



"IULIU HATIEGANU" UNIVERSITY OF MEDICINE AND PHARMACY DOCTORAL SCHOOL

NEUROSCIENCE PROGRAM

2019-2020 | SECTION 4

5 FEBRUARY, 2020
"MULTIMEDIA" AUDITORIUM, "IULIU HATIEGANU" UMF CLUJ-NAPOCA
8 VICTOR BABES STREET | CLUJ-NAPOCA | ROMANIA



PhD NEUROSCIENCE PROGRAM COORDINATOR



Dafin F. Mureşanu

President of the European Federation of NeuroRehabilitation Societies (EFNR)

Chairman of EAN Communication and Liaison Committee

Co-Chair EAN Neurotraumatology Scientific Panel

Past President of the Romanian Society of Neurology

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

INTERNATIONAL GUEST LECTURER



Natan M. Bornstein

WSO Board of Directors

Co-Chair EAN Stroke Scientific Panel

Chairman of the Israeli Neurological Association

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2019-2020

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COURSE PROGRAM

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WEDNESDAY, 5 FEBRUARY 2020

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

10:00 – 10:45 Management of carotid stenosis: CEA vs STENT

Natan Bornstein /Israel

10:45 – 11:30 Secondary stroke prevention

Natan Bornstein /Israel

11:30 – 12:00 Coffee Break

12:00 – 12:45 Time is brain, TIA as an emergency

Natan Bornstein /Israel

12:45 – 13:30 Post stroke depression

Natan Bornstein /Israel



INTERNATIONAL GUEST LECTURERS



NATAN BORNSTEIN

EDUCATION

1970-73 University of Sienna, Medicine, Sienna, Italy 1973-79 Technion Medical School, Hifa, Medicine, MD, 1979 Date of receiving specialization 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 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 Editor1991-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
 2003-present
 2003-present
 2003-present
 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, Reviewer1999-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
 1998-present
 2005-present
 World Stroke Organization (WSO)

2008-present Fellow of the European Stroke organization (FESO)



DAFIN F. MUREŞANU ROMANIA

Professor of Neurology, Senior Neurologist, Chairman of the Neurosciences Department, Faculty of Medicine, "Iuliu Hatieganu" University of Medicine and Pharmacy Cluj-Napoca, President of the European Federation of Neurorehabilitation Societies (EFNR), Co-Chair EAN Scientific Panel Neurorehabilitation, Past President of the Romanian Society of Neurology, President of the Society for the Study of Neuroprotection and Neuroplasticity (SSNN), Member of the Romanian Academy, Member of the Academy of Medical Sciences, Romania, secretary of its Cluj Branch. He is member of 17 scientific international societies (being Member of the American Neurological Association (ANA) - Fellow of ANA (FANA) since 2012) and 10 national ones, being part of the executive board of most of these societies.

Professor Dafin F. Muresanu is a specialist in Leadership and Management of Research and Health Care Systems (specialization in Management and Leadership, Arthur Anderson Institute, Illinois, USA, 1998 and several international courses and training stages in Neurology, research, management and leadership). Professor Dafin F. Muresanu is coordinator in international educational programs of European Master (i.e. European Master in Stroke Medicine, University of Krems), organizer and co-organizer of many educational projects: European and international schools and courses (International School of Neurology, European Stroke Organisation summer School, Danubian Neurological Society Teaching Courses, Seminars - Department of Neurosciences, European Teaching Courses on Neurorehabilitation) and scientific events: congresses, conferences, symposia (International Congresses of the Society for the Study of Neuroprotection and Neuroplasticity (SSNN), International Association of Neurorestoratology (IANR) & Global College for Neuroprotection and Neuroregeneration (GCNN) Conferences, Vascular Dementia Congresses (VaD), World Congresses on Controversies in Neurology (CONy), Danube Society Neurology Congresses, World Academy for Multidisciplinary Neurotraumatolgy (AMN) Congresses, Congresses of European Society for Clinical Neuropharmacology, European Congresses of Neurorehabilitation). His activity includes involvement in many national and international clinical studies and research projects, over 400 scientific participations as "invited speaker" in national and international scientific events, a significant portfolio of scientific articles (193 papers indexed on Web of Science-ISI, H-index: 21) as well as contributions in monographs and books published by prestigious international publishing houses.

Prof. Dr. Dafin F. Muresanu has been honoured with: "Dimitrie Cantemir" Medal of the Academy of The Republic of Moldova in 2018, Ana Aslan Award 2018 - "Performance in the study of active aging and neuroscience", for the contribution to the development of Romanian medicine, National Order "Faithful Service" awarded by the President of Romania in 2017; "Iuliu Hatieganu" University of Medicine and Pharmacy Cluj-Napoca, Faculty of Medicine, the "Iuliu Hatieganu Great Award 2016" for the best educational project in the last five years; the Academy of Romanian Scientists, "Carol Davila Award for Medical Sciences / 2011", for the contribution to the Neurosurgery book "Tratat de Neurochirurgie" (vol.2), Editura Medicala, Bucuresti, 2011; the Faculty of Medicine, "Iuliu Hatieganu" University of Medicine and Pharmacy Cluj-Napoca "Octavian Fodor Award" for the best scientific activity of the year 2010 and the 2009 Romanian Academy "Gheorghe Marinescu Award" for advanced contributions in Neuroprotection and Neuroplasticity.



ABSTRACTS

MANAGEMENT OF CAROTID STENOSIS CEA VS. STENT

NATAN BORNSTEIN

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

Symptomatic severe carotid stenosis (>70%) carries a high risk of subsequent stroke of about $\sim 30\%$ 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

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 eff ective. Low doses of 50-325 mg aspirin are as eff ective 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. Clopidgrel 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 eff ective than clopidogrel alone but carries a higher bleeding risk (MATCH3 and CHARISMA4). None of the antiplatelet agents is able to signifi cantly reduce mortality. The recent results of the PRoFESS trial 5, 6 showed no diff erence 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

POST STROKE DEPRESSION

NATAN BORNSTEIN

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

Stroke is a major cause of long-term physical, cognitive, emotional and behavioral disability. There is poor recognition of the emotional burden after stroke. Depression is abnormal and considered as "emotional distress". Post -stroke Depression (PSD) is the most frequent non-cognitive neuropsychiatric complication affecting up to a third of all ischemic stroke patients. PSD is associated with increased mortality, poorer functional recovery and lower quality of life. Despite its great clinical relevance the relationship between stroke, depression and cognitive impairment remains relatively unexplained and the awareness of . The potential mechanisms of PSD are either neuroanatomical caused by lesions in the frontal areas, or directly affecting neural circuits involving mood regulation, or as a result of psychological adjustment required by the disease. There is controversy regarding the appropriateness of diagnosing depression in the setting of an acute stroke. Geriatric Depression Scale (GDS) is the most widely used.

Regarding treatment there is insufficient randomized evidence to support the routine use of antidepressants for the prevention of depression or to improve recovery from stroke.

The approaches to management should be multidisciplinary including nurses and allied health staff.

