





4<sup>th</sup> International Conference on Neurodegenerative Disorders and Stroke

July 05-06, 2017 Frankfurt, Germany

# Keynote Forum Day 1

**Global Stroke 2017** 



# **Neurodegenerative Disorders and Stroke**

July 05-06, 2017 Frankfurt, Germany



# Abubakr Darrag Salim

National Center for Neurological Sciences, Sudan

## Management of pediatric brain tumors, strategies and long term outcome

**Objective:** This study is aimed at shedding the lights on different patterns of presentation of Sudanese children with brain tumors and reflecting the experience of the national center for neurological sciences in setting strategies for management together with long-term follow up over 14 years period.

**Material-Methods:** Retrospective, observational study for all Sudanese children with brain tumors operated in the National Center for Neurological Sciences in the period between September 2000 to March 2015. Data were collected and patients were followed throughout the entire 14.5 years study period. All patients with deficient clinical pre and post-operative data, patients with missed operative details, patients with missed histopathology reports and adult patients were all excluded from the study.

**Results:** During this 174 months period, 54 patients were operated aging between 1-17 years with average presentation at 9 years of age. M:F 2:1. The commonest presenting symptoms are headache (90.7%), back pain (81.3%), vomiting (59.3%) and unsteady gate (48.1%). The average duration of symptoms was 1 year. Most patients were operated through posterior fossa craniectomy (n=30/54, 55.9% and histopathology reports were mainly medulloblastoma (n=15/54, 27.8%) and pilocytic astrocytoma (n=11/54, 20.4%). Most patients improved or cured post-operatively (n=43/54, 79.7%) 1 deteriorated and 9 died.

**Conclusions:** Pediatric brain tumors are among the most challenging neurosurgical problems that needs stepwise multidisciplinary team. The lesions tend to be infratentorial with obstructive hydrocephalus. In our center it is found that 2 steps surgery first with VP shunt followed by second stage tumor resection after few weeks is both effective and safe way with apparently good outcome.

### **Biography**

Abubakr Darrag Salim has completed his primary medical school at Ain Shams university in Cairo Egypt in 1986 then he obtained MD in clinical surgery from Khartoum University in Sudan in 1997 Then he obtained MD in Neurosurgery from Sudan medical specialisation board in Sudan in 2003 he was then offered Honor MD in Neurosurgery from the same board in 2013, he is practising neurosurgery in Khartoum Sudan at Mawada and Alyaa hospital and he is the presendent of the advisory board of neuroscience of fedral minstry of health in Sudan and conver of the Neurosurgical board of Sudan medical specialisation board ,He has published more than 8 papers and has presented more than 50 papers in local regional and international confernces

drdarrag666@yahoo.com



# **Neurodegenerative Disorders and Stroke**

July 05-06, 2017 Frankfurt, Germany



## Gerlinde A S Metz

University of Lethbridge, Canada

## Our ancestors' ghosts: How transgenerational stress may influence the risk of neurological diseases

For most neurological diseases, including neurodegenerative diseases and stroke, the causes remain largely unknown. Recent research emphasized that many neurodegenerative diseases and stroke are associated with a pro-inflammatory state. Variables that alter the inflammatory state may therefore affect disease risk, progression, and recovery. Stress represents one of the most potent modulators in immune function and inflammatory processes. Work in our laboratory has shown that stress across generations has downstream effects on endocrine, metabolic and behavioral manifestations of neurodegenerative diseases and stroke via epigenetic regulation of inflammatory processes. Through potentially heritable epigenetic marks, ancestral stress and trauma may influence disease risk and outcomes in the unexposed offspring. The compounding effects of gestational stress propagate across multiple generations to influence disease risk and outcomes via miRNA regulation. In turn, the adverse transgenerational programming by stress can be reversed by environmental enrichment therapy. Our findings indicate that epigenetic and metabolic biomarkers of stress represent potentially predictive and diagnostic biomarkers of neurodegenerative diseases and stroke. Thus, ancestral programming by stress may be a significant risk factor in many common neurological diseases through altered epigenetic regulation.

### Biography

Gerlinde A S Metz completed her PhD at ETH Zurich and habilitated in Medicine at University of Jena. She is a Professor and Tier 1 Board of Governors Research Chair at Canadian Centre for Behavioral Neuroscience, University of Lethbridge, Alberta, Canada. Her research program focuses on "The influence of experience and environment on behavior and brain plasticity, as well as transgenerational programming of health and disease". She has published over 130 peer-reviewed papers in reputed journals and has been serving as an Editorial Board Member of *Environmental Epigenetics*.

gerlinde.metz@uleth.ca

Notes:







4<sup>th</sup> International Conference on Neurodegenerative Disorders and Stroke

July 05-06, 2017 Frankfurt, Germany

# Keynote Forum Day 2

**Global Stroke 2017** 



# **Neurodegenerative Disorders and Stroke**

July 05-06, 2017 Frankfurt, Germany



# Mohammad Nazrul Hossain

Jalalabad Ragib-Rabeya Medical College, Bangladesh

## Minimally invasive stroke surgery with Urokinaseinstil can be a useful procedure in managing spontaneous intracerebral haematoma: A cross-sectional evidence from Bangladesh

**Introduction**: Spontaneous intracerebral haematoma (SICH) is one of the most annihilating kinds of cerebrovascular disease. Studies found that minimally invasive stroke surgery (MISS) using Urokinase i.e. blood clot removal after liquefaction can be a beneficial procedure for managing ICH. This study attempted to investigate the outcome of SICS on a large number of participants who were undergone through the MISS with Urokinase instil.

**Methods**: A hospital based cross-sectional study was conducted in a tertiary level hospital of Bangladesh between 1 July2014 and 30 January 2017. Eligibility criteria: age  $\geq$  30 years, spontaneous ICH, Glasgow coma score (GCS) > 5, ICH volume >10-80 cm3, diameter > 3 cm and presented in hospital within 72 hours of SICH attack. Data were collected from face to face interview and by extracting the case recording form. Patients were followed up over the 30 days to notice complication. During the MISS, a manually placed catheter was used to instil Urokinase to liquefy the clot and drain in 6-hour interval for all patients. GCS and ICH volume were assessed before the operation and at 3rdpostoperative period. The outcome of this study was determined according to the 'Glasgow Outcome Score.

**Results**: According to CT scan, the average volume of intracerebral haematoma was 41.43 ml and mostly on left sided (51%). Concerning the location of hematoma, 583 (76%) were in basal ganglia and 61% featured with ventricular extension. Catheter was placed in the centre of haematoma in 93.3% patients. Patients received 5.7 doses of Urokinase and most (96%) of the operative procedures were uneventful. On 3rdpostoperative period, the average haematoma volume was decreased with each dose of Urokinase varied from 2 to 15 ml for 98% of patients (P<0.05). Moreover, GCS and motor strength of the patients gradually increased which was statistically significant. Patients with ventricular extension, more than 40ml of haematoma volume, basal ganglia ICH, delay to introduce intervention (>48 hours), low initial GCS level and presence of other comorbidities (diabetes and hypertension) were associated with mortality (P<0.05).

### **Biography**

Mohammad Nazrul Hossain, passed MBBS from Sir Salimullah Medical College, Dhaka, Bangladesh in 2000. He got his fellowship in Neurosurgery from Bangladesh College of Physician and Surgeons (BCPS) in 2012. He was the first fellow in his subject from BCPS. His study was acknowledged by the BCPS and published in their journal. After successful completion of his fellowship he joined and worked in a world renowned chain hospital "APOLLO", Dhaka, Bangladesh as neurosurgeon. During his neurosurgical carrier he worked with famous neurosurgeons of both national and international level. He joined "Jalalabad Ragib-Rabeya Medical College and Hospital" from Apollo in 2013 and established a fully new Neurosurgery department and serving the people of this area with their satisfaction.

drmnh2003@gmail.com



# **Neurodegenerative Disorders and Stroke**

July 05-06, 2017 Frankfurt, Germany



# A K M Shoab

MAG Osmani Medical College, Bangladesh

## Evaluation of adenosine deaminase activity in cerebrospinal fluid for disgnosis of tuberculous meningitis

**Background:** In the developing countries where TB is endemic; an ideal test for tuberculous meningitis should be economic, of high accuracy & quick to perform. It is very much needed to evaluate the diagnostic role of CSF ADA (adenosine deaminase) in tuberculous meningitis in Bangladesh.

**Objective:** This study objective is to find out CSF ADA sensitivity & specificity for early diagnosis of tuberculous meningitis Patients and Methods / Material and Methods Case control study; 30 patients of tuberculous meningitis as cases & 30 nontuberculous meningitis as control

**Results:** The mean CSF ADA activity was found to be significantly higher in CSF of TBM patients, 14.01+-12.4(1.0-65.2), mean+\_ SD with range , than in the CSF from non-TBM infectious meningitis, 7.2+8.2(1.8-49.1)P=0.01 cut off value of >7.6U/L for the TBM patients was calculated from the mean +\_ SD of the non TBM patients. The ADA sensitivity is 81.82%, specificity 65.3%, accuracy 68.33%, PPV 34.62%, NPV 94.12%, positive likelihood ratio 2.3 and negative likelihood ratio 0.2 for infectious TBM when this cut- off value was used. ROC curve shows area under curve of .736 suggests a moderate accuracy

Conclusion: ADA activity in CSF can be useful for early diagnosis of TBM

### Biography

A K M Shoab has completed his MBBS in 1999 from Sir Salimullah Medical College, Dhaka. In 2008 he did post graduate MCPS degree in Medicine and in 2012 did MD (Neurology) from Dhaka University. He was consultant of Medicine from 2008 to 2016 at 250 Bedded Hospital, Moulvibazar. He is now working as Assistant Professor of Neurology in Sylhet MAG Osmani Medical College. He has published 7 papers in reputed journals and he is the member of AAN and EAN.

shoabmcpsbcsmd@gmail.com

Notes: