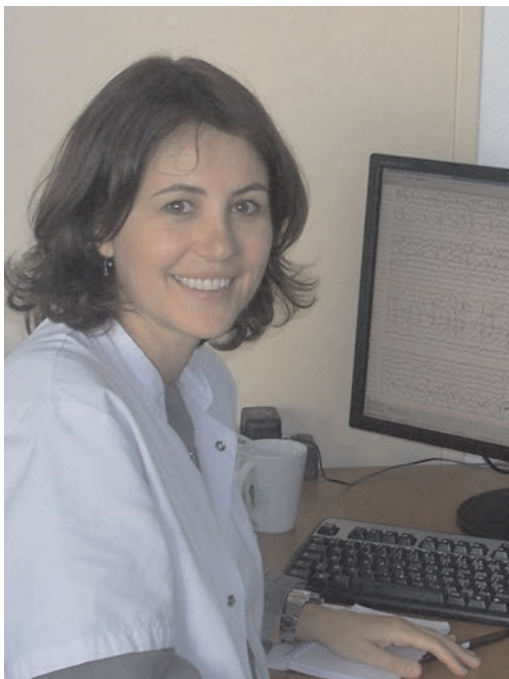
Since 2008 Dr Tudor Lupescu is also a member of the Subcommittee for Neurophysiology of the European Neurological Societies.

He is author of many articles, oral presentations, and posters, also of chapters of textbooks.

He also shows clinical interest in multiple sclerosis, peripheral neuropathies, and movement disorders, including therapy with botulinum toxin.

Traumatic Nerve Lesions

The goal of my presentations is to outline the most important facts that should be considered by the neurophysiologist or the neurologist in cases of peripheral nerve injuries. The content of the lectures covers the different mechanisms of nerve lesions, anatomic and pathophysiologic facts, important clinical data, eventually therapeutical options. The theoretical data is completed by illustrative cases.



Ioana MINDRUTA

Neurologist with competence in electrophysiology and special interest in epileptology and epilepsy surgery, working in the University Emergency Hospital in Bucharest in the Epilepsy and Sleep Monitoring Unit.

Main research interest in invasive recordings for epilepsy surgery.

Vicepresident of Romanian Association for Clinical Electrodiagnosis (ASNER) since 2009.

PhD in 2006 on "Sleep in epileptic syndromes"

Academic affiliation at the University of Medicine and Pharmacy "Carol Davila" of Bucharest since 1994.

How do we describe an epileptic seizure? – glossary of clinical terms and EEG ictal patterns.

The clinical picture of a seizure is described worldwide using a precise terminology. This is a common language for health care workers designed to communicate what is observed and what a patient reports during a seizure. Its use in clinical practice would not require knowledge of ictal pathophysiology, pathological substrate or etiology but will provide a base for further discussions. (Blume et al., 2001) Some of the ictal clinical features could be easily observed but other are only revealed during the interaction with the patient experiencing a seizure or could result from a skilled interview. This practical issues have a considerable value for the diagnosis of epilepsy in correlation with a recognized ictal pattern on the electroencephalographic recordings. So, appropriate description of ictal discharges in terms of morphology, lateralization and localization is a critical step in the diagnosis of epileptic disorders. As neurophysiologists we usually deal with patients suffering from epilepsy. The current course is aiming to review the language we use in our clinical reports, diagnosis and rounds as well as ictal patterns associated with focal or generalized epilepsy.



Mihai MOLDOVAN

Mihai Moldovan obtained his medical degree from "Carol Davila" University Bucharest in 1999. Based on his research interests as a student, after graduation he was selected to work in the group of prof. Christian Krarup that continues the Copenhagen neurophysiology school founded by prof Fritz Buchthal in the 60' with the aim of translating experimental neurophysiology into clinical electrodiagnostic procedures for patients with nerve and muscle disease. Mihai Moldovan obtained his PhD degree in neurophysiology from Copenhagen University in 2004 where he continues his scientific career as associate professor. His primary research interest is the development of clinically applicable electrophysiological methods with particular emphasis on peripheral nerve excitability testing. While based in Copenhagen, Mihai Moldovan continued to collaborate with prof .Leon Zagrean at "Carol Davila" University first as scientific project coordinator and now as associate professor at the

department of physiology. His research in Bucharest is focused on developing electroencephalographic biomarkers to monitor the ischemic disturbances in the electrical activity of the brain neuronal networks. Emerging from these wide research interests are not only original publications and review articles in high impact international journals but also educational chapters in several neuroscience and neurophysiology textbooks in Romanian language. Mihai Moldovan has scientific duties in several international organizations including International Brain Research Organization (IBRO). He is also founder member and scientific consultant for the National Neuroscience Society of Romania (SNN) and the Romanian Society of Electrodiagnostic Neurophysiology (ASNER) where he continues to promote the advantages of neurophysiological investigations for clinical practice.

Electrodiagnosis of traumatic nerve injury

Following a mechanical interruption in continuity, the axonal segment distal to injury undergoes Wallerian degeneration to allow the proximal axon to regenerate and, given a proper pathway, reestablish functional connections with targets. For previously myelinated sensory and motor axons, regrowth at a rate of 1 mm/day is closely followed by remyelination and the subsequent maturation of the myelin sheath. Saltatory conduction is resumed although the structure function of the newly formed myelinated axons remains persistently abnormal.

The site of traumatic nerve injury can be typically localized clinically or by imaging. Neurophysiological investigation can help localization only in anatomically favorable cases. Instead, neurophysiological investigation is indispensable to answer: 1) what is the extent of true axonal degeneration versus reversible focal demyelination and 2) is surgical intervention/re-intervention required to repair the regeneration pathway.

By nerve conduction studies it is possible to detect conduction block across the lesion site and, in association with needle electromyography, to identify the denervated and/or reinnervated muscles across the regeneration pathway. Interpretation of these studies is critically dependent on the timing of axonal degeneration and regeneration, both in context of complete lesions and partial lesions.

In recent years, nerve excitability studies by threshold-tracking were developed as electrodiagnostic procedures complementary to conduction studies. Using excitability studies in patients and animal injury models, we found that ion channel dysfunction may precede loss of axonal conduction during Wallerian degeneration and that membrane function of regenerated axons should be regarded as an acquired channelopathy.



Mircea MOLDOVAN

Dr. Mircea Moldovan, absolvent al Universitatii de Medicina si Farmacie "Carol Davila" Bucuresti, doctor in stiinte medicale, este medic neurolog, la spitalul "Elias" Bucuresti din anul 1968. In toata cariera lui ca neurolog a avut o preocupare neintrerupta pentru neurofiziologia clinica. In anii '70-80 interesul principal a fost reprezentat de EEG si potentziale evocate. In anii '90 interesul lui s-a extins la studii de conducere periferica si EMG in laboratorul de neurofiziologie clinica si potentziale evocate al spitalului "Elias". In timpul acestei munci de pionierat in neurofiziologia clinica din Romania, Mircea Moldovan a pledat pentru importantza tehnicilor de neurofiziologie clinica in practica neurologica prin consecvente prezentari la manifestari stiintifice nationale si publicatii stiintifice. Prin experientza practica acumulata si spirit didactic, el a contribuit la initierea in neurofiziologie clinica a generatiei de tineri neurologi. In ultima decada, o data cu transformarea sectiei de neurologie a spitalului "Elias" intr-o sectie universitara

si oficializarea competentelor in EMG (2003) si EEG (2004), Dr. Mircea Moldovan si-a mentinut preocuparea didactica si sustine impreuna cu Dr. Ionela Codita demonstratiile practice din cadrul cursurilor post-universitare de EMG organizate de Conferentiar Dr. Cristina Panea. In plus, Dr. Mircea Moldovan a contribuit la reluarea activitatii societatii de neurofiziologie clinica din Romania fiind din 2009 membru fondator al ASNER.

Demyelinating sensory-motor polineuropathy with , higher CSF proteins and MRI radicular hypertrophy – Case presentation

Dr M Moldovan*, Dr Ionela Codita*, Dr. Smarandita Lacau**, Dr Bogdan Rotaru ***

SUU Elias*, Centrul de Imagistica Hyperdia **, Centrul medical Sanador , ***

A 21 years old man was admitted for loss of muscular strength without sensory symptomatology, installed insidiously in the previous 3-4 months, Clinical examination revealed distal muscular atrophy and strength loss installed insidiously, distal superficial and vibratory hypoesthesia, areflexia, curled toes.

EMG examination showed motor conduction speeds of 10 to 16 m/s on the median, ulnar and tibial nerves with a prolonged distal latency (5,2-9, =6,0 =7,6-9,7 m/s). Peroneal n. stimulation failed to elicit M response. Median n. presented a prolonged F wave (43 m/s). Sensory response (with surface electrodes) could not be elicited.

CSF examination revealed a higher CSF proteins (100 mg%). MRI showed important radicular hypertrophy of the lumbar plexus. No genetic studies and no sural n. biopsy were attempted.

The clinical and electro-physical aspect of demyelinating neuropathy was differentiated from other sensory-motor neuropathies with similar aspect, by (1) the presence of albumino-cytologic dissociation in CSF, (2) the MRI-revealed radicular hypertrophy, and (3) the existence of both type 1A CMT and chronic inflammatory demyelinating forms of polyneuropathy. Similarly, the differential diagnosis between CMT and chronic inflammatory demyelinating polyneuropathy was difficult, due to the gradual onset.

Despite the absence of the familial factor of the existing electro-physiological asymmetry and of the imaging particularities, the diagnosis inclined to a type 1A of CMT, due to the history of upper limb muscular modification since childhood, and the very low values of MCV.



Dafin Fior MURESANU

Chairman and Professor of Neurology, Department of Neurology, University CFR Hospital, Cluj Napoca, Romania

Vice Dean of the Faculty of Medicine, "Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj-Napoca, Romania

President of the Society for the Study of Neuroprotection and Neuroplasticity

Member of the Romanian Academy of Medical Sciences, Romania

OTHER ACADEMIC DEGREES

2002-2004 MBA, School of Health Care Systems Management, The Danube University, Krems, Austria

1998 Specialization in Leadership, The Arthur Anderson Institute, Illinois, USA

PAPERS PUBLISHED IN INTERNATIONAL JOURNALS (INDEXED IN ISI AND PUBMED) 30 articles

PAPERS PUBLISHED IN OTHER JOURNALS, (INDEXED IN OTHER DATABASES) 44 articles

PAPERS PUBLISHED IN ROMANIAN JOURNALS 46 articles

MONOGRAPHS 7 monographs / CHAPTERS IN PUBLISHED BOOKS 5 chapters

Fluent in: English, Italian

ACADEMIC MEMBERSHIPS INTERNATIONAL SCIENTIFIC SOCIETIES

World Academy for Multidisciplinary Neurotraumatology (WAMN); Chairman of the Scientific Committee (2008-2010); Secretary (2010-present); Danube Neurological Society;

Executive Management Committee; European Society of Clinical Neuropharmacology; Secretary General; European Federation of Neurological Societies (EFNS); Member of the

Neurotrauma Panel; Global College for Neuroprotection and Neuroregeneration (GCNN); Vice-President, Chairman of the Clinical Committee

The Society for the Study of Neuroprotection and Neuroplasticity (SSNN); Founder and President

European Neurological Society (ENS); Society for Neuroscience; European Stroke Organization; New York Academy of Science

EDITORIAL BOARD

Frontiers in Neuroscience; Associate Editor; International Journal of Neuroprotection and Neuroregeneration; The Romanian Journal of Neurology; Romanian Journal of Clinical

Anatomy and Embryology; Acta Neurologica Transilvaniae; American Journal of Neuroprotection and Neuroregeneration; Guest editor

Journal of Cellular and Molecular Medicine, Guest editor; Journal of Medicine and Life

AWARDS

2010 University of Medicine and Pharmacy Cluj-Napoca, Faculty of Medicine

"Octavian Fodor" Award for the best scientific activity of the year

2009 Romanian Academy "Gheorghe Marinescu Award" for contribution to neuroprotection and neuroplasticity

2009 Excellence Award; "Viata Medicala Romaneasca" Medical Journal

2007 Award for the best Medical TV Series Program; Romanian Television Channel 2.

Pharmacological support in brain protection and recovery - the role of multimodal molecules and pleiotropic metabolic regulators.

Dafin F. Muresanu Chairman and Professor of Neurology, Department of Neurology, University CFR Hospital, Cluj Napoca, Romania

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The old concept that neuroprotection means suppressing pathophysiological processes, the idea that a single mechanism molecule might be effective in clinical practice are obsolete today, and represents the root cause of failure.

The effects of etiological agents on the brain traditionally are conceived as a linear sum of independent pathophysiological processes (excitotoxicity, inflammation, apoptosis-like, oxidative stress, misfolding protein, etc.) generating the pathways of pathological cascades in acute and chronic disorders.

The pathway approach has produced a very detailed understanding of molecular changes in the postlesional brain but it possesses blind spots that are critically related to the failure of pharmacological neuroprotection treatment in neurodegenerative disorders.

This is due to the simplistic way of understanding the neurobiological processes supporting brain protection and recovery and pathophysiological mechanisms. The failure of modifying disease therapies in many pathological conditions is measuring the failure of the reductionistic approach to the problem.

Every lesion in the nervous system initially triggers an endogenous neuroprotective reaction followed by an endogenous repair process, combining neurotrophicity, neuroprotection, neuroplasticity and neurogenesis, overlapping and acting under genetic control to generate endogenous defense activity (EDA) which continually counteracts pathophysiological processes - damage mechanism (DM).

All these biological processes are initiated and regulated by biological molecules.

Neurotrophic factors are probably the best example in this respect. They are acting in a pleiotropic neuroprotective way against pathological cascades.

The same molecules, due to a complex genetically regulated process, are able to regulate further on neurotrophicity, neuroplasticity and neurogenesis as well. Therefore, they have not only pleiotropic neuroprotective activity but also multimodal mechanism of action.

In the same time, post-lesional brain has a very demanding status of aerobic metabolic activation. Unfortunately, in mostly all pathological conditions, this important pathway is heavily impaired. A good cellular aerobic metabolic status is an important prerequisite for neuroprotection and recovery regulated by multimodal molecules. Therefore, we should focus our therapeutical efforts also to sustain this important biological background. In this respect, pleiotropic metabolic regulators having the capacity to improve critically disregulated glucose aerobic metabolic pathway are crucial for neurorestorative approach.

Beside the concept and therapeutical effects of multimodal molecules and pleiotropic metabolic regulators, this presentation will give an overview on the evolution of clinical treatment concepts with these two classes of molecules in stroke, including the latest positive clinical results.



Izabela POPA

Izabela Popa graduated the University of Medicine and Pharmacy Timisoara in 1999. Finished internship and residency in neurology in Timisoara and became neurologist in 2006. Followed clinical neurophysiology trainings at Department of Neurology, University of Szeged, Hungary (2004), Department of Neurology, University of Leipzig, Germany (2005) and at Department of Neurophysiology, Uppsala University Hospital, Sweden (2008, 2011). In 2007 earned competence in electromyography and nerve conduction studies and in 2009 received a Certification for Electrophysiological Testing from Albert Einstein College of Medicine of Yeshiva University. Since 2007 works as private practitioner with special interest in neurophysiology.

Traumatic lesions of radial nerve – case presentation

The involvement of the radial nerve is one of the most frequent traumatic nerve injuries. Although it may be involved at any level, (e.g. in the brachio-axillary angle, in the spiral groove or in its course through the arcade of Frohse) there are certain sites where the nerve is more prone to be damaged. Two of these situations are presented here, a proximal involvement and a distal one, together with some considerations on the delay between trauma and the electrodiagnostic study.



Dan M. PSATTA

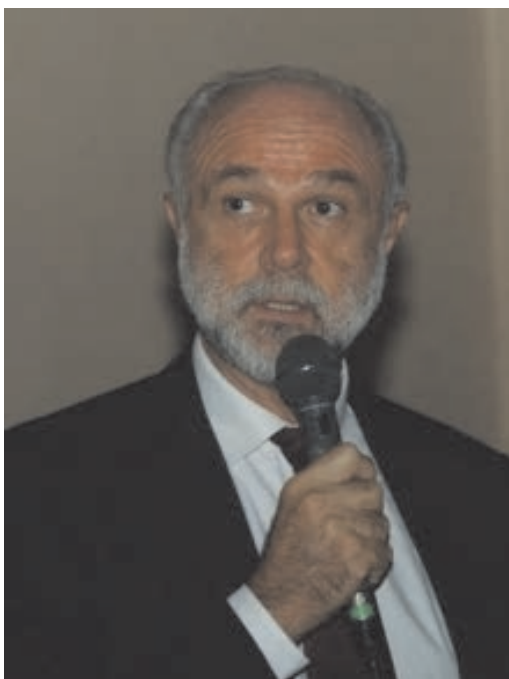
A absolvit Facultatea de Medicina Generala din Bucuresti in 1959. In 1962 a fost incadrat prin concurs ca Cercetator la Institutul de Neurologie din Bucuresti, condus de Acad. A. Kreindler si Vlad Voiculescu. A efectuat cercetari in domeniul Neurofiziologiei clinice si experimentale. In 1974 a obtinut titlul de Doctor in Medicina, prezentand o teza de doctorat privind: Diferente functionale intre Hipocampul Dorsal si Ventral. In 1980 a primit Premiul Gheorghe Marinescu al Academiei de Medicina, pentru lucrarile publicate. A efectuat cercetari experimentale in domeniul fiziologiei hipocampului, fiziologiei lobului parietal, studiul EEG al mecanismelor motivatiei si memoriei, studiul excitabilitatii nucleilor hipotalamici sub stimulare hipocampica, efectele stimulării feed back a nucleului Caudat asupra excitabilitatii focarelor epileptice corticale induse experimental. In domeniul Neurofiziologiei clinice a demonstrat existenta de deosebiri privind capacitatile cognitive si personalitatea bolnavilor epileptici cu diverse focare corticale, a studiat EEG modul de actiune al procedeelor biofeedback asupra excitabilitatii focarelor epileptice, a descris modificari tipice ale potentialelor evocate vizuale, auditive (de trunchi) si somestezice in Scleroza multipla, potentialele somestezice in Disociatia senzitiva, potentialele

evocate somestezice etajate (pe 8 canale) din maduva spinarii in patologia spinala, modificarile potentialelor evocate vizuale, somestezice si auditive din Insuficienta vertebrobazilara cronica si sindromul de unghi ponto-cerebelos. Prin corelatii electroclinice la peste 5000 de bolnavi a stabilit generatorii componentelor potentialului evocat vizual si al unor componente ale potentialului auditiv. A introdus metoda inregistrarii simultane a EEG si PEV, pentru diferentierea patologiei retiniene de cea a cailor optice centrale. Din 1985 si pana in prezent a dezvoltat progresiv un sistem original de Mapping EEG, proiectat sa aiba o rezolutie suficient de mare pentru a putea decela leziunile cele mai mici corticale sau subcorticale. A elaborat prin Mapping EEG o noua semiologie pentru multiple boli neurologice: Scleroza Multipla, Afectiunile cerebro-vasculare, Encefalite si Borelioza, tumori, traumatisme cranio-cerebrale.. A introdus un sistem de Mapping EEG functional, capabil sa arate modificarile EEG induse prin diferite stiimulari senzoriale. Prin aceasta metoda a descris modificari caracteristice ale excitabilitatii corticale in epilepsie, modificari ale functiei ariilor rolandice in SLA, efectele leziunilor lobului temporal si frontal, al leziunilor cerebeloase, modificari tipice de raspuns in afazie si alexie, efectele EEG ale auditivei muzicale, modificarile de judecata si constiinta care apar in leziunile lobului frontal. Prin Mapping de potentiale evocate a putut arata propagarea centrala a influxului nervos dealungul cailor vizuale, auditive si cerebeloase. A publicat 128 de lucrari in reviste din tara si strainatate, si a tinut numeroase comunicari pe temele studiate. A tinut conferinte in Cehoslovacia, Rusia, Italia, Franta si SUA. A tinut numeroase cursuri de perfectionare pentru medicii neurologi. Din 1992 a predat Neurofiziologie Universitatea Ecologica (timp de trei ani) si a tiparit un Curs Neurofiziologie aplicata de 450 pagini. Din 1990 pana in 2002 a fost Presedintele Societatii romane de Neurofiziologie clinica, reinfintand o societate disparuta in 1968, la plecarea doctorului Steriade. A fost membru in comitetul redactional al Romanian Journal of Neurology si EEG Journal. Din 1995 a lucrat ca sef de laborator in Laboratorul de Neurofiziologie clinica dela Colentina, apartinand Centrului de Neurostiinte al Academiei de Medicina. A devenit Cercetator Principal gr I.

Dupa revolutie a publicat 3 volume de poezie si teatru, scrise intre 1974 si 1990. A tradus in limba franceza din poezia lui Eminescu, Bacovia si Blaga.

D.M. Psatta, Mihaela Matei, Dan Alexianu: Leziuni cerebrale revelate de examenul Mapping EEG, lung timp dupa traumatismele craniene inchise.

Examenul Mapping EEG efectuat la 18 pacienti in faza timpurie sau tardiva a traumatismului cranio-cerebral a decelat anomalii semnificative ale functiilor creierului in majoritatea cazurilor (15/18), fiind mult superior examenului CT. Se considera ca dezvoltarea sindromului de stress post-traumatic este datorata exclusiv dezvoltarii unor anomalii functionale frontale sau temporale. Textul integral al lucrarii a fost publicat in Romanian J. of Neurology, 1999, 37, pp 3-9. Sunt adaugate imagini dela sase cazuri investigate recent (2011), care confirma si completeaza observatiile anterioare. Bolnavii investigati prezinta anomalii evidente de Mapping EEG atat la repaus, cat si la stimularea binoculara cu flash (semne de hiper sau hipoeexcitabilitate corticala). Concomitent se arata aparitia posibila a unor anomalii ale potentialelor evocate, vizuale sau auditive.



Paolo Maria ROSSINI

Born in Rome on 9th June 1949. Honours in Medicine (Catholic University of Rome , July 1974).
1974 - 1978 attended the postgraduate course as a Resident in Neurology supervised by Professor Giorgio Macchi (graduated November 1978) with a dissertation on Evoked Potentials. Appointed Assistant Professor in 1978 and subsequently transferred to the University of Chieti where he remained until 1984. During this period he took part in various courses and research projects in the United States, collaborating with Roger Cracco and his group on Somatosensory Evoked Potentials. Appointed Associate Professor in 1985 and transferred to the University of Rome "Tor Vergata" where he was teaching Clinical Neurophysiology at Neurology Clinic directed by Professor Giorgio Bernardi.
1984 - 1990 actively participated in the development of clinical applications in transcranial electrical & magnetic stimulations collaborating with many italian and foreign colleagues . Appointed in 1990 as chairman of the Department of Neurology at the Fatebenefratelli Hospital "San Giovanni Calibita" of Rome. Since then he has guided the Clinical activity of the Department (20 bed-ward as well as services involving EEG, EP, EMG, Doppler, as well as a Centre

for Cerebral Ageing, for Cephalalgia, as well as a Centre for Epilepsy). Actively collaborates with research centres operating principally with the Nationals Research Council of Italy in the field of neuromagnetic brain activity. Visiting Professor at the University of Irvine (California) in 1989. Organizer of many National and International congresses on Neurology and Clinical Neurophysiology . On several occasions has been appointed Official Delegate of the Italian Society of Clinical Neurophysiology. Over the years, Professor Rossini has taught on various occasions on neurological subjects at the Neurology courses held at the Faculty of Medicine and Surgery at the University of Chieti, "La Sapienza" (Rome, and "Tor Vergata" (Rome) as well as at the Post-Graduate School in Neurology, Neurosurgery, Anaesthesia, and Intensive Care of the University of Rome "Tor Vergata". Member of the Executive Committee of the International Federation of Clinical Neurophysiology.

Editor-in-Chief of "Electroencephalography and Clinical Neurophysiology" (later Clinical Neurophysiology) between 1995 and 2003.

Scientific Director of the Scientific Institute on Dementia and Psychiatry recognized by the Italian Ministry of Health between 1997 and 2007.

Chairman of Department of Neuroscience at Fatebenefratelli Hospital, Isola Tiberina between 1999 to 2010.

Scientific Director of AfAR (Fatebenefratelli Association for Research) since 1997.

President of SINC between 2001 and 2003.

Full Professor of Clinical Neurology at the Faculty of Medicine at the University of Campus Biomedico in Rome between 2000 and 2011

Member of the Superior Council of Health since 2003.

2001-2003 President of the Italian Society of Clinical Neurophysiology.

Chairman of the European Chapter of the International Federation of Clinical Neurophysiology (E.C. -I.F.C.N.) since 2005. Expert of the EU research program.

Scientific Director of Integrated Research Centre University Campus Bio-Medico of Rome between 2006 and 2011.

Appointed full Professor of neurology at Catholic University of Rome since March 2011.

Elected as IFCN President for the fiscal period 2010-2014

Author of a large number published scientific works among which more than 400 listed in Pub Med with more 1400 point of I.F. and more than 4.500 citations, in the fields of neuroanatomy, experimental neurophysiology, Clinical neurophysiology, clinical neurology and clinical neuropharmacology, on 40 different journals reviewed in the Med-line directory .

Ad Hoc Reviewer for Brain, Neurology, Annals of Neurology, Current Biology, J. Neuroscience, Neuroscience, Eur. J. Neuroscience, Neurosci. Lett., Exp. Neurology, Brain Res., NeuroImage, Human Brain Mapping, Muscle & Nerve, Clinical Neurophysiology, Stroke etc.

Project reviewer for Israel, German, Finnish, Austrian, Italian national research councils as well as for several international research foundations, including the Wellcome Trust and Telethon.

Present research fields include: brain plasticity in healthy adult brain and following brain lesions, TMS in cognitive sciences, neurophysiology of aging brain and of Dementias, integrated brain functional imaging.

“NEUROPHYSIOLOGICAL CORRELATES OF HUMAN CORTICAL PLASTICITY”

PM Rossini

Catholic University of Rome, Italy

Abstract

Topographical cortical organization has been shown to be highly plastic, altering his configuration in response to training in different tasks in healthy controls and in neurological patients. The study of neuroplasticity has clearly shown the ability of the developing brain --- and of the adult and ageing brain --- to be shaped by environmental inputs both under normal conditions (ie, learning) and after a lesion. The neural plasticity associated with learning and functional recovery is increasingly being studied using functional neuroimaging methods such as functional magnetic resonance imaging (fMRI), magnetoencephalography (MEG), and transcranial magnetic stimulation (TMS) alone and combined with simultaneous EEG recordings (TMS/EEG). A number of parameters, related to changes in performance, learning and functional recovery must be addressed when taking into account plastic neuronal reorganization.

The interpretation of changes in imaging signals is greatly underdetermined, suggesting that hypothesis driven research approaches may be most fruitful

Transcranial Magnetic Stimulation (TMS) and Magnetoencephalography (MEG) have a high temporal resolution but, also, have some limitations. TMS can provide bidimensional scalp maps and MEG depicts three-dimensional spatial characteristics of virtual neural generators obtained by use of a mathematical model of the head and brain. Functional MRI (fMRI) and positron emission tomography (PET), on their own, have insufficient time resolution to follow the hierarchical activation of relays within a neural network; however, because of their excellent spatial resolution, they can integrate the findings of TMS and MEG. An integrated approach constitutes, at present, the best way to assess the brain plasticity both under normal and pathological conditions.



Andreas SCHILLER

Dr. Andreas Schiller graduated 1998 from medical school, Geneva University, Switzerland. After internship in internal medicine he did his Neurology residency in the Neurology Department of the University Hospital Zurich. Neurology Board exam certified in 2005, he is responsible of the neurophysiological laboratory of the Clinic for Plastic and Handsurgery University Hospital Zurich since 2006. His special interests are peripheral nerve- and brachial plexus injuries and tumors and intraoperative electrophysiological diagnostics. Apart from the University Hospital, he works in his private general neurological practice Neuromed, Zurich. His research interests are imagery of peripheral nerves, intraoperative diagnostics and more in general subjects pertinent to electrophysiology of peripheral nerve pathologies. He is married, has 3 boys and lives in Zurich.

Intraoperative Electrophysiology for peripheral nerve surgery : the Zurich experience

Abstract

Intraoperative electrophysiological diagnostic methods are applied to assess the physiological status of nerve fibres in peripheral nerve surgery. In contrast to nerve monitoring they supply objective criteria for operative decisions to the nerve surgeons. The technique of intraoperative nerve action potential (NAP) recordings, motor evoked potentials and somatosensory evoked potentials is discussed. An overview of relevant historical, pathophysiological and histopathological background relevant to the method are reviewed. Practical issues and the limits of these techniques are discussed. Based on our experience we suggest that NAP and MEP recordings on exposed nerve tissue may widely prevent unnecessary nerve or fascicle resection with subsequent poor prognosis. Further indications such as evaluations of brachial plexus lesions, determining the optimal proximal location of the coaptation site, evaluating the function of a nerve root and tracing the site of a preoperatively non localized nerve lesion are presented. The method and material to record intraoperative nerve action potentials is demonstrated by the use of practical case examples. Intraoperative electrophysiological diagnostics are increasingly relied on to document the strategy chosen during peripheral nerve surgery and to predict its outcome. For neurologists used to perform electrophysiology, these techniques are readily available since the equipment is the same as in routine clinical use except for the intraoperative electrodes. In conclusion intraoperative electrophysiology is not a substitute but a complement to a thorough preoperative clinical EMG and radiological diagnostics and an intraoperative morphological examination. In our experience, it is readily available, rapidly performed and significantly improves postoperative outcome for peripheral nerve surgery.

Nerve trauma of the hand: Optimizing management by the use of electrophysiology

Abstract

Trauma of the hand frequently involves injury to peripheral nerves. The latter often constitutes an important and longest persisting factor leading to disability and to use of medical resources. An early comprehensive neurological and electrodiagnostic (EDX) work up permits to optimize planning of operative and rehabilitational procedures and to determine a prognosis that is relevant early in the process of reintegration into the working process. We review the value of EDX in the interdisciplinary management of trauma to the hand. In times of increasing use of imagery technologies a reappraisal of electrophysiology is warranted : EDX is a complement to a comprehensive clinical examination. It is cheap, quick and effective for nerve trauma if the questions are well formulated. A good quality EDX exam may be of invaluable help to a nerve surgeon to plan surgery. Different nerves need specific consideration pertaining to management. We review the most frequent nerve injury constellations of the hand and present our

approach. Discussed are median and ulnar nerve lesions at the wrist, radial nerve lesions, painful sensory nerve lesions, hand related issues in diagnostic work up of brachial plexus injury and the role of EDX in the diagnosis and management of complex regional pain syndrome (CRPS). New approaches to peripheral nerve trauma evaluation using diffusion tensor imagery technology are presented. The results are compared to EDX. Although imaging techniques have an ever more important role in selected clinical issues such as assessment of spinal root damage, today EDX still constitutes the cornerstone of evaluation, follow up and intraoperative surgical decision making.



Edith SISAK

Edith SISAK- absolventa a IMF Tirgu Mures, este medic specialist neurolog din 1991 si medic primar din 1996. Competentele in examinarea Doppler, EEG, EMG, PE si stagiile practice multiple efectuate in Budapesta, Tel Aviv, Graz si Salzburg confirma interesul in examinarile paraclinice si indeosebi in electroneurofiziologie. In prezent profeseaza in Spitalul Judetean Sf Gheorghe. Este membra a Societatii de Neurologie din Romania, a Societatii pentru Studiul Neuroprotectiei si Neuroplasticitatii, membra a Societatii de Neurofiziologie Electrodiagnostica din Romania si a numeroase societati stiintifice internationale.

Potentiale evocate vizuale (PEV) in neuropatia ischemica acuta (NOIA)

E.Sisak, A.Galamb, S.Sisak

Abstract Scaderea marcata a acuitatii vizuale la un adult/ persoana varstnica este o problema grava care necesita o abordare interdisciplinara- neuro-oftalmologica pentru un diagnostic si tratament cat mai precoce. Este necesara examinarea acuitatii vizuale, a fundului de ochi, a campului vizual, OCT (ocular coherence tomography) cu program RNFL (retinal nerve fiber layer), precum si angiografii retiniane (AFGR). La precizarea diagnosticului contribuie si potentialale evocate vizuale (PEV). Acuitatea vizuala scade monocular- daca patologia atinge fibrele maculare, atunci: sever. In campul vizual se evidentiaza scotom corespunzator teritoriului atins. OCT in faza acuta arata ingrosarea fibrelor nervoase din teritoriul bolnav, iar in faza cr.- atrofia acestora. AFGR este modificata patognomonic, evidentiind ischemie segmentara capilara a papilei nervului optic. PEV este modificat in primul rand prin scaderea amplitudinii unde P100.

Prezentam investigarea complexa a pacientilor cu NOIA.



Ovidiu STEFANESCU

01/08/2007 - 10/05/2010

medic sef sectie

Chirurg plastic medic primar

Medic sef managementul resurselor materiale sectie

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Servicii medicale pentru populatie

Carpal canal syndrome - features of surgery

Authors: Stefanescu Ovidiu MD, Jecan Radu MD, Silviu Badoiu MD

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Abstract: The authors present 88 cases operated between 01 August 2008 - August 31 2011 with pain syndrome, compression of the median nerve in the carpal tunnel. In all patients suffering nerve exploration is documented by the neurologist and peripheral nervous suffering is completed by anamnestic findings motor evoked by patients and objective examination. The method was applied to all patients with open surgery, carpal ligament section, median nerve neurolysis. Postoperative follow-up was performed for at least six months, with supervision of motor recovery through exploration carried out clinical and by peripheral nerve exploration. The authors conclude that surgery performed accurately and timely, significantly improve patient complaints, offering rapid patient satisfaction and improved long-term hand activity.

POSTER SESSION:

Variability of visual evoked potentials parameters using color stimulation

Bogdan Catalin - UMF Craiova

Georgescu D., Alexandru D. Georgescu M., Enescu-Bieru D., Balseanu A. T. Sfredel V., Romanescu F., Mitran S., Iancau M.

Our study is imposed as a necessity by the widening area of use for Visual Evoked Potentials (VEP) obtained through color stimulation, in our laboratory, beyond the ophthalmological pathologies, in the diagnosis of neurological pathologies (multiple sclerosis,), metabolic (diabetes mellitus), etc. Establishing physiological limits for the parameters of VEP waves following stimulation with different wavelengths of luminous radiation is another goal of our work. Our tested group is represented by 29 volunteers, healthy from an ophthalmological point of view or with refraction pathologies adequately corrected (21 girls and 8 boys, aged between 18 and 20 years of age). A VEP recording was made through pattern reversal stimulation. To record, VEP Fz-OL5, Fz-Oz, Fz-OR5 derivations were used, the evoked answer extracted through averaging. The stimulations were made with red, blue, green, yellow bars. An original software was used to process the recorded data, measuring latency, amplitude, duration, surface and suddenness of the waves of the N75-P100-N135-145 complex. From the abundance of data, only the latencies of N75 and P100 waves were selected and statistically analyzed. The interpretation of data shows that the latencies of the two waves recorded, the smallest values at yellow light stimulation, increasing with up to 10ms. for blue light stimulation, the highest latency. By comparatively analyzing the latencies of the two waves, following stimulations with luminous radiations with different wavelengths, statistically highly significant values of "p" were obtained, for blue-green and blue-yellow, red-yellow, and insignificant for red-blue and green-yellow.



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