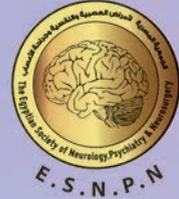




# 4<sup>th</sup>



## International Conference of Neuropsychiatry Department, Ain Shams University “Translational Neurology: from bench to bedside”

In Collaboration with

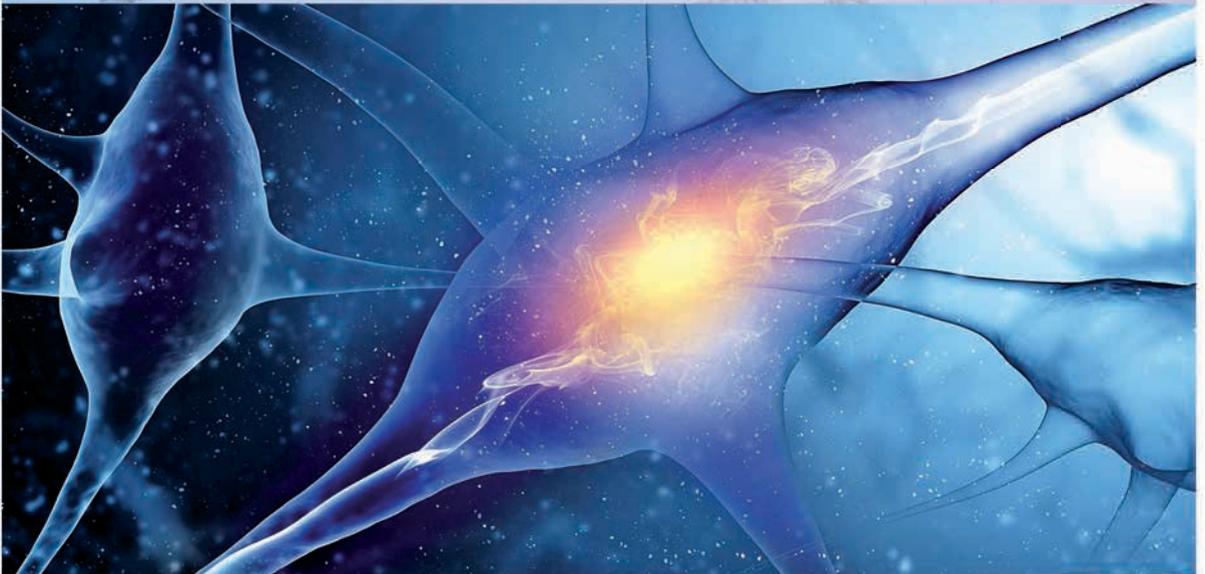
The Egyptian Society of Neurology, Psychiatry and Neurosurgery  
(ESNPN) & The Neuromuscular Chapter, ESNPN

Under the Auspices Honor of

**Prof. Abd El-Wahab Ezzat**  
President of Ain Shams University

**Prof. Mahmoud El-Meteiny**  
Dean of Faculty of Medicine, Ain Shams University

**Prof. Ahmed Saad**  
Chairman of Neuropsychiatry  
Department, Ain Shams University



26<sup>th</sup>- 27<sup>th</sup> September 2017 - Training and Development Center, Ain Shams University Hospital

28<sup>th</sup> September 2017 - JW Marriott Hotel, Cairo, Egypt

4<sup>th</sup>

Neuropsychiatry Department Conference, Ain Shams University  
"Translational Neurology: from bench to bed side"



## Welcome Message

It is Our great pleasure to invite you to the 4<sup>th</sup> International conference of the Neuropsychiatry Department , Ain Shams University . We are honored to welcome our national and international experts to our annual neurology conference

**Prof. Mahmoud Haroun**

*Mahmoud Haroun*

Head of Neurology Unit & President of the Conference

## President of the Conference:

**Prof. Mahmoud Haroun**

Head of Neurology Unit & President of the Conference

## Secretary General of the Conference:

**Prof. Hany Aref**

**Prof. Azza Abd El-Naser**

**Prof. Nagia Aly Fahmy**

## ESNPN Board:

### President

**Prof. Yousria El Taweel**

### Vice Presidents

**Prof. Mohamed Elwan**

**Prof. Nabil El Agouz**

**Prof. Ahmed Ossama**

### Secretary General

**Prof. Maged Abdel Naseer**

### Assist. Secretaries

**Prof. Hany Amin Aref**

**Prof. Ahmed Gamal Azab**

**Prof. Eman Khedr**

### Treasurer

**Prof. El Sayed Tag El Din**

## Honorary Presidents of the Conference:

**Prof. Magd Zakaria**

**Prof. Taha Kamel**

**Prof. Samiha Abd El-Moneim**

**Prof. Anwar Etribi**

**Prof. Amira Zaki**

**Prof. Osama Abdulghani**

**Prof. Mona Raafat**

**Prof. Samia Ashour**

## Scientific Committee:

**Prof. Magd Zakaria**

**Prof. Taha Kamel**

**Prof. Mohamed Yasser**

**Prof. Mahmoud Haroun**

**Prof. Hany Aref**

**Prof. Mahmoud Hemida**

**Prof. Mohamed Mostafa**

**Prof. Nahed Salah**

**Prof. Nevine El-Nahas**

**Prof. Azza Abd El-Naser**

**Prof. Nagia Aly Fahmy**

**Prof. Ayman Nasef**

**Prof. Naglaa El-Khayat**

**Prof. Ahmed Gaber**

**Prof. Salma Hamed**

**Prof. Hala El-Khawas**

**Prof. Hany Zaki**

**Prof. Lobna El-Nabeel**

**Prof. Yousry Abu El-Naga**

**Prof. Eman Mahmoud Awad**

## Organizing Committee:

Prof. Ahmed Hazu  
 Prof. Ali Shalash  
 Prof. Ramez Reda Mostafa  
 Prof. Amr Abd El-Moneim  
 Prof. Haytham Mohamed Salem  
 Prof. Ahmed El Bassiouny  
 Prof. Maha Ali  
 Prof. Dina El Gawad  
 Prof. Tamer Hussein  
 Prof. Doaa Abdallah El Aidy  
 Prof. Mohamed Amir Tourk

Dr. Sherif Abdel-Latif  
 Dr. Heba Mahmoud Ismail  
 Dr. Heba Hamed Afify  
 Dr. Mohamed Khalid Ahmed  
 Dr. Hossam Eldin Afify  
 Dr. Aliaa Hassan  
 Dr. Ahmed El Sadek  
 Dr. Sherin Farag  
 Dr. Mona Mokhtar  
 Dr. Mohamed Ahmed Shafik  
 Dr. Randa Amin

Dr. Shahinaz Helmy  
 Dr. Ahmed El Bokl  
 Dr. Mohamed Tawfik Boghdady  
 Dr. Tamer Mahmoud Roshdy  
 Dr. Mohamed Abdel Hafiz  
 Dr. Hossam Shokry  
 Dr. Mahmoud Saad  
 Dr. Ayman Hassan El Sodany  
 Dr. Eman Hamed  
 Dr. Ahmed Zaki  
 Dr. Sherif Magdy El Amin

Dr. Alaa Mohamed Sayed  
 Dr. Eman Moenes  
 Dr. Aya Ashour  
 Dr. Ghada Ashraf  
 Dr. Shady Samy  
 Dr. Shaimaa Sayed Ibrahim  
 Dr. Amr Said Attia  
 Dr. Mohamed Abdel Naby

## International speakers:

### Prof. Bjarne Udd, MD, PhD

Prof. of Neurology and Director, Neuromuscular Center, Tampere University, Finland.

### Prof. J.S.H. Vles, MD, PhD

Professor, Clinical Neurological Sciences, School for Mental Health and Neuroscience, Fac. Health, Medicine and Life Sciences, Maastricht University, Netherlands.

### Prof. A.W. Gavilanes, MD, PhD

Associate Professor of Pediatrics, Neonatologist, Senior Researcher School for Mental Health and Neuroscience, Maastricht University Medical Center, Netherlands.

### Prof. Amadi Ogonda Ihunwo, MD, PhD

School of Anatomical Sciences, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa.

### Prof. Sameh Aly, PhD

Professor of Biophysics, University of California, San Diego, US

## Main Topics:

Translational Neurology  
 Cerebrovascular disorders  
 Multiple Sclerosis.  
 Epilepsy

Neuromuscular Disorders  
 Neuro-rehabilitation  
 Pediatric Neurology  
 Movement Disorders

Demntia  
 Headache  
 Tele-Neurology

### - Two Days Workshops:

**Date:** 26<sup>th</sup> - 27<sup>th</sup> of September 2017

**Venue:** Training and Development Center, Ain Shams University Hospital

### Parallel workshops in each day: 09:00 am to 05:00 pm

- 1- Neuromuscular Workshop
- 2- Neuro-Vascular workshop
- 3- Pediatric Neurology workshop
- 4- Movement Disorders workshop
- 5- EEG Workshop

4<sup>th</sup>

Neuropsychiatry Department Conference, Ain Shams University  
"Translational Neurology: from bench to bed side"

26<sup>TH</sup>  
SEPTEMBER  
2017  
TUESDAY

## Neuromuscular Workshop: Updated Protocol of Diagnosing Neuromuscular Disorders

(Hall A)



09:00 – 16:00

**Venue:** Training and Development Center, Ain Shams University Hospital

### Chairpersons

Prof. Mahmoud Haroun  
Prof. Bjarne Udd  
Prof. Ahmed Othman  
Prof. Nagia Aly Fahmy

Professor of Neurology and Head of Neurology Unit, Ain Shams University.  
Professor of Neurology and Director, Neuromuscular Center, Tampere University, Finland.  
Professor of Biochemistry and Molecular Biology, Faculty of Science, Ain Shams University.  
Professor of Neurology and Director, Muscle and Nerve Research Unit, Ain Shams University.

- 09:00 - 10:00      Structured protocol of the diagnosis of Neuromuscular Disorders  
**Prof. Nagia Aly Fahmy**  
Professor of Neurology and Director, Muscle and Nerve Resrach Unit, Ain Shams University
- 10:00 - 11:00      Clinical assessment of a patient with Neuromuscular Disorders.  
**Prof. Bjarne Udd**  
Professor of Neurology and Director, Neuromuscular Center, Tampere University, Finland.
- 11:00 - 11:30      Family Pedigree, Construction and Analysis.  
**Prof. Nermin Salah**  
Consultant of Human Genetics, Medical Genetic Center, Ain Shams University.
- 11:30 - 12:00      Laboratory Tests.  
**Dr. Sara Ihab.**  
Neurology Specialist, Ain Shams University.
- 12:00 - 13:00      Coffee Break and Prayer  

- 13:00 - 14:00 Genetic diagnosis of a neuromuscular patient: What is the test to order and how can we interpret it?  
**Prof. Bjarne Udd**  
Professor of Neurology and Director, Neuromuscular Center, Tampere University, Finland.
- 14:00 - 15:00 Role of Muscle biopsy in the diagnosis of a patient with neuromuscular disorders  
**Prof. Nagia Aly Fahmy**  
Professor of Neurology and Director Muscle and Nerve Research Unit, Ain Shams University.
- 15:00 - 16:00 Presentation of some interesting patients with neuromuscular disorders  
**Dr. Sara Ihab and Postgraduates of Neuropsychiatry Department, Ain Shams University**
- 16:00 - 17:00 Lunch 

4<sup>th</sup>

Neuropsychiatry Department Conference, Ain Shams University  
"Translational Neurology: from bench to bed side"

26<sup>TH</sup>  
SEPTEMBER  
2017  
TUESDAY

## Neuro-Vascular Workshop (Neurosonology and Intervention)

(Hall B)



09:00 – 16:00

**Venue:** Training and Development Center, Ain Shams University Hospital

### Chairpersons

Prof. Azza Abd El-Naser  
Prof. Hany Zaki El-Deen  
Prof. Ahmed Basiouny

Prof. of Neurology, Ain Shams University  
Prof. of Neurology, Ain Shams University  
Assist. Prof. of Neurology, Ain Shams University

### Moderator

Prof. Azza Abd El-Naser

- 09:00 - 09:45      Vascular Anatomy of the Brain  
**Dr. Shady Samy**  
Ass. Lecturer of Neurology, Ain Shams University
- 09:45 - 10:30      Strategies in the treatment of Subarachnoid Hemorrhage  
**Dr. Amr Saeed**  
Ass. Lecturer of Neurology, Ain Shams University
- 10:30 - 11:15      Endovascular Treatment of Acute Ischemic Stroke  
**Dr. Rady Yousef**  
Ass. Lecturer of Neurology, Ain Shams University
- 11:15 - 12:00      Carotid stenting in high risk patients  
**Dr. Mohamed Khaled**  
Lecturer of Neurology, Ain Shams University
- 12:00 - 13:00      Coffee Break and Prayer  

- 13:00 - 13:45      Vascular and Non-Vascular Applications of Ultrasound in Neurology  
                         **Dr. Ahmed El-Sadek**  
                         Lecturer of Neurology, Ain Shams University
- 13:45 - 14:15      Carotid Ultrasound Updates  
                         **Dr. Hossam Afifi**  
                         Lecturer of Neurology, Ain Shams University
- 14:15 - 15:00      Vertebral Artery Duplex  
                         **Dr. Shahinaz Helmy**  
                         Lecturer of Neurology, Ain Shams University
- 15:00 - 16:00      Hands on for Ultrasonography.
- 16:00 - 17:00      Lunch 

4<sup>th</sup>

Neuropsychiatry Department Conference, Ain Shams University  
"Translational Neurology: from bench to bed side"



## Pediatric Neurology Workshop

(Hall A)



09:00 – 16:00

**Venue:** Training and Development Center, Ain Shams University Hospital

### Chairpersons

Prof. Shoura Yousef

Professor of Neurology, Azhar University

Prof. Mahmoud Haroun

Professor of Neurology and Head of Neurology Unit, Ain Shams University.

Prof. Ihab Ragaa

Professor of Neurology, National Research Center

Prof. Nahed Salah El-Deen

Professor of Neurology, Ain Shams University

Prof. Ayman Nasef

Professor of Neurology, Ain Shams University

09:00 - 09:45

Spot Diagnosis on some Neuropediatric Disorders

**Prof. Shoura Yousef**

Professor of Neurology, Al-Azhar University.

09:45 - 10:30

Inborn errors of Metabolism: a model for preventable Autism.

**Prof. Ihab Ragaa**

Professor of Neurology, National Research Center

10:30 - 11:15

Epileptic Encephalopathy in Children

**Prof. Ayman Nasef**

Professor of Neurology, Ain Shams University.

11:15 - 12:00

Pediatric EEG

**Prof. Hala El-Khawas**

Professor of Neurology, Ain Shams University

12:00 - 13:00

Coffee Break and Prayer



4<sup>th</sup>

Neuropsychiatry Department Conference, Ain Shams University  
"Translational Neurology: from bench to bed side"

- 13:00 - 13:45      **Parasomnias in Childhood**  
**Prof. Nahed Salah El-Deen**  
Professor of Neurology, National Research Center University,
- 13:45 - 14:30      **MRI leukodystrophy: A road map for diagnosis**  
**Dr. Shaimaa Abdel Satar**  
Ass. Prof. of Radiology, Ain Shams University
- 14:30 - 15:15      **rTMS in children: Safety and Applications**  
**Dr. Ahmed El-Bokle**  
Lecturer of Neurology, Ain Shams University
- 15:15 - 16:00      **The amazing, the challenging and the research from our pediatric neurology clinic**  
**Dr. Maha Nada**  
Ass. Professor of Neurology, Ain Shams University
- 16:00 - 17:00      **Lunch** 

4<sup>th</sup>

Neuropsychiatry Department Conference, Ain Shams University  
"Translational Neurology: from bench to bed side"



## EEG Workshop

(Hall B)



09:00 – 12:30

**Venue:** Training and Development Center, Ain Shams University Hospital

### Chairpersons

Prof. Mahmoud Hemida  
Prof. Ahmed Gaber  
Dr. Heba Hamed

Professor of Neurology, Ain Shams University  
Professor of Neurology, Ain Shams University.  
Lecturer of Neurology, Ain Shams University

- |               |   |
|---------------|---|
| 09:00 - 09:45 | Technical aspects of EEG<br><b>Dr. Heba Hamed</b><br>Lecturer of Neurology, Ain Shams University  |
| 09:45 - 10:30 | Normal variants and EEG ARTIFACTS<br><b>Prof. Ahmed Gaber</b><br>Professor of Neurology, Ain Shams University   |
| 10:30 - 11:15 | Non epileptiform abnormalities<br><b>Dr. Heba Hamed</b><br>Lecturer of Neurology, Ain Shams University  |
| 11:15 - 12:00 | Epileptiform abnormalities<br><b>Prof. Ahmed Gaber</b><br>Professor of Neurology, Ain Shams University  |
| 12:00 - 12:30 | Ictal patterns<br><b>Dr. Heba Hamed</b><br>Lecturer of Neurology, Ain Shams University  |
| 12:30 - 13:00 | Coffee Break and Prayer   |

4<sup>th</sup>

Neuropsychiatry Department Conference, Ain Shams University  
"Translational Neurology: from bench to bed side"



## Movement Disorders Workshop Fundamentals of Movement Disorders: Semiology and Assessment



13:00 - 16:00

(Hall B)

### Chairpersons

Prof. Amira Zaki  
Prof. Taha Kamel  
Prof. Mahmoud Haroun

Professor of Neurology, Ain Shams University  
Professor of Neurology, Ain Shams University.  
Professor of Neurology and Head of Neurology Unit, Ain Shams University.

13:00 - 13:45 Parkinson's Disease Vs Atypical Parkinsonism  
**Dr. Aly Shalash**  
Ass. Professor of Neurology, Ain Shams University

13:45 - 14:30 Semiology of Hyperkinesia  
**Dr. Alia Hassan**  
Lecturer of Neurology, Ain Shams University

14:30 - 15:15 UDPRS training  
**Dr. Aly Shalash**  
Ass. Professor of Neurology, Ain Shams University

15:15 - 16:00 Rating of Hyperkinesia  
**Dr. Alia Hassan**  
Lecturer of Neurology, Ain Shams University

16:00 - 17:00 Lunch 



## Registration



08:00 – 09:00

## Session 1 Miscellaneous Disorders



09:00 – 10:15

### Chairpersons

Prof. Samiha Abd El-Moneim	Professor of Neurology, Ain Shams University
Prof. M.A. Etribi	Professor of Neurology, Ain Shams University
Prof. Mona Raafat	Professor of Neurology, Ain Shams University
Prof. Samia Ashour	Professor of Neurology, Ain Shams University
Prof. Eman Khedr	Professor and Chairman of Neuropsychiatry Department, Assiut University
Prof. Azza Abbas Helmy	Professor of Neurology, Cairo University

09:00 - 09:15	Hypoxic ischemic encephalopathy <b>Prof. Taha Kamel</b> Professor of Neurology, Ain Shams University
09:15 - 09:30	Overview of Pediatric Stroke <b>Prof. Nahed Salah Eldeen</b> Professor of Neurology, Ain Shams University
09:30 - 09:45	Nocturnal Enuresis from Neurological concept of View <b>Dr. Maha Nada</b> Ass. Professor of Neurology, Ain Shams University
09:45 - 10:00	The Tumor Associated Macrophages and its Nanovesicles: Immunological Insights In Cerebral Glioma <b>Dr. Sherin El-Mosly</b> Ass. Professor of Neurology, Fayoum University
10:00 - 10:15	Deep Brain Stimulation in Parkinson's Disease <b>Dr. Alia Hassan</b> Lecturer of Neurology, Ain Shams University

4<sup>th</sup>

Neuropsychiatry Department Conference, Ain Shams University  
"Translational Neurology: from bench to bed side"



## Opening Ceremony



10:15 – 11:00

### Welcome speech of Prof. Ahmed Saad

Chairman of the Neuropsychiatry Department, Ain Shams University.

### Welcome speech of Prof. Mahmoud Haroun

Head of Neurology unit and President of the conference, Ain Shams University.

### Speech of Prof. Abdel Wahab Ezzat

President of Ain Shams University

### Speech of Prof. Mahmoud El-Meteiny

Dean of Faculty of Medicine, Ain Shams University

### Speech of Prof. Yosria Altaweel

President of Egyptian Society of Neurology, Psychiatry and Neurosurgery (ESNPN)

**Honoring Professor Magd Zakaria and Professor Taha Kamel By Professor Ahmed Saad and Professor Mahmoud Haroun**

## Plenary Lecture



11:00 – 12:00

11:00 - 11:30

Lessons from Our History: Cybernetics and Arabization of Medicine

دروس من تاريخنا : السيبرنطيقا وتعريب الطب

**Prof. M. O. Abdulghani**

Professor of Neurology, Ain Shams University

11:30 - 12:00

Mitochondrial Function and Dysfunction in Neurological Disorders: An Update

**Prof. Sameh Aly**

Professor of Biophysics, University of California, San Diego, US

12:00 - 12:30

Coffee Break



4<sup>th</sup>

Neuropsychiatry Department Conference, Ain Shams University  
"Translational Neurology: from bench to bed side"

28<sup>TH</sup>  
SEPTEMBER  
2017  
THURSDAY

## Session 2 Women and Epilepsy



12:30 - 13:30

### Chairpersons

Prof. Osama Abdulghany	Professor of Neurology, Ain Shams University
Prof. Mahmoud Hemida	Professor of Neurology, Ain Shams University
Prof. Alaa El-Fiky	Professor of Gyneacology and Obstetrics, Ain Shams University
Prof. Ibtesam Fahmy	Professor of Neurology, Cairo University
Prof. Ashraf Abdou	Professor and Chairman of Neurology Department, Alexandria University
Prof. Maged Abd El-Naseer	Professor of Neurology, Cairo University

12:30 - 12:45	Epilepsy and Pregnancy <b>Prof. Mahmoud Hemida</b> Professor of Neurology, Ain Shams University
12:45 - 13:00	Sex Hormones and Epilepsy <b>Prof. Ahmed Gaber</b> Professor of Neurology, Ain Shams University
13:00 - 13:15	Epilepsy in Postmenopausal Women <b>Dr. Heba Hamed</b> Lecturer of Neurology, Ain Shams University
13:15 - 13:30	Borderline between Neurology and Gynaecology with Emphasis on Epilepsy <b>Prof. Alaa El-Fiky</b> Professor of Gyneacology and Obstetrics, Ain Shams University



## Session 3

### Multiple Sclerosis



13:30 - 14:45



### Chairpersons

Prof. Magd Zakaria

Prof. Sherif Hamdy

Prof. Houssain Mohamed Houssain

Prof. El-Sayed Tag El-Deen

Prof. Azza Abd El-Naser

Prof. Ismaeel Ramadan

Professor of Neurology, Ain Shams University

Professor of Neurology, Cairo University

Professor and chairman of Neurology Department, Al-Azhar University

Professor and chairman of Neurology Department, Tanta University

Professor of Neurology, Ain Shams University

Professor of Neurology, Alexandria University

13:30 - 13:45

Current status of Multiple Sclerosis in Egypt

**Prof. Magd Zakaria**

Professor of Neurology, Ain Shams University

13:45 - 14:00

What is New in Multiple Sclerosis?

**Prof. Ayman Nasef**

Professor of Neurology, Ain Shams University

14:00 - 14:15

Females and Multiple Sclerosis

**Dr. Dina Abd El-Gawad Zamzam**

Ass. Professor of Neurology, Ain Shams University

14:15 - 14:30

Risk Factors in Multiple Sclerosis

**Dr. Mohamed Fouad**

Lecturer of Neurology, Ain Shams University

14:30 - 14:45

Lights on Endoxan In Multiple Sclerosis

**Dr. Mahmoud Saad**

Lecturer of Neurology, Ain Shams University

4<sup>th</sup>

Neuropsychiatry Department Conference, Ain Shams University  
"Translational Neurology: from bench to bed side"

28<sup>TH</sup>  
SEPTEMBER  
2017  
THURSDAY

## Novartis Symposium



14:45 - 15:25



### Chairpersons

Prof. Obsis Madkour  
Prof. Amira Zaki  
Prof. El-Bahy Reda  
Prof. Wael Fadel

Professor of Neurology, Cairo University  
Professor of Neurology, Ain Shams University  
Professor of Neurology, Al-Azhar University  
Professor of Neurology, Tanta University

14:45 - 15:05

"When To Escalate? Proper escalation practices to 2<sup>nd</sup> line therapies".

**Prof. Magd Zakaria**

Professor of Neurology, Ain Shams University

15:05 - 15:25

Results of PERFORMS study: RWE on effectiveness, safety and Quality of life with Fingolimod

**Prof. Hany Aref**

Professor of Neurology, Ain Shams University



Coffee Break



## Session 4

### Role of Neurosciences in Neurological practice



15:25 - 16:40

### Chairpersons

Prof. Mahmoud Haroun	Professor of Neurology and Head of Neurology Unit, Ain Shams University.
Prof. Saher Hashem	Professor of Neurology, Cairo University
Prof. Ayman Ezz El-Deen Yousef	Professor of Neurology, Alexandria University
Prof. Alaa El-Deen Hassan	Professor of Medical Physiology, Alexandria University
Prof. Ahmed Gamal Azab	Professor and Chairman of Neurology Department, Mansoura University
Prof. Nagia Aly Fahmy	Professor of Neurology, Ain Shams University

15:25 - 15:40	<p>Role of Epigenetics in Neurological disorders</p> <p><b>Prof. Mahmoud Haroun</b> Professor of Neurology and Head of Neurology Unit, Ain Shams University.</p>
15:40 - 15:55	<p>Muscle and Brain: a Dyad with Important Diagnostic and Therapeutic Implications</p> <p><b>Prof. JSH Vles</b> Professor, Clinical Neurological Sciences, School for Mental Health and Neuroscienc, Fac. Health, Medicine and Life Sciences, Maastricht University Netherlands.</p>
15:55 - 16:10	<p>Molecular Biomarkers in the Diagnosis of Duchenne muscular Dystrophy</p> <p><b>Prof. Ahmed Othaman Mostafa</b> Professor of Biochemistry and Molecular Biology, Ain Shams University</p>
16:10 - 16:25	<p>25 years of research on global asphyxia in the immature rat brain</p> <p><b>Prof. Danilo Gavilanes</b> Associate Professor of Pediatrics, Neonatologist, Senior Researcher School for Mental Health and Neuroscience, Maastricht University Medical Center, Netherlands.</p>
16:25 - 16:40	<p>Adult Stem Cell Research from comparative adult neurogenesis animal models</p> <p><b>Prof. Amadi Ogonda Ihunwo</b> School of Anatomical Sciences, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa</p>



## Session 5

### Cerebrovascular Disorders



16:40 – 17:55

### Chairpersons

Prof. Taha Kamel  
 Prof. Fathi Afifi  
 Prof. Farouk Talaat  
 Prof. Yosria Altaweel  
 Prof. Iman Banhaway  
 Prof. Hany Aref

Professor of Neurology, Ain Shams University  
 Professor of Neurology, Al-Azhar University  
 Professor of Neurology, Alexandria University  
 Professor of Neurology, and Chairman of Neurology Department, Zagazig University.  
 Professor of Neurology, and Chairman of Neurology Department, Cairo University  
 Professor of Neurology, Ain Shams University

- 16:40 - 16:55      Reperfusion therapy experience in stroke unit (Ain shams hospital)  
**Prof. Hany Aref**  
 Professor of Neurology, Ain Shams University
- 16:55 - 17:10      Outcome of thrombolytic therapy in acute ischemic strokes (Ain shams university hospitals -SITS database)  
**Prof. Azza Abd El-Naser**  
 Professor of Neurology, Ain Shams University
- 17:10 - 17:25      Endovascular treatment of acute stroke in patients with underlying intracranial atherosclerotic stenosis  
**Dr. Ahmed Basiouny**  
 Ass. Professor of Neurology, Ain Shams University
- 17:25 - 17:40      Unanswered questions in mechanical thrombectomy  
**Prof. Hany Zaki El-Deen**  
 Professor of Neurology, Ain Shams University
- 17:40 - 17:55      Carotid Artery Stenting (closed versus open Cell Stent)  
**Dr. Ayman El-Soudany**  
 Lecturer of Neurology, Ain Shams University



Neuropsychiatry Department Conference, Ain Shams University  
"Translational Neurology: from bench to bed side"

17:55 - 18:15

**Closing Remarks**

18:15 - 19:00

Dinner 



Neuropsychiatry Department Conference, Ain Shams University  
"Translational Neurology: from bench to bed side"

# ABSTRACTS BOOK

## Hypoxic ischemic encephalopathy

**Prof. Taha Kamel**

Professor of Neurology, Ain Shams University

Cardiac arrest is a devastating event associated with mortality rates in excess of 90%. Among patients who achieve Return Of spontaneous circulation more than 40% survive to ICU admission and nearly 30% are discharged alive from the hospital. Poor neurological prognosis because two thirds survive the early phase will subsequently develop neuro-functional complications.

---

## Overview of Pediatric Stroke

**Prof. Nahed Salah Eldeen**

Professor of Neurology, Ain Shams University

Overview of stroke in pediatric age group.

Stroke is relatively rare in children, but can lead to significant morbidity and mortality. Understanding that children with strokes present differently than adults and often present with unique risk factors will optimize outcomes in children. Despite an increased incidence of pediatric stroke, there is often a delay in diagnosis, and cases may still remain under- or misdiagnosed. Clinical presentation will vary based on the child's age, and children will have risk factors for stroke that are less common than in adults. Management strategies in children are extrapolated primarily from adult studies, but with different considerations regarding short-term anticoagulation and guarded recommendations regarding thrombolytics.

---

## Nocturnal Enuresis from Neurological Concept of View

**Dr. Maha Nada**

Ass. Professor of Neurology, Ain Shams University

Enuresis is derived from the Greek word (Enourein), which means to void urine.

Nocturnal enuresis is a common childhood problem causing distress not only to affected children but also to

their parents. The International Continence Society restricts the term to only wetting that occurs at night. Here we will try to shed the light on possible neurological causes of this problem.

---

## The Tumor Associated Macrophages and its Nanovesicles: Immunological Insights in Cerebral Glioma

**Dr. Sherin El-Mosly**

Ass. Professor of Neurology, Fayoum University

**Background:** The immune system has a key role in glioma progression, especially the tumor associated macrophages (TAMs). In-vivo, we aimed to study the total TAMs and differential M1 and M2 TAM infiltration in low grade (LGG) versus high grade gliomas (HGG). Also, we investigated the implication of total TAMs and differential M1 and M2 TAMs infiltration on glioma progression. In-vitro, we studied the effect of soluble factors present in nanovesicles (NV) released from M1 macrophages on the fate of glioma cells. **Methodology:** In-vivo, we performed immunohistochemistry using iNOS as a marker for M1, and CD163 as a marker for M2. In-vitro, we polarized the human monocytes U937 cell line into M1, then we isolated the NV from the M1-conditioned medium (CM) by centrifugation and filtration; then, the protein content of the NV was quantified by the protein assay. We added M1-NV on U251 glioma cells and we studied the cellular activation of glioma cells using the MTT assay. To assess the apoptosis of U251, we used the flow-cytometry. Apoptotic cells were identified by annexin V (marker of early apoptosis) and PI (marker of late apoptosis). **Results:** in-vivo, there is an M1/M2 imbalance in early stages of glioma which is associated with earlier progression to high malignancy. Also, the higher M2 infiltration, the earlier is the progression. In-vitro, our results showed that the M1-NV have a more potent anti-tumor effect compared to its corresponding CM. Hopefully, our experimental results can be a future treatment for the cerebral glioma.

---

## Deep Brain Stimulation in Parkinson's Disease

**Dr. Alia Hassan**

Lecturer of Neurology, Ain Shams University

Parkinson's disease is the second most degenerative disorder affecting elderly all over the world. Here in Egypt there is high prevalence of this disorder, and there is a growing need for management of complicated and severe cases. We will highlight the Egyptian experience of DBS in Egypt as multidisciplinary approach.

## Lessons from Our History: Cybernetics and Arabization of Medicine.

دروس من تاريخنا : السيبرنطيقا وتعريب الطب.

**Prof. M. O. Abdulghani**

Professor of Neurology, Ain Shams University

كان ولم يزل قسم المخ والأعصاب والطب النفسي بطب عين شمس مدرسة تنويرية فريدة منذ نشأته عام 1945 وكم من دروس تربينا عليها عبر ثلاثة وستين عاماً. ومن هذه الدروس ما كان مرتبطاً مباشرة بعلوم التخصص ومنها ما كان مرتبطاً بمناهج الفكر العلمي والتربوي ومناهج التعليم التي هي جزء جوهري من تكوين وقيمة الأستاذ الجامعي. وسوف أحوال إستجلاء قبسين من تلكم الدروس التي هي جزء أصيل من تكويننا نحن تلاميذ الرواد. لعله أن يكون في ميزان حسناتهم وإياكم.

Lessons out of our department history: Cybernetics and Arabization of medicine.

The 63 years history of our department of Neurology and Psychiatry was not only a history of establishing a modern school of Neurology and Psychiatry as it really did. But also we had a brilliant opportunity to learn other crucial scientific ideas and educational methodologies. Cybernetics and arabization of medicine are two examples.

## Mitochondrial Function and Dysfunction in Neurological disorders: An Update

**Prof. Sameh Aly**

Professor of Biophysics, University of California, San Diego, US

With the advent of modern methodologies including high-resolution respirometry, optical, and electrochemical methods, studies on the role of mitochondria in cellular functions have evolved remarkably. These studies established mitochondria not only as bioenergetics machines, but also as biosensors orchestrating cellular signaling platforms and controlling cell death, survival as well as cellular responses to internal and external stressors. Mitochondrial dysfunction is largely implicated in the development and progression of various human disease states including cancer, cardiovascular, metabolic, and central nervous system diseases, particularly autism and neurodegenerative diseases. Here we provide an update on modern experimental approaches that are applied to understand the central role of the mitochondrion in ATP and reactive oxygen species production and in controlling cell death pathways. Particular attention will be devoted to discuss roles of mitochondria in the etiology of neurologic disorders while providing some examples from our research and from the literature.

## Epilepsy and Pregnancy

**Prof. Mahmoud Hemida**

Professor of Neurology, Ain Shams University

One third of women with epilepsy are in the reproductive age. The risk of death is increased ten folds in pregnant women with epilepsy, compared to those without this condition, especially with uncontrolled seizures. Nevertheless, the risk of major congenital malformation is increased for women with epilepsy taking antiepileptic drugs. Moreover, the risk of seizures and sudden unexpected death are increasing in women during pregnancy. Seizure deterioration, antiepileptic exposure, and pregnancy have an enormous impact on the life of the mother. There is definitely a tremendous need to introduce services: that care for women with epilepsy, reduce the risks to the mother and the baby, and increase the benefits of appropriate treatment. This will guide parents to make the right choices for their care.

---

## Sex Hormones and Epilepsy

**Prof. Ahmed Gaber**

Professor of Neurology, Ain Shams University

There are sex differences regarding epilepsy due to interaction between sex hormones and epilepsy. These interactions are sometimes in favor of epileptogenesis and in other times in favor of controlling epilepsy. There is evidence of different synaptic modulation mechanisms between males and females especially on hippocampus. There is also evidence of changes in the ictal spiking during ovarian cycle. The effect of female sex hormones and epilepsy will be revised in the view of recent advances in that area.

---

## Epilepsy in Postmenopausal Women

**Dr. Heba Hamed**

Lecturer of Neurology, Ain Shams University

This presentation will focus on 1- Types, causes and best management of newly diagnosed epilepsy as well as epilepsy that started at earlier age and continued to menopause. 2- Change in seizure frequency during

menopause, 3- Whether hormonal replacement therapy is good or bad for the epileptic patient and lastly, 4- bone health in epileptic woman during menopause.

---

## What is New in Multiple Sclerosis

**Prof. Ayman Nasef**

Professor of Neurology, Ain Shams University

Multiple sclerosis (MS) affects nerves in the brain and spinal cord, causing a wide range of symptoms including problems with muscle movement, balance and vision.

While the [cause of multiple sclerosis](#) (MS) is still not known, advances in treatment options and new understanding about the disease have been especially brisk in the past few years.

In the past two or three years have seen noteworthy advances in many areas, including:

- New understandings about the genetics of the disease
- More drug treatment options, including oral [medications](#) expected soon
- New techniques to repair the damage caused by MS.
- New information about the potential causes of the disease.

MS researchers hope genetics will allow doctors to identify people at high risk for the disease and intervene with treatment at very early stages of MS -- perhaps even before symptoms appear.

### Scientists step closer to finding cause of multiple sclerosis

High levels of the protein Rab32 disrupt key communications involving mitochondria. The disruption causes these "cellular batteries" to misbehave, leading to the toxic effects seen in the brain cells of people with multiple sclerosis.

Study may lead to new MS treatments that target Rab32.

### Anti-cell death agent a potential treatment for vision loss associated with MS.

A new therapeutic agent tested in a mouse model of [multiple sclerosis](#) (MS) produced anti-inflammatory activity and prevented loss of cells in the optic nerve.

ST266 is a solution of molecules that stimulate paracrine signaling. This is one way in which cells "talk" to each other: One cell produces a chemical signal that induces changes in nearby cells.

## Females and Multiple Sclerosis

**Dr. Dina Abd El-Gawad Zamzam**

Ass. Professor of Neurology, Ain Shams University

Multiple sclerosis is the most common disabling neurological disease in young adults. Females are affected more than males with an increasing ratio that reaches 3:1 in some regions. The disease onset ranges between 18 and 40 years which is the child bearing period. The impact of multiple sclerosis on fertility, pregnancy, and contraception is an issue of interest nowadays. There are classic and newly emerging disease modifying drugs with varying impacts on pregnancy, which results in challenging medical decisions.

---

## Risk Factors in Multiple Sclerosis

**Dr. Mohamed Fouad**

Lecturer of Neurology, Ain Shams University

As regards the risk factors of MS, they could be classified into genetic factors and environmental factors. Environmental factors include viral infections such as EBV, vitamin D and sunlight exposure, smoking. Genetic risk factors include the histocompatibility leucocytic antigen-DRB1 (HLA-DRB1). This lecture will highlight 3 of the studies conducted at the MS unit of Ain Shams University that studied some of these risk factors

---

## Lights on Endoxan in Multiple Sclerosis

**Dr. Mahmoud Saad**

Lecturer of Neurology, Ain Shams University

Assessment of Cyclophosphamide in active Relapsing Remitting Multiple Sclerosis

Authors: Mahmoud S Swelam, MD<sup>1</sup>, Samia A Helal MD, <sup>1</sup> Magd F Zakaria MD, <sup>1</sup> Ayman M Nasef MD, <sup>1</sup> Dina M AbdEl-Gawad MD, <sup>1</sup> Mohamed H Attia MD <sup>2</sup>

<sup>1</sup>Neuropsychiatry department, Faculty of Medicine, Ain Shams University, Cairo, Egypt.

<sup>2</sup>Haematology department, Faculty of Medicine, Ain Shams University, Cairo, Egypt.

Corresponding author: Mahmoud S Swelam

Email: mahmoudsaad\_mt@yahoo.com Telephone: 01225700883

**Key Words:** Multiple Sclerosis, Cyclophosphamide, Disability, Progression.

**Abstract:**

**Background:** Cyclophosphamide (CYC) is an alkylating agent produces immunosuppression and an anti-inflammatory immune deviation. CYC used extensively in treating aggressive and rapidly progressive forms of multiple sclerosis (MS).

**Objective:** The aim of this open study was to determine the effect of monthly pulse doses of CYC for 12 months therapy given to active form of relapsing-remitting MS (RRMS) patients for better control of clinical disease activity regarding relapse rate, disease progression and radiological outcome.

**Results:** CYC produced a marked and significant reduction in annual relapse rate ( $p < 0.001$ ), disability progression ( $p < 0.001$ ) and gadolinium enhancing lesions ( $p < 0.004$ ) compared to pretreatment baseline state.

---

## Role of Epigenetics in Neurological disorders

**Prof. Mahmoud Haroun**

Professor of Neurology and Head of Neurology Unit, Ain Shams University.

Epigenetic is a growing branch of neuroscience. Recently it has been proved to play a major role both in normal development and in the neurological diseases. Also there is great potentiality for treatment of these disorders. There has been many drugs that can be used to make a modification in chromatin as well as to change the methylation of DNA. We aim to highlight the Update of this subject.

---

## Muscle and Brain: a Dyad with Important Diagnostic and Therapeutic Implications

**Prof. JSH Vles**

Professor, Clinical Neurological Sciences, School for Mental Health and Neurosciences, Faculty of Health, Medicine and Life Sciences, Maastricht University.

RGF Hendriksen, JGM Hendriksen, G Hoogland, JSH Vles

Duchenne muscular dystrophy (DMD) is a severe X-chromosomal linked genetic disorder that is primarily characterised by progressive muscular degeneration. The DMD gene is vast; it comprises 0.1% of the human genome, and contains the code for the dystrophin protein. This partly contributes to the fact that DMD is the most common form of muscular dystrophy as it affects approximately 1 in 3,500-5,000 live male births, hence making it the second most common single gene disorder in Western countries.

In the eighties of the previous century extremely low levels of the newly discovered full-length isoform (i.e. Dp427) were discovered in the brain. In the discussion the authors describe a potential role of dystrophin in mental retardation, as this was seen in approximately 30% of patients with DMD. Now, anno 2017, it is known that males with DMD may not only have intellectual disabilities but also learning disorders, particularly those involving language and reading, and neurobehavioural comorbidities (autism spectrum disorder, attention deficit hyperactivity disorder and obsessive compulsive disorder), which is supposed to be related to the absence of dystrophin in specific brain regions.

In the decades to follow it turned out that dystrophin seemed primarily located in three structures within the human brain: hippocampus, prefrontal cortex and cerebellum. Likewise, three dystrophin protein (Dp) isoforms have been identified in the brain: i) Dp427, localized post-synaptically; ii) Dp140, a minor component found in brain extracts, which seems amongst others linked to microvascular glia cells; and iii) Dp71, the most abundant expressed isoform, that is found in both neurons and glia cells. The functions of these proteins vary; that is, Dp427 clusters gamma-aminobutyric acid type A (GABAA) receptors at the post-synaptic membrane. The function of Dp140 is, however, unknown. Its expression seems limited to the stages of foetal development where it appears to be developmentally regulated. Later in life, after this initial high expression phase in prenatal stages, it is found at very low levels at the same locations as Dp71, i.e. vascular endothelium and astroglial endfeet processes. Aside from the clustering of water and potassium channels in the astrocyte membrane, the expression of Dp71 at such perivascular endfeet suggests amongst others a role in blood brain barrier functioning.

Intriguingly, the brain pathology in DMD appears not to be limited to the abovementioned spectrum of cognitive- and behavioural deficits, thereby further complicating the supposed role of dystrophin in the brain. That is, clinical, theoretical and molecular evidence is indicating a possible relationship between a lack of dystrophin and hyperexcitation, a process characterized by tremendous excitatory brain signalling by means of the spread of large neuronal currents. This can subsequently result in seizures.

The evidence for a potential relationship between epilepsy and DMD has only recently been slightly, yet slowly emerging. In 1997 the first clinical epidemiological study on the increased prevalence of epilepsy in a muscular dystrophy population appeared, and was followed by a small study in 2004 and, finally, by a rather elaborative one in 2013. The prevalence of epilepsy ranged from 3,1% to 12,3%. The subsequent average epilepsy prevalence based on these three studies is 5.3% (N = 477). In contrast, in the normal population this is approximately 0.5-1%. In addition, our research group recently also studied the prevalence of epilepsy in an international population of 228 boys and men with DMD and found a prevalence of 7.9%, thereby confirming the increased prevalence. It is furthermore particularly intriguing to realise that both DMD, as summarized above, and epilepsy, are associated with cognitive and behavioural deficits. Similarly, we found a statistically increased

prevalence of ADHD, OCD and anxiety disorders in DMD males with epilepsy compared to those without epilepsy. This may reflect an underlying (triangular) relationship. The subsequent question that emerges provides the rationale for the title of this chapter: might there be an underlying mechanism or could we, alternatively, perhaps speak of a new triad within (paediatric) neurology?

A possible underlying mechanism for the increased prevalence of epilepsy (and cognitive/behavioural deficits) in DMD has been extensively studied and described by our research group. In summary, if Dp71 is absent, potassium and water channels function less well, which impairs, via different mechanisms, the extracellular potassium buffering capacity. Increased potassium concentrations may lead to hyperexcitation because of the influence on action potential propagation. Next, because Dp71 also appears to have a function in the blood-brain barrier, its absence may result in leaky blood vessels, which can expose the brain to serum components, hence giving rise to seizures. Dp427, on the other hand, clusters GABAA receptors post-synaptically. Aberrant or defective clustering of the most important inhibitory neurotransmitter receptor system results in less inhibitory (counterbalance) effects and hence potentially hyperexcitable brain networks. In fact, it has been known for quite some time that such defective GABA-ergic mechanisms could give rise to epilepsy. Similarly, it has been postulated more than once that this could also constitute the cause of the neuropsychological problems often observed in DMD.

Finally, in order to (indirectly) test the abovementioned hypothesis we studied dystrophin distribution and expression in rat- and human brain tissue by means of immunohistochemistry and Western blot analysis respectively. In rat hippocampus and cerebellum there were no differences between epileptic and control animals. However, in human hippocampus, Dp427 levels were about 60% higher in temporal lobe epilepsy patients compared to post-mortem controls. This upregulation may indicate a compensatory mechanism in the chronic epileptic human brain to occur over time, as more Dp427 implies more GABA-input and hence a possible restoration of the seizure threshold. Since DMD patients are not able to make use of such potential mechanisms their seizure threshold may be lower, thus possibly clarifying the increased prevalence of epilepsy.

However, as shown here, not much research on this specific and rather new association has been performed. Consequently, in daily, clinical practice, awareness seems to be lacking. This could be attributed to a lack of insight in the fact that DMD could additionally be considered a brain disorder, even though the scientific interest for this specific matter has substantially increased during the past decade(s). Additionally it should be noted that a diagnosis of epilepsy might be challenged by the wide spectrum of possible associated features seen in DMD (e.g. ADD), also referred to as diagnostic overshadowing. Because of the huge impact of epileptic seizures on the quality of life, even more in males with a severe and progressive disorder such as DMD, more research is required. Not least as this may generally also give insight in the pathogenesis of epilepsy, cognition or into the possible existence of a common neuropaediatric triad as suggested here.

# Twenty Five Years of Research on Global Asphyxia in the Immature Rat Brain

Prof. Danilo Gavilanes

Associate Professor of Pediatrics, Neonatologist, Senior Researcher

School for Mental Health and Neuroscience, Maastricht University Medical Center, Netherlands.

M. Barkhuizen, D.L.A. van den Hove, J.S.H. Vles, H.W.M. Steinbusch, B.W. Kramer, A.W.D. Gavilanes  
Hypoxic-ischemic encephalopathy (HIE) remains a common cause of brain damage in neonates. Preterm infants have additional complications, as prematurity by itself increases the risk of encephalopathy. Currently, therapeutic hypothermia is the only routinely used clinical intervention for full-term infants with HIE. This intervention reduces death and disability, but it does not provide complete protection. For preterm infants, there are currently no specific therapeutic options available. A small pilot trial with selective head cooling in infants born at 32-35 weeks concluded that there is no evidence that it is safe or beneficial in preterm infants yet. Currently, therapy for this subset of asphyxiated infants is limited to supportive care.

Traditional models of neonatal brain injury had used 7-10 day old rat pups. At this time-point, neurodevelopmental milestones in the rat resemble those of the human fetus from week 36-40. The most commonly used model of injury in the late-preterm neonate is the Rice-Vannucci model. In this model, 7-day old rats undergo unilateral carotid artery ligation, accompanied by hypoxia (inhalation of 8%O<sub>2</sub>) for various durations (from 20 min to 3.5 h). This model was originally derived from the Levine model, which used adult rats. Unilateral carotid artery occlusion causes one-sided focal brain damage, which models neonatal stroke rather than global HIE.

In 1991, a novel rodent model of global asphyxia in the preterm infant was developed in Sweden. This insult occurs at a time-point when the rodent brain maturity resembles the brain of a 22-32-week-old human fetus. This model has developed over the past 25 years as an established model of perinatal global asphyxia in the early preterm brain. This review will give an overview of all the knowledge gained on the short- and long-term neuropathological and behavioral functional outcome effects of asphyxia on the immature central nervous system

## Adult Stem Cell Research from Comparative Adult Neurogenesis Animal Models

Prof. Amadi Ogonda Ihunwo

School of Anatomical Sciences, Faculty of Health Sciences, University of the Witwatersrand,  
Johannesburg, South Africa

Adult neurogenesis, the process of cell proliferation, differentiation, maturation and integration in specific areas of the adult brain is a concept that only became accepted in the scientific community a little over four decades ago following a long period of the dogma that cell proliferation in mammalian brain ceased after infancy. Though adult neurogenesis decreases with age and has implications in the brain function of learning and memory, stress, neuropsychiatric and neurodegenerative diseases, its investigations had concentrated mostly on laboratory rodents. Issues in comparative adult neurogenesis especially in using animals from natural populations include providing an index of sexual maturity of the species; queries on the acceptable numbers of the wild animals (mammals and birds) versus laboratory rodents, reviewing potential neurogenic sites; attempting a correlation of environmental factors and social lifestyle with findings; maintaining a database of findings from different species and noting reactions of different immunohistochemical markers and species specificity. In the long Evans rats, it is evident that there is differential influence in the integration phase on the dorsal and ventral limbs of the dentate gyrus under standard laboratory, running wheel exercise and complex environments. We have applied the concept of cell proliferation, isolation and differentiation, to adult human dental stem cells by evaluating the dental pulp stem cells (DPSCs) from pulp of human exfoliated teeth (SHEDs) using non carious permanent and deciduous teeth in a South African cohort.

---

## Reperfusion therapy experience in stroke unit (Ain Shams Hospital)

Prof. Hany Aref

Professor of Neurology, Ain Shams University

**Background:** The rate of alteplase (tPA) thrombolysis utilization in acute stroke in Egypt is <1%. We report on the causes of this low rate of reperfusion therapies and take corrective action to improve it.

**Methods:** Two prospective observational studies were conducted at Ain Shams University hospitals. The first

included 269 acute stroke patients admitted to the hospital over a six-month period. Obstacles to reperfusion therapy were identified, and based on the results, a corrective action plan was implemented including making alteplase(tPA) available, training, and establishing a standardized local protocol for reperfusion therapy. A second study was then conducted that included 284 acute ischemic stroke patients over another six-month period.

**Results:** In the first study, 53/269 patients (19.7%) arrived at hospital within 4.5 h and were eligible for reperfusion therapy. Of those, seven (13.2%) received alteplase(tPA), representing 2.6% of the total ischemic stroke patients admitted. The main causes for not giving thrombolytic therapy was unavailability of alteplase(tPA) (56.5%), wrong treatment decision (17.4%), missed window while performing brain imaging (15%), and unavailability of intermediate care bed (10.9%). The second study showed that out of 284 cases admitted with acute ischemic stroke, 37 were eligible for thrombolysis and 35 received alteplase(tPA) (94.3%), representing 12.3% of the total ischemic stroke admissions.

**Conclusion:** A comprehensive action plan that centers around making the drug available and training resulted in a significant improvement of reperfusion therapy utilization in Egypt.

---

## Outcome of Thrombolytic Therapy in Acute Ischemic Strokes (Ain Shams University Hospitals -SITS Database)

**Prof. Azza Abd El-Naser**

Professor of Neurology, Ain Shams University

On reviewing the SITS data for Demerdash hospital there were 120 patients who received rTPA from a total of 496 patients.

The functional outcome after 3 months for these patients showed: 41% had excellent outcome (mRS 0-2), 39% had moderate to severe disability (MRS 3-5), 19.5% passed away.

## Endovascular Treatment of Acute Stroke in Patients with Underlying Intracranial Atherosclerotic Stenosis

**Dr. Ahmed Basiouny**

Ass. Professor of Neurology, Ain Shams University

Recently, randomized controlled studies of endovascular treatments for acute ischemic stroke due to intracranial large artery occlusion have demonstrated improved efficacy. One important factor in their success is the use of stent retrievers to remove clots. Stent retrievers were designed for thrombus, which can incorporate into the inner space of the stent. Underlying stenosis due to intracranial atherosclerotic disease (IAD) is often encountered during endovascular treatment for acute intracranial large-artery occlusion. Regarding the pathomechanism of stroke, in situ thrombotic occlusions may occur in addition to hemodynamic compromise due to stenosis, the treatment strategy is very tricky when we have underlying intracranial stenosis. here by we will highlight the different treatment strategies aiming to solve this dilemmatic problem.

---

## Unanswered Questions in Mechanical Thrombectomy

**Prof. Hany Zaki El-Deen**

Professor of Neurology, Ain Shams University

Mechanical thrombectomy has been approved after about 30 years of the initial attempt. Despite this long journey, it has been approved for only a specific subgroup of patients. In addition only bridging it with IV rtPA is approved. This is apart from different technical points that are still needing consensus. In my talk i will discuss these unanswered questions concerning patient selection, bridging and the technical advances in mechanical thrombectomy.

---

## Stent Design in Management of Extracranial Carotid Stenosis

Dr. Ayman El-Soudany

Lecturer of Neurology, Ain Shams University

**Background:** Carotid artery stenting (CAS) had become widely used as an alternative to carotid endarterectomy (CEA) in revascularization therapy of carotid stenosis, especially in some high risk patients for surgical intervention.

**Objective:** To study the effect of carotid artery stent design in preventing periprocedural cerebral embolization in patients with symptomatic and asymptomatic extracranial carotid artery stenosis.

**Methods:** During a 30 months period, 50 cases with significant internal carotid artery stenosis were enrolled , randomized 1:1 and underwent carotid stenting with either open cell (Protégé®-EV3) or closed cell (Wall stent®- Boston scientific) designed stents at the Neuroendovascular Unit of Ain Shams University Hospital. A single filter device for embolic protection (Spider filter® - EV3) was used. Clinical assessments with the NIHSS together with post procedural brain DW-MRI were used to determine cerebral embolization.

**Results:** CAS was performed in 40 symptomatic cases (80%) and 10 asymptomatic cases (20%). A similar number of open-cell and closed-cell stents were used. New acute cerebral emboli were detected with DW-MRI in (6/50) of cases (12%) after the procedure. Three (3/50) cases (6%) showed corresponding clinical deterioration in NIHSS; two cases developed minor stroke and the third case developed a major stroke. The use of closed cell designed stents was associated with a lower incidence of new ipsilateral brain DW-MRI lesions than the use of open cell designed stents, 2 cases (2/25) in the closed cell group versus 4 cases (4/25) in the open cell group, but this was statistically insignificant (P=0.677).

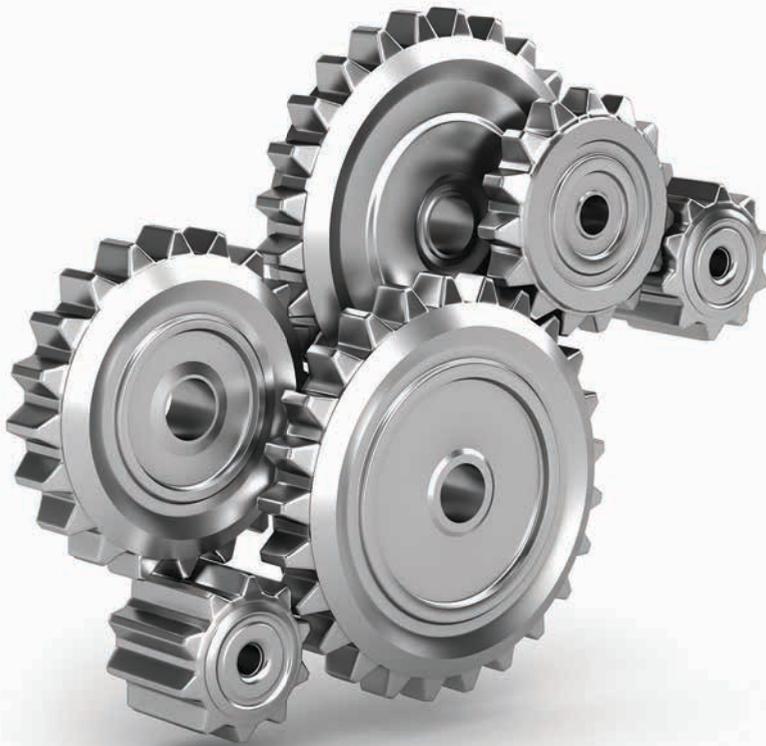
**Conclusion:** Cerebral embolization, as detected by brain DW-MRI, occurs more with open cell design than closed cell design stents but this was statistically non-significant. This randomized trial does not support the superiority of any stent design with respect to cerebral embolization.







IN  
TEAMWORK,  
WE BELIEVE



Address: 16 Fathy Talaat st. - Sheraton Buildings - Cairo  
Tel: +20 (2) 22666152 - 22666156 - 01001634534  
Fax: +20 (2) 22666137  
Website: [www.misr2000online.net](http://www.misr2000online.net) | Email: [misr\\_2000@hotmail.com](mailto:misr_2000@hotmail.com)  
Facebook: [www.facebook.com/misr2000](http://www.facebook.com/misr2000)

Scan QR Code  
[www.misr2000online.net](http://www.misr2000online.net)

