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IULIU HAȚIEGANU
UNIVERSITY OF
MEDICINE AND PHARMACY
CLUJ-NAPOCA



"IULIU HAȚIEGANU" UNIVERSITY
OF MEDICINE AND PHARMACY
DOCTORAL SCHOOL

NEUROSCIENCE PROGRAM

2015-2016 | SECTION 1 | FEBRUARY 5TH, 2016



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President of the Romanian Society of Neurology

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Neuroplasticity (SSNN)

INTERNATIONAL GUEST LECTURER



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Professor of Neurology at the Tel-Aviv University
Sackler Faculty of Medicine, Israel

Vice President of the World Stroke Organization (WSO)

Head of Stroke Unit at the Tel-Aviv Medical Center

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Cluj-Napoca, Romania

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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 specialisation 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 Council
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)



COURSE PROGRAM

COURSE PROGRAM

FEBRUARY 5TH, 2016

"MULTIMEDIA" AUDITORIUM, "IULIU HATIEGANU" UMF CLUJ-NAPOCA
8 VICTOR BABES STREET | CLUJ-NAPOCA | ROMANIA

13:30 - 14:30

Management of symptomatic carotid stenosis CEA vs. Stent

14:30 - 15:30

Secondary stroke prevention

15:30 - 16:00

Coffee Break

16:00 - 17:00

Time is Brain, TIA as an emergency

17:00 - 18:00

Management of intracerebral hemorrhage - update

18:00 - 18:30

Coffee Break

18:30 - 19:30

What can we learn from National Stroke Registry - The Israeli model



ABSTRACTS

MANAGEMENT OF SYMPTOMATIC CAROTID STENOSIS. CEA VS. STENT

NATAN BORNSTEIN

Tel-Aviv University, Sackler Faculty of Medicine, Israel
Stroke Unit at Tel-Aviv Medical Center, Israel

Symptomatic severe carotid stenosis (>70%) carries a high risk of subsequent stroke of about ~ 30% over 2 years. Carotid endarterectomy (CEA) was proved to reduce the risk of stroke significantly, with Relative Risk Reduction (RRR) = 65% and Number Needed to Treat (NNT) = 6 if performed safely (perioperative S&D =5.8%) and should be executed within 2 weeks of TIA or minor stroke (NASCET & ECST).

For carotid stenting to replace CEA we need to know the comparative safety, durability and efficacy of the procedure. Only a few randomized, controlled studies comparing CEA and stenting were conducted (CAVATAS, SAPPHIRE, EVA-3 and SPACE) with inconclusive results. There are still several ongoing studies (CREST in the USA and ICSS in Europe and Australia). Until more data will be available carotid stenting should be performed only in a selected group of patients with specific indications like: re-stenosis of the CEA, post neck radiation, inaccessible lesion for CEA and contra-indications for CEA.

SECONDARY STROKE PREVENTION

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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 ESPRIT1). Both studies have shown approximately 20%-24% relative risk reduction (RRR) of stroke and death. Clopidogrel is superior to aspirin in patients at high risk of recurrence by about 8.7% RRR (CAPRIE2). The combination of aspirin plus clopidogrel is not more effective than clopidogrel alone but carries a higher bleeding risk (MATCH3 and CHARISMA4). 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

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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 within 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

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Stroke Unit at Tel-Aviv Medical Center, Israel

Intracerebral hemorrhage (ICH) accounts for 10 to 15% of all strokes and is one of the major causes of stroke-related 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)

NATIONAL ACUTE STROKE ISRAELI REGISTRY-NASIS

NATAN BORNSTEIN

Tel-Aviv University, Sackler Faculty of Medicine, Israel
Stroke Unit at Tel-Aviv Medical Center, Israel

Stroke is a major cause of long-term adult disability, death and health care costs worldwide. This overwhelming burden on global health necessitates ongoing improvements in stroke management. Indeed, considerable progress in acute stroke care is evident nowadays thanks to urgent triage, multimodal CT or MRI based brain imaging, and endovascular reperfusion therapy. Randomized controlled trials (RCTs) have been rightly put in top of hierarchies of evidence for assessing the efficacy of therapeutic interventions. RCT, however, have also some inherent shortcomings that leave a clear need for complimentary registry research. While efficacy is best evaluated in RCTs, observational data collected in registries and including unselected patients populations are most useful for the appraisal of clinical effectiveness in heterogeneous populations of patients. Registries provide real-world views of clinical practice contributing to an ongoing process of quality improvement and education. They are useful for determining the presence of disparities in healthcare delivery among subpopulations, including racial and ethnic minorities. Trends in the utilization of novel technologies and quality of care can be easily assessed.

In Israel, the National Acute Stroke Israeli (NASIS) registry founded in 2004 is conducted triennially during 2-month periods and includes all adult patients with acute stroke or TIA hospitalized in all medical centers nationwide. The NASIS registry is a valuable source of information which serves as the basis for research on specific areas of stroke and provides details on secular trends in risk factors, stroke characteristics, management and outcomes.

