UMF
IULIU HAȚIEGANU
UNIVERSITY OF
MEDICINE AND PHARMACY
CLUJ-NAPOCA
ROMANIA

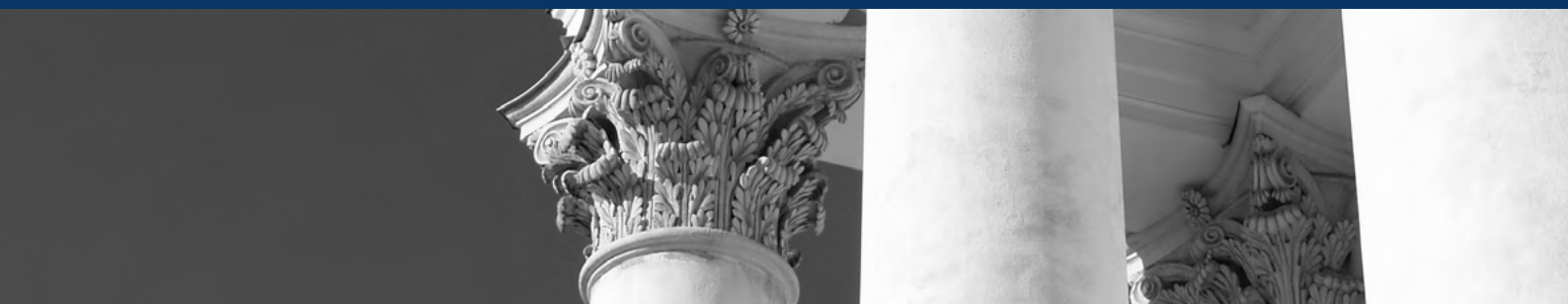
"IULIU HATIEGANU" UNIVERSITY OF MEDICINE AND PHARMACY DOCTORAL SCHOOL

NEUROSCIENCE

PROGRAM

2016-2017 | SECTION 2

FRIDAY, 3 FEBRUARY | UMF "IULIU HATIEGANU" | CLUJ-NAPOCA | ROMANIA



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President of the Romanian Society of Neurology

Co-Chair EAN Scientific Panel Neurorehabilitation

Vice President European Federation of NeuroRehabilitation Societies (EFNR)

Professor of Neurology, Chairman Department of Neurosciences
"Iuliu Hatieganu" University of Medicine and Pharmacy,
Cluj-Napoca, Romania

Chairman "RoNeuro" Institute for Neurological Research and Diagnostic

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

INTERNATIONAL GUEST LECTURER

Natan M. Bornstein

Director of Neurological Division,
Shaare Zedek Medical Center

Vice President of the World Stroke Organization (WSO)

Chairman of the Israeli Neurological Association

Doctor Honoris Causa,
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Cluj-Napoca, Romania

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2016-2017

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COURSE PROGRAM

COURSE PROGRAM

FEBRUARY 3RD, 2017

"MULTIMEDIA" AUDITORIUM,
"IULIU HATIEGANU" UNIVERSITY OF MEDICINE AND PHARMACY
CLUJ-NAPOCA, 8 VICTOR BABES STREET

09:50 – 10:00	Dafin F. Mureșanu /Romania Welcome Address
10:00 – 10:45	Natan Bornstein /Israel Mood and gait as the interacting modulators of cognitive impairment after stroke
10:45 – 11:30	Natan Bornstein /Israel Secondary stroke prevention
11:30 – 12:15	Natan Bornstein /Israel Time is Brain, TIA as an emergency
12:15 – 14:00	Session Break
14:00 – 14:45	Natan Bornstein /Israel Management of Intracerebral hemorrhage - Update
14:45 – 15:30	Natan Bornstein /Israel Cerebral Small Vessel Disease – The Most Common Neurological Disorder

INTERNATIONAL GUEST LECTURER

NATAN BORNSTEIN
ISRAEL

EDUCATION

1970-73	University of Sienna, Medicine, Sienna, Italy
1973-79	Technion Medical School, Hifa, Medicine, MD, 1979

Date of receiving specialixation certificate: 11 September, 1984
Title of Doctoral dissertation: Dextran 40 in acute ischemic stroke
Name of Supervisor: Dr. Jacob Vardi

FURTHER EDUCATION

1978-83	Tel-Aviv University, Sackler Faculty of Medicine, neurology (residence), Israeli Board certified in Neurology, 1983
1979-83	Tel-Aviv University, Sackler Faculty of Medicine, Post graduate studies in Neurology
1984-87	Sunnybrook Medical Center, University of Toronto, M.R.C stroke, Fellowship

ACADEMIC AND PROFESSIONAL EXPERIENCE

1982-1995	Tel-Aviv University, Neurology, instructor
1991-present	European stroke Conference (ESC), Executive committee
1995-1999	Tel-Aviv University, Neurology, Senior lecturer
1995	Eliprodil CVD 715 clinical trial, Steering Committee
1995-1997	International Stroke Study (IST), Steering Committee
1995-1999	American Academy of Neurology, Member of the International Affairs Committee
1996	Asymptomatic Carotid Stenosis and Risk of Stroke(ACSRS), Advisory Committee
1996-present	The Mediterranean Stroke Society (MSS), President
1996-2002	EFNS, Management Committee
1997-2009	Israeli Neurological Association, Secretary
1999-present	Tel-Aviv University, Neurology, Associated Professor
2001- present	European Society Neurosonology and Cerebral Hemodynamics (ESNCH) Executive committee
2005-present	Neurosonolgy Research Group, Executive committee
2006-present	European Master in Stroke Medicine, Member of faculty
2006-2008	NEST II clinical Trial, Steering Committee
2006-present	SENTIS clinical Trial, Steering Committee
2006-present	CASTA Trial, Steering Committee
2006-present	Brainsgate clinical Trial, Steering Committee
2008- present	World Stroke Association (WSO), Vice president
2009-present	Israeli Neurological Association, Chairman
2009-present	European Stroke Organization (ESO), Member on the board of directors
2010-	NEST III clinical Trial, Steering Committee

PROFESSIONAL ACHIEVEMENTS- EDITORIAL BOARD

1991-present	Neurological Research Journal, Guest Editor
1991-present	STROKE, Member of the editorial board
1998-present	European Journal of Neurology, Member of the editorial board
1999-present	Journal of Cerebrovascular disease, Member of the editorial board
2000-present	Journal of Annals of Medical Science, Consulting Editor
2001-present	Journal of Neurological Science (Turkish), Member of the editorial board
2001-present	Acta Clinica Croatica, Member of the editorial Counsil
2003-present	Italian Heart Journal, International Scientific Board
2003-present	Journal of Neurological Sciences, Guest Editor
2004-present	Turkish Journal of Neurology, International Advisory Board
2005-present	Archives of Medical Sciences (AMS) , Member of the Editorial Board
2006-present	Journal of Cardiovascular Medicine, International Scientific Board
2006-present	International Journal of Stroke, Editorial Board
2006-present	Acta Neurologica Scandinavica, Editorial Board
2009-present	American Journal of Neuroprotection& Neurogeneration (AJNN) Member of the Editorial Board
2010	Neurosonology, International Editorial Board
2010	Frontiers in Stroke, Review Editor

PROFESSIONAL ACHIEVEMENTS- REVIEWER

1998-present	Lancet, Ad Hoc reviewer
1998-present	Diabetes and its complications, Ad Hoc reviewer
1999-present	Journal of Neuroimaging, Reviewer
1999-present	Journal of Neurology, Ad Hoc reviewer
2000-present	Neurology, Ad Hoc reviewer
2003-present	Israeli Medical Association Journal (IMAJ), Reviewer
2003-present	Acta Neurologica Scandinavica, Ad Hoc reviewer
2006-present	Journal of Neurology, Neurosurgery & Psychiatry, Reviewer
2010-	European Neurology, Ad Hoc reviewer

MEMBERSHIP IN PROFESSIONAL SOCIETIES

1977-present	Israeli Medical Association
1983-present	The Israeli Neurological Association
1985-present	Stroke Council of the American Heart Association (Fellow)
1986-present	American Academy of Neurology
1986-present	Neurosonology Research Group of the World Federation of Neurology
1987-present	Stroke Research Group of the World Federation of Neurology
1990-2008	International Stroke Society
1995-2008	European Stroke Council
1995-present	Mediterranean Stroke Society (MSS)
1998-present	European Neurosonology Society
2005-present	World Stroke Organization (WSO)
2008-present	Fellow of the European Stroke organization (FESO)

ABSTRACTS

MOOD AND GAIT AS THE INTERACTING MODULATORS OF COGNITIVE IMPAIRMENT AFTER STROKE

NATAN BORNSTEIN
Director of Neurological Division, Sackler school of Medicine, Tel-Aviv University, Israel

Background: After a stroke, patients frequently experience a spectrum of neuropsychological and motor deficits, resulting in impaired activities, cognitive and function.

Additionally, post-stroke (PS) depression is associated with increased mortality, disability and anxiety levels, and lower quality of life.
We tested whether the assessment of balance and gait, as well as depressive symptoms, can enhance the prediction of long-term cognitive and functional outcome in stroke survivors.

Methods: Participants were first-ever, mild-moderate stroke/ patients from the TABASCO study, who underwent 3T MRI and followed using neurologic, neuropsychological, mobility and functional examinations 6, 12 and 24 months after the index event.

Results: Data were available for 306 consecutive patients. Of these patients, 51 (16.7%) developed cognitive decline (CD) within 2 years.

Multivariate regression analysis showed that a Geriatric Depression Score (GDS) > 6 at admission and 6 months PS was a significant independent marker of CD and worse functional outcome 2 years after the index event (OR=3.68, 95% CI: 1.03-13.21).

The CD group and cognitively intact (CI) group did not differ in their neurological deficits nor in their infarct volume or location. Nonetheless, 6 months PS, the Timed Up and Go (TUG) test took longer in those who later developed CD ($p<0.001$) and they had lower Berg Balance Scale scores ($p<0.001$) and slower gait ($p<0.001$). Another multivariate regression model showed that TUG longer than 12 seconds at 6 months PS was a significant independent risk marker of CD 2 years PS (OR=6.07, 95% CI: 1.36-27.15).

Conclusions: We suggest that measures of balance and gait as well as depression scores are significant risk markers of cognitive status 2 years after stroke. Relatively simple, performance-based tests of mobility and depression screening may enhance the identification of stroke/TIA survivors who have an increased risk to develop cognitive decline and may benefit from closer medical surveillance.

SECONDARY STROKE PREVENTION

NATAN BORNSTEIN
Director of Neurological Division, Sackler school of Medicine, Tel-Aviv University, Israel

Patients with TIA or ischemic stroke carry a risk of recurrent stroke between 5 and 20% per year. In patients with TIA or ischemic stroke of noncardiac origin antiplatelet drugs are able to decrease the risk of stroke by 11-15% and the risk of stroke, MI and vascular death by 15-22%. Aspirin is the most widely used drug. It is affordable and effective. Low doses of 50-325 mg aspirin are as effective as high doses and cause less gastrointestinal side effects. Severe bleeding complications are dose-dependent. The combination of aspirin with slow release dipyridamole is superior to aspirin alone for stroke prevention (ESPS-2 and ESPRIT[1]). Both studies have shown approximately 20%-24% relative risk reduction (RRR) of stroke and death. Clopidgrel is superior to aspirin in patients at high risk of recurrence by about 8.7% RRR (CAPRIE[2]). The combination of aspirin plus clopidogrel is not more effective than clopidogrel alone but carries a higher bleeding risk (MATCH[3] and CHARISMA[4]). None of the antiplatelet agents is able to significantly reduce mortality. The recent results of the PRoFESS trial[5,6] showed no difference between clopidogrel and aspirin with slow release dipyridamole in secondary stroke prevention.

References
1. Lancet 2006;367:1665-73
2. Lancet 1996;348:1392-1339
3. Lancet 2004;364:331-337
4. N Eng J Med 2006;354(16):1744-6
5. Cerebrovasc Dis 2007;23:368-380
6. N Engl J Med 2008;359:1238-51

TIME IS BRAIN, TIA AS AN EMERGENCY

NATAN BORNSTEIN
Director of Neurological Division, Sackler school of Medicine, Tel-Aviv University, Israel

Transient Ischemic Attack (TIA) should be considered as an emergency and work-up has to be done within 24 hours like acute unstable angina pectoris. It is known that about 23% of stroke are preceded by TIA.Several studies have shown that the risk of subsequent stroke in the first 2 weeks after a TIA is about 1% per day. In 2 published well conducted studies, EXPRESS (P. Rothwell) and SOS_TIA (P. Amarenco) it was shown that very early management in a TIA clinic will reduce the risk of subsequent stroke by 80% at 3 months. Therefore, work-up evaluation has to be performed with in 24 hours in a dedicated organized structure.
Several stroke registries reported that carotid stenosis is the cause of embolic stroke in about 25%-30% of all ischemic strokes. Current guidelines recommend immediate intervention either by carotid endarterectomy (CEA) or stenting (CAS) in patients with symptomatic carotid stenosis greater than 50%.
Carotid duplex is a reliable, non-invasive, accessible tool for evaluation of carotid stenosis with very high level of accuracy. Therefore, carotid duplex should be the first line tool for rapid evaluation of every patient with TIA in order to detect a potential treatable carotid stenosis for stroke prevention. It is recommended to establish an "Acute TIA clinic" equipped with immediate accessible Duplex device to enable rapid evaluation of the carotid system in order to detect potential treatable carotid stenosis.

MANAGEMENT OF INTRACEREBRAL HEMORRHAGE - UPDATE

NATAN BORNSTEIN
Director of Neurological Division, Sackler school of Medicine, Tel-Aviv University, Israel

Intracerebral hemorrhage (ICH) accounts for 10 to 15% of all strokes and is one of the major causes of strokerelated death and disability. After the initial hemorrhage, further bleeding and edema contribute to secondary damage and worsened outcomes. As such, goals of previous and ongoing trials are to prevent continued bleeding, as well as mitigate the impact of cerebral edema. Although no trials have shown a definite functional outcome benefit with a given intervention, much progress has been made recently. This review focuses on recent developments that inform the acute management of ICH.
The lecture will review the progress made in the treatment of ICH and the new American Stroke Association guidelines (June 2015).

CEREBRAL SMALL VESSEL DISEASE – THE MOST COMMON NEUROLOGICAL DISORDER

NATAN BORNSTEIN
Director of Neurological Division, Sackler school of Medicine, Tel-Aviv University, Israel

The term cerebral small vessel disease encompasses a group of pathological conditions affecting mainly small arteries but also venules and capillaries of the brain. These processes can be confined to the brain or a part of a systemic condition
Being the most common neurological pathology, it plays a key role in the mechanism of intracerebral hemorrhage, ischemic stroke and vascular dementia. It also contributes to gait difficulties, depression, incontinence and to aging of the brain in general.
Hypertensive vasculopathy and cerebral amyloid angiopathy are the two most common forms of the disease. Other etiologies include post radiation injury, vasculitis and genetic forms.
As opposed to large vessels, cerebral small vessels cannot be visualized in vivo using conventional imaging, therefore parenchymal alternations attributed to cerebral small vessel disease can be used for diagnosis. These alternations include white matter hyperintensities, lacunes, microbleeds, dilated perivascular spaces and cerebral microinfarcts. These radiological markers can be used in the future as surrogate endpoints in trials design to stop the epidemic of vascular dementia.

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