PEERS ALLEY MEDIA

5th Global Conclave on

Neurology and Neurological Disorders

JUNE 25-26, 2024

AMSTERDAM, NETHERLANDS

2
DAYS WITH MORE THAN 45 SESSIONS, KEYNOTES & ORAL PRESENTATIONS

12+
INNOVATIVE FEATURED SPEAKERS

20+
HOURS OF NETWORKING EVENTS

60+
INTERNATIONAL SPEAKERS

125+
EDUCATIONAL SESSIONS

Theme:

Decoding the Nervous System: Insights from Early Diagnosis to New Age Therapeutics

- Translation of research to bedside practices
- Cutting-edge treatments and interventions
- Case studies of integrative treatments
- Neurotechnology and Digital Health: A New Era for Neurological Care
- The Global Burden of Neurological Disorders: Strategies for Prevention and Management

NEURO Conclave 2024

https://neurology.peersalleyconferences.com/

2 DAYS WITH MORE THAN 45 SESSIONS, KEYNOTES & ORAL PRESENTATIONS

INNOVATIVE FEATURED SPEAKERS 12+

20+ HOURS OF NETWORKING EVENTS

INTERNATIONAL SPEAKERS 60+

125+ EDUCATIONAL SESSIONS

WHO SHOULD ATTEND?

Neurologists | Neurosurgeons | Neuroscientists | Neuroradiologists | Physicians | Neuromuscular Specialist | Adult & Pediatric Neurologist | Neuroimmunologists | Medical Students, Researchers, Residents (Neurosurgery, Neurology, Psychiatry, Radiology, and Rehab) | Nurses | Nurse Practitioners | Physician Assistants | Professors | Academicians | Associations | Organizations | Hospitals | Medical Labs | Research Laboratories | Drug Development Companies | Research Institutes and Members | Scholars | Manufacturing Companies | Training Institutes | Healthcare Workers and Druggist | Industries

PRESENTATION FORUM

KEYNOTE FORUM / MINI-PLENARY SESSIONS

Presentations under Keynote Forum or Mini-Plenary Sessions includes abstracts with remarkable research value selected by the program committee. These significant speeches are delivered by globally recognized honorable speakers and it is open to all registrants.

DISTINGUISHED SPEAKERS FORUM (ORAL ABSTRACT SESSIONS)

In this forum, speakers and experts of the research field gets an opportunity to showcase their noble research work that involves comprehensive research findings. These formal oral presentations include a wide range of talks covering basic research to advanced research findings in accordance to the theme and scientific sessions of the conference.

STUDENT FORUM

POSTER SESSION

This session is particularly introduced to encourage more number of student participation at international conferences, however it is not restricted only to students since it is also available for the participants with language barrier. There are specific guidelines to be followed to prepare the poster. Poster topic should be selected only from relevant scientific sessions with in-depth technical details.

YOUNG INVESTIGATORS FORUM

An exclusive opportunity for students and young investigators to present their research work through a formal oral presentation. Young Investigators Forum provides a global platform for young researchers and scholars to showcase their valuable contribution to the scientific world and to get acknowledged by the global scientific community of experts. It is an excellent opportunity to recognize young scientific assets with promising research ideas. These oral presentations are of shorter time duration with 10-15 minutes of informative and precise presentations in relevant scientific sessions.

EDUCATIONAL WORKSHOPS/ RESEARCH WORKSHOPS/ CORPORATE WORKSHOPS/MINI-SYMPOSIA

With an aim of transferring knowledge among the participants, workshops are introduced as a part of international conferences. These interactive and occasionally practical sessions gives an opportunity for participants to engage in detail discussion. Workshops are mostly scheduled for 60 to 90-minutes. It may range from learning about a specific topic relevant to international education, products and research which sometimes involves practical demonstration. It helps in enhancing skills, knowledge and understanding of the research field in depth through interactive discussions.

HIGHLIGHTS OF THE DAY SESSIONS

"Highlights of the Day Sessions" is introduced to discuss and focus a ray upon previous day ORAL ABSTRACT presentations by experts to summarise the key findings. It helps in getting better insights into the various dimensions of the topic.

MEET THE PROFESSOR @ NETWORKING SESSIONS

This session involves open discussion between the experts and session attendees, it gives enough time for getting answers to specific questions and doubts. It is an opportunity for attendees to increase their professional networking, sometimes also leads to an excellent collaboration opportunity.

EDUCATIONAL SESSIONS/ TRAINING PROGRAMS

Educational Sessions or training programs are specifically designed for a better understanding of the latest findings and technologies. These are generally 45-minute sessions that gives an exposure to the multidisciplinary field, that provides in-depth learning experiences and address educational needs.

TYPES OF ACADEMIC REGISTRATIONS

- Speaker Registration
- COMBO A (Registration + 2 Night Accommodation)
- COMBO B (Registration + 3 Night Accommodation)
- Delegate Registration

TYPES OF BUSINESS REGISTRATIONS

- Speaker Registration
- COMBO A (Registration + 2 Night Accommodation)
- COMBO B (Registration + 3 Night Accommodation)
- Delegate Registration

TYPES OF STUDENT REGISTRATIONS

- Registration
- YIF
- COMBO A (Registration + 2 Night Accommodation)
- COMBO B (Registration + 3 Night Accommodation)
- Posters

TYPES OF ADDITIONAL REGISTRATIONS

- Accompanying Person
- E-Poster
- Virtual Presentation
- Workshops
- Start-Ups

Register & Participate in NEURO CONCLAVE 2024

https://neurology.peersalleyconferences.com/

https://neurology.peersalleyconferences.com/

TIME TO CONNECT

WITH YOUR PEERS

CONCURRENT EDUCATIONAL SESSIONS

TUESDAY
JUNE 25
2024

- Advanced Imaging Techniques
- Neurology
- Neurosurgery
- Neuroscience
- Neuropsychiatry

- Personalized Medicine
- Pain Disorder and Management
- Central Nervous System
- Pediatric Neurology

GROUP PHOTO | COFFEE BREAK

- Neuroinformatics
- Neuro-Oncology and Brain Tumors
- Neurophysiology
- Neuroimmunology
- Neuropathology

- Gene Therapy
- Neuroimaging
- Neurodegenerative Disorders and Neurodegeneration

LUNCH BREAK

- Neural Interface and Brain-Computer Interface (BCI)
- Neurological Disorders
- Sleep Disorder
- Stroke
- Movement Disorders

- Neurorehabilitation
- Parkinsons Disease
- Neurochemistry
- Epilepsy

COFFEE BREAK

- Regenerative Medicine and Stem Cell Therapy
- Multiple Sclerosis
- Alzheimers Disease and Dementia
- Neuromuscular Disease

- Telemedicine in Neurology
- Case Studies and Clinical Trials
- Novel Treatment Strategies
- Speech Disorders

CONCURRENT EDUCATIONAL SESSIONS

WEDNESDAY
JUNE 26
2024

- Nano-Neuroscience
- Demyelinating Disorders
- Cerebrovascular Disorders

- Neurosurgical Innovations
- Autoimmune and Inflammatory Disorders
- Neuropathy
- Headache and Facial Pain

GROUP PHOTO | COFFEE BREAK

- Neuroethics
- Diagnosis and Screening of Neurological Disorders
- Neuropharmacology
- Stem Cells and Neuroregeneration

- Precision Psychiatry
- Cognitive Neuroscience
- Motor System Disorders
- Behavioral Neurology

LUNCH BREAK

- Neuromodulation and New Therapeutic Approaches
- Computational Neuroscience
- Neurogenetics
- Spinal Neurosurgery
- Pediatric Neurosurgery

- Microbiome and Neurological Health
- Stereotactic and Functional Neurosurgery
- Neurovascular Surgery
- Intraoperative Neurophysiology
- Peripheral Nerve Surgery

COFFEE BREAK

- Neurological Implications of COVID-19
- Robotics in Neurosurgery
- Latest Advancement in Brain Surgery
- Skull Base Surgery
- Trauma and Critical Care

- Child Psychology
- Social Cognitive Neuroscience
- Neurophysics
- Neuroradiology
- Neurorobotics

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Stress-induced endocrine and metabolic disorders

Speaker Name: Hassan Heshmati

Affiliation: Endocrinology Metabolism Consulting LLC, USA

Abstract:

Stress is a universal non-specific response to any pressure or demand. It is a condition caused by a stressor. In humans, the stressor can be a variety of factors (e.g., physical activity, extreme temperature, noise, workload, financial difficulties, violence, disease, and death of a loved one). Stress disturbs the equilibrium between the living organism and its environment. It is a challenging experience with multiple effects on the physiology and the behavior. Several factors including hormones are released during stress. The excess release of these factors can cause several endocrine and metabolic disorders. The hormones released during stress include corticotropin-releasing hormone, adrenocorticotropic hormone, cortisol, growth hormone, vasopressin, and catecholamines. Studies have reported that subjects with Cushing's disease, hyperprolactinemia, and Graves' disease have been exposed more to stressful life events than their matched controls. Stress in early life may be a risk factor for the development of type 1 diabetes. Gonadal function can also be impacted by stress resulting in oligospermia and impotence in males and anovulation and amenorrhea in females. Through multiple and complex biochemical changes, stress can induce abnormalities in food intake behavior and fat storage, causing weight changes (e.g., weight gain or weight loss). The weight gain may ultimately lead to obesity. A better understanding of the stressors and the implementation of an efficient program to decrease their incidence may prevent the occurrence of stress-related endocrine and metabolic disorders.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Understanding Executive Functioning (EF) Deficits Inherent in ADHD and Autism (ASD)

Speaker Name: Mary Hynes Danielak

Affiliation: The Counseling and Development Center Alpharetta, USA

Abstract:

Executive Functions (EF) are a topic that is often thrown around loosely by both parents and professionals without a clear understanding of what are the specific EF's and how they manifest. Even professionals can´t agree on how many executive functions exist. These functions are core deficits in ADHD, ASD, and other disorders, with varying levels of severity. However, even a minimal degree of dysfunction in a few areas of executive functioning can cause a person to struggle in many aspects of life and can persist over a lifetime. Increase your knowledge of the types of EF, the breadth and depth of these, the types of disorders they can be present in, and how they impact daily life. We will discuss each of these Executive Functions specifically, focusing on the most prevalent types of these deficits and the impact they have in daily life. The attendees will be able to identify different types of Executive Functions and name 5 of the most prominent types. The attendees will understand the plethora of ways these deficits can impact a patient's life and how these can manifest in daily life. Lastly, the attendee will learn interventions that may be useful for different types of Executive Functions. Although sparse in research there are useful interventions, and understanding these will help your effectiveness with patients.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Evidentiary Significance of Routine EEG in Refractory Cases: A Paradigm Shift in Psychiatry

Speaker Name: Ronald J. Swatzyna

Affiliation: Houston Neuroscience Brain Center, USA

Abstract:

Over the past decade the Diagnostic and Statistical Manual's method of prescribing medications based on presenting symptoms has been challenged. The shift toward precision medicine began with the National Institute of Mental Health and culminated with the World Psychiatric Association's posit that a paradigm shift is needed. This study supports that shift by providing evidence explaining the high rate of psychiatric medication failure and suggests a possible first step towards precision medicine. A large psychiatric practice began collecting electroencephalograms (EEGs) for this study in 2012. The EEGs were analyzed by the same neurophysiologist (board certified in electroencephalography) on 1,233 patients. This study identified four EEG biomarkers accounting for medication failure in refractory patients: focal slowing, spindling excessive beta, encephalopathy, and isolated epileptiform discharges. Each EEG biomarker suggests underlying brain dysregulation, which may explain why prior medication attempts have failed. The EEG biomarkers cannot be identified based on current psychiatric assessment methods, and depending upon the localization, intensity, and duration, can all present as complex behavioral or psychiatric issues. The study highlights that the EEG biomarker identification approach can be a positive step toward personalized medicine in psychiatry, furthering the clinical thinking of 'testing the organ we are trying to treat.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Dizzy patient in the emergency, should we call the neurologist?”

Speaker Name: Adraa nouini

Affiliation: Delta Hospital, Belgium

Abstract:

The management of dizziness and vertigo can be challenging in the emergency department (ED). It is important to rapidly diagnose vertebrobasilar stroke (VBS), as therapeutic options such as thrombolysis and anticoagulation require prompt decisions.

This study aims to assess the rate of misdiagnosis in patients with dizziness caused by VBS in the ED.

The cohort was comprised of 82 patients with a mean age 55years; 51% were women and 49% men. Among dizzy patients, 15% had VBS. We used Cohen’s kappa test to quantify the agreement between two raters – namely, emergency physicians and neurologists – regarding the causes of dizziness in the ED. The agreement between emergency physicians and neurologists is low for the final diagnosis of central vertigo disorders and moderate for the final diagnosis of VBS. The sensitivity of ED clinal examination for benign conditions such as BPPV was low at 56%. The positive predictive value of the ED clinical examination for VBS was also low at 50%.

There is a substantial rate of misdiagnosis in patients with dizziness caused by VBS in the ED. To reduce the number of missing diagnoses of VBS in the future, there is a need to train emergency physicians in neurovestibular examinations, including the HINTS examination for acute vestibular syndrome (AVS) and the Dix-Hallpike (DH) maneuver for episodic vestibular syndrome. Using video head impulse test could help reduce the rate of misdiagnosis of VBS in the ED.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Predictors of Conversion to Dementia in Patients with Mild Cognitive Impairment: The Role of Low Body Temperature

Speaker Name: Kannayiram Alagiakrishnan

Affiliation: University of Alberta, Canada

Abstract:

Subjects with mild cognitive impairment (MCI) can progress to dementia. Methods: The objectives of this retrospective study in elderly subjects at the University of Alberta Hospital are to assess the prevalence of MCI, the rate of conversion to dementia and association of clinical risk factors with conversion from MCI to dementia over 5 1/2 years. Results: The prevalence of MCI at baseline was 25.6% and 43% of the MCI subjects converted to dementia. Regression analysis showed family history of dementia (OR: 3.52, 95% CI: 1.62, 5.38, $p<0.001$), abnormal clock drawing (OR: 1.95, 95% CI: 1.00, 3,37, $p< 0.05$), MoCA score (OR: 0.92, 95% CI: 0.86, 0.99, $p<0.05$), and temperature of 36C or below (OR: 4.14, 95% CI: 3.19, 25.66, $p < 0.001$) are associated with the progression to dementia. Conclusion: This study would help the clinicians to identify patients with MCI who are at risk of converting to dementia.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Brain injury and prison: over-representation, prevention and reform

Speaker Name: Molly Townes O'Brien

Affiliation: Australian National University, Australia

Abstract:

People who have suffered a brain injury are significantly over-represented in prisons around the world. Compared to the general population, people in prison are more than five times as likely to have had a brain injury. Brain injuries may have multiple ongoing symptoms which lead to the commission of criminal offenses and to inadequate presentation of defenses. Police, lawyers, judges and prison staff are largely unaware of an inmate's brain injury status. The silence of this unrecognized epidemic frequently leads to insufficient treatment and unnecessary and inappropriate disciplinary action. Objective The goal of this presentation is to increase the communication between medical staff and patient's families, carers and advocates. From the perspective of having had a severe traumatic brain injury, I recommend that before hospital release, each patient should be in the care of people who are aware of the patient's brain injury status and the effect(s) it may have on their Behaviour. I recommend that medical professionals provide more and better brain injury screening to the justice system. I further recommend that training be given to police, lawyers, judges and prison staff. People who deal with prisoners should be trained in how to identify and manage the deficits caused by brain injury. Human rights litigation may also be a tool to meet the needs of brain injured inmates. People with brain injuries should not be punished and forgotten.

Conclusion Too many people with Traumatic Brain Injury are imprisoned. Justice officials' lack of understanding of the behaviour associated with brain brain injury may contribute to the over-representation in prison. Medical professionals may contribute to the education and solution.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Diagnosis of autism spectrum disorder based on functional brain networks and machine learning

Speaker Name: Caroline Lourenço Alves

Affiliation: Aschafenburg University of Applied Sciences, Germany

Abstract:

Autism is a multifaceted neurodevelopmental condition whose accurate diagnosis may be challenging because the associated symptoms and severity vary considerably. The wrong diagnosis can affect families and the educational system, raising the risk of depression, eating disorders, and self-harm. Recently, many works have proposed new methods for the diagnosis of autism based on machine learning and brain data. However, these works focus on only one pairwise statistical metric, ignoring the brain network organization. In this paper, we propose a method for the automatic diagnosis of autism based on functional brain imaging data recorded from 500 subjects, where 242 present autism spectrum disorder considering the regions of interest throughout Bootstrap Analysis of Stable Cluster map. Our method can distinguish the control group from autism spectrum disorder patients with high accuracy. Indeed the best performance provides an AUC near 1.0, which is higher than that found in the literature. We verify that the left ventral posterior cingulate cortex region is less connected to an area in the cerebellum of patients with this neurodevelopment disorder, which agrees with previous studies. The functional brain networks of autism spectrum disorder patients show more segregation, less distribution of information across the network, and less connectivity compared to the control cases. Our workflow provides medical interpretability and can be used on other fMRI and EEG data, including small data sets.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Alteration of glia in covid infection: permanence of cognitive alterations and mood disorders. Clinical cases

Speaker Name: Concetta Mezzatesta

Affiliation: "Civico" Partinico Covid Hospital, Italy

Abstract:

The COVID-19 pandemic has resulted in multiple investigations into its neurological impact, revealing a remarkable association between the virus and cognitive impairment, as well as mood disorders. our research, which lasted 3 years in the covid medicine department of the Partinico OP, delves into the alterations observed in glial cells, particularly in astrocytes and microglia, in inpatients and home patients infected with COVID-19. Through the exploration of clinical cases, this study elucidates the persistence of cognitive deficits and mood disorders related to glial cell dysfunction after COVID-19 recovery. Furthermore, it highlights the need for further research to understand the mechanisms underlying these alterations and to develop targeted therapeutic interventions to mitigate the long-term neurological consequences of the virus.

To evaluate the relationship between gliotic alterations, neuropsychological consequences and mood disorders of Sars-Cov 2 infection in sampled patients in order to construct an integrated and targeted clinical-pharmacological-psychological-psychotherapeutic intervention.

To evaluate the possible neuro-psychological consequences of Sars-Cov 2 infection in patients subject to sample: - Anamnesis and first psychological evaluation; - MRI analysis - Administration of the following tests: State-Trait Anxiety Inventory Y1-Y2 (STAI-Y); Impact of Event Scale – Revised; - neuropsychological protocol (Mini Mental State Exmination (MMSE), Immediate and deferred Rey figure, Frontal assessment battery (FAB)

63% of subjects have gliotic alteration in the frontal and prefrontal, parietal and temporal lobes. in 21% there is a microgliotic alteration to the limbic lobe and arcuate nucleus88% of subjects tested with the neuropsychological protocol showed cognitive impairment. 52% of the sample reported a potentially traumatic event related to Sars-Cov 2, among these 58% obtain a highly significant score for a PTSD and 54% comorbidity had a clinically significant anxiety disorder. the treatment with the EMDR method of critical PTSD cases has allowed a substantial remodulation of both the post-traumtic picture.

longitudinal study showed a correlation between gliotic alterations, cognitive and mood disorders in covid patients. Doctors wonder whether progressive changes in astrocyte and oligochondrocyte cells leading to 'covirus-induced dementia' will occur in the future.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: A Transistor Model for the Cystic Fibrosis Transmembrane Conductance Regulator—With and Without Blockers

Speaker Name: William D. Hunt

Affiliation: Georgia Institute of Technology Atlanta, Georgia

Abstract:

The Cystic Fibrosis Transmembrane conductance Regulator (CFTR) is a member of the ATP-binding cassette (ABC) transporter superfamily that has uniquely evolved to function as a chloride channel. It binds and hydrolyzes ATP at its nucleotide binding domains NBD1 and NBD2 to form a pore which provides a conductive pathway—predominantly for chloride and bicarbonate ions. The dysfunction of CFTR, induced by mutations, is responsible for the disease cystic fibrosis. While much is known about the functional aspects of CFTR, significant gaps remain in our knowledge and understanding. Paths towards a fuller understanding of this membrane channel include structural studies, molecular dynamics simulations, and single channel patch clamp studies of function that may be enhanced using modeling approaches as described here. We present here an experimentally verified transistor circuit model for CFTR, based on single channel patch clamp recordings, which seeks to describe the operation of CFTR both in wild type and the G551D clinically relevant mutant. The circuit architecture is configured so that the function, and as much as possible the form, faithfully represents what is known about CFTR from Cryo-electron microscopy and molecular dynamics. The model is a mixed Analog-Digital topology with an AND gate receiving the input from two separate ATP-NBD binding events. The computational efficiency and complexity of circuit simulation tools, such as LTspice® and Cadence®, facilitate the investigation of WT-CFTR and its mutants. Further, we will present recent extensions to the circuit which model the effect of blockers (e.g. arylaminobenzoates NPPB and DPC) and new details on how flicker noise can be predicted based on nuanced changes to the front end AND gate of the circuit. The approach taken here may prove useful towards a greater understanding of membrane channels central to much of neurology.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: A case of hereditary hemorrhagic telangiectasia presenting with brain abscess

Speaker Name: Mohammad Barakat Jamil Alnees

Affiliation: An-Najah National University, Palestine

Abstract:

Hereditary hemorrhagic telangiectasia (HHT), characterized by telangiectases and arteriovenous malformations that can occur in any organ but primarily the lungs, liver, and brain, is an autosomal dominant disorder. Brain abscess, though a rare and potentially fatal complication, can be an initial presentation of this condition.

A 60-year-old man presented with anemia and black tarry stools, then developed right-sided weakness initially misdiagnosed as an ischemic stroke. Subsequent onset of headaches and high-grade fever led to the diagnosis of brain abscess, and HHT was subsequently identified.

This case underscores that brain abscess can be an initial symptom of HHT. Prompt diagnosis and treatment are vital, which requires physicians to maintain a high index of suspicion and conduct appropriate investigations promptly.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Recovery of spinal walking in paraplegic dogs using physiotherapy and supportive devices to maintain the standing position

Speaker Name: Gheorghe Solcan

Affiliation: University of Life Sciences, Romania

Abstract:

Paraplegic patients have always been ideal candidates for physiotherapy due to their body's inability to recover on its own. Regardless of the cause that led to the onset of paraplegia (traumatic or degenerative), physiotherapy helps these patients with devices and methods designed to restore their proper functioning of the motility, as well as quality of life.

60 paraplegic dogs without deep pain on hindlimbs caused by discal hernia or thoraco-lumbar fractures have undergone physiotherapy sessions: manual therapy (massage), electrostimulation (10-20 minutes, with possible repetition on the same day), ultrasound therapy, laser therapy, hydrotherapy, and assisted gait in supportive devices or on treadmill to stimulate and relearn walking, this being the main focus of the study. To maintain the standing position over time, we developed different devices adapted for each patient, depending on the degree of damage and the possible associated pathologies. Concurrent pathologies (skin wounds, urinary infections etc.) were managed concomitantly. After 125 to 320 physiotherapy sessions, 35 dogs (58,33%) developed the spinal walking, being able to walk without falling or falling sometimes in case of quick look, with a lack of coordination between the thoracic and pelvic limbs, difficulties in turning especially when changing direction but with recovery of the quadrupedal position in less than 30 seconds.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Schrödinger's What is Life?—Complexity, Cognition and the City

Speaker Name: Juval Portugali

Affiliation: Tel Aviv University Research Center for Cities and Urbanism Tel Aviv University, Israel

Abstract:

The aim of this talk is twofold: Firstly, to draw attention to four central concepts in Schrödinger's [1] 'What is Life?' that have not, as yet, received sufficient attention in the domain of complexity theory: delayed entropy, free energy, order out of order and aperiodic crystal. Secondly to demonstrate the important role the four elements play in the dynamics of complex systems by elaborating on their implications for cities as hybrid complex systems [2]. In the latter elaboration links will be made to Laland's et al [3] Niche Construction Theory, Friston's [4] free energy Principle, and Simon's [5} Sciences of the Artificial.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Neuroprotective and Antioxidant Effects of Cronassial in Experimental Autoimmune Encephalomyelitis: Insights into Oxidative Stress and Immune Factors

Speaker Name: Zanginyan Hasmik

Affiliation: Institute of Molecular biology NAS of Armenia, Armenia

Abstract:

In recent years, the pathogenetic role of oxidative stress in damaging myelin cells, a precursor to the development of myelin-related diseases such as multiple sclerosis, has gained increasing significance. Experimental autoimmune encephalomyelitis (EAE) in rats serves as an experimental model for human multiple sclerosis.

Our study aimed to investigate the factors contributing to the development of oxidative stress, such as lipid peroxidation, oxidative modification of proteins, the content of nitric oxide (NO), and sulfhydryl groups in the brains and spinal cords. Additionally, we explored humoral immune factors (IL-1β, IL-6, TNFα) in blood plasma, homogenates of the brain and spinal cord, circulating immune complexes (CICs) in serum, and conducted histological analysis with Bcl2 staining in experimental autoimmune encephalomyelitis and its treatment. The therapeutic agent used was Cronassial, containing mono-, di-, tri-sialyl gangliosides.

The results of our research revealed that experimental animals exhibited oxidative stress with an increase in the investigated parameters. Elevated concentrations of the examined interleukins and CICs were observed, along with positively stained Bcl2 cells in the white matter tissues of the brain and spinal cord. Upon administering Cronassial, the consequences of oxidative stress were normalized, and the formation of reactive oxygen species was suppressed.

Consequently, the data obtained underscore the neuroprotective and antioxidant effects of Cronassial when administered to animals with autoimmune encephalomyelitis.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Study on the relationship between vertebrobasilar dolichoectasia and posterior cranial fossa space

Speaker Name: Yao Xiaolong

Affiliation: The Third People's Hospital of Hubei Province, China

Abstract:

To investigate the correlation between vertebrobasilar dolichoectasia (VBD) and posterior cranial fossa (PCF) space.

The medical records and imaging data of patients with VBD and control group were collected from June 2021 to June 2022 in the Third People's Hospital of Hubei Province. All patients with VBD were graded by head and neck CTA. The grading index was divided into two parts, including vertebral artery bifurcation height and offset degree. Taking the healthy adult subjects of matched age as the control group. The linear volume of posterior cranial fossa was measured by median sagittal CTA images. Middle clivus length, transverse diameter of occipital foramen, supraoccipital length, sagittal diameter of posterior cranial fossa and height diameter of posterior cranial fossa was measured. The volume of the PCF was calculated by 3Dslice software. The relationship between VBD and the volume of PCF was analyzed by SPSS23.0.

The height diameter of posterior cranial fossa, sagittal diameter of posterior cranial fossa, transverse diameter of occipital foramen, clival length, supraoccipital length and space volume of PCF were 34.78 ±3.67mm, 85.49 ±4.15mm, 30.89 ±3.94mm, 44.53 ±5.36mm, 45.21 ±6.45mm, 171.08 ±15.81 cm3 in the case group. The linear volume of PCF and space volume of PCF were significantly lower than those in the control group ($P < 0.05$). Binary logistic regression analysis showed that the independent risk factors of VBD were height diameter of PCF, sagittal diameter of PCF, transverse diameter of occipital foramen, clival length, supraoccipital length and space volume of posterior cranial fossa. According to the classification, the height and diameter of PCF in grade 1 was significantly smaller than that in grade 2 VBD ($P < 0.05$). Under the standard of BA bifurcation degree, there were significant differences between different grades of VBD patients and age ($P < 0.05$).

The smaller volume of PCF may leading the greater possibility of VBD. Under the classification of VBD, the older, the longer the course of disease is, the higher degree of VBD classification is.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Relationships of domestic violence with bullying, silencing-the-self, resilience, and self-efficacy: Moderating roles of stress-coping

Speaker Name: Cansu Karakuş

Affiliation: Çankaya University, Turkey

Abstract:

The present study aimed to investigate the relationships of Child Exposure to Domestic Violence (CEDV) with bullying, silencing-the-self (STS) behaviors, resilience, and self-efficacy. In addition, moderating effects of stress-coping strategies in the relationships of CEDV with the outcome variables were examined. Data were collected from 569 adolescents aged between 14 and 17. The findings showed that CEDV was positively related to bullying and STS and it was negatively associated with resilience, overall self-efficacy, academic and emotional self-efficacy. Optimistic style and seeking social support moderated the relationship between CEDV and resilience. Also, the self-confident style, seeking social support, and optimistic style moderated the associations between CEDV and self-efficacy. Findings are discussed in terms of theoretical and practical contributions as well as directions for future research.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Driving assessment for persons with dementia: How and when?

Speaker Name: Lara Camilleri

Affiliation: Saint Vincent De Paul Long Term Care Facility, Malta

Abstract:

Dementia is a progressive neurodegenerative disease leading to deterioration in cognitive and physical skills. Driving is an important instrumental activity of daily living, essential for mobility and self-sufficiency. However, this is a complex skill which can be affected by dementia. A moving vehicle can be a dangerous tool in the hand of someone who cannot maneuver it properly. As a result, the assessment of driving capacity should be part of dementia management.

Dementia comprises of different etiologies and stages consisting of different signs and symptoms. This increases the complexity of driving assessment. This study aims to identify driving behaviors common in dementia and compare different assessment methods. A literature search was performed using the PRISMA checklist as a framework.

A total of forty-four observational studies and four meta-analysis were identified. Study characteristics varied greatly with regards to methodology, population, assessments, and outcome measures used. Drivers with dementia performed generally worse than cognitively normal drivers. Poor speed maintenance, lane maintenance, difficulty managing intersections and poor response to traffic stimuli were the most common behaviors identified in drivers with dementia. Naturalistic driving, standardized road assessments, neuropsychological tests, participant self-rating and caregiver rating were the most common driving assessment methods used. Naturalistic driving and on-road assessments had the highest predictive accuracy. Results on other forms of assessments varied greatly. Both driving behaviors and assessments were influenced by different stages and etiologies of dementia at varying degrees.

Methodology and results in available research are varied and inconsistent. As a result, more good quality research is required in this field. Like with any other form of assessment in geriatric medicine, a multidisciplinary, holistic, and patient centered assessment is the suggested approach when assessing driving competence in dementia.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: JAHI Mcmath: It is stll a controversial case

Speaker Name: Calixto Machado

Affiliation: Institute of Neurology and Neurosurgery, Cuba

Abstract:

In this paper, I reviewed the case of Jahi McMath, who was diagnosed as being in brain death (BD). Nonetheless, ancillary tests performed nine months after the initial brain insult showed conservation of intracranial structures, EEG activity, and autonomic reactivity to the “Mother Talks” stimulus. She was clinically in a state of unarousable and unresponsiveness, without evidence of awareness of self or environment, but a full absence of brainstem reflexes and partial responsiveness rejected the possibility of being in a coma. Jahi was not a UWS because she was not awake and showed partial responsiveness. LIS patients are wakeful and aware, and although these cases are quadriplegic, they fully or partially preserve brainstem reflexes, vertical eye movements, and/or blinking and respire on their own, rejecting the possibility of classifying her as LIS patients. She was not a MCS because she did not preserve arousal and only partially preserved awareness. The CRS-R in Jahi would have resulted in a very low score, not corresponding with MCS patients. MCS patients fully or partially preserve brainstem reflexes and usually breathe independently. MCS has always been described as a transitional state between coma UWS, but MCS has never been reported in a patient who has all clinical BD findings. This case does not contradict the concept of BD but brings to discussion the need to use ancillary tests in BD again. I concluded that Jahi represented a new state of disorder of consciousness, non-previously described, that I have termed: “responsive unawakefulness syndrome” (RUS).

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Genetic Etiology and Prognosis of Fetuses with Lateral Fissure Angle <0° on Transthalamic Plane

Speaker Name: Qing Zeng

Affiliation: Shenzhen Maternity and Child Healthcare Hospital, China

Abstract:

To explore the etiology and prognosis of fetuses with a lateral fissure angle <0° on the transthalamic plane.

A total of 62 cases of fetuses with a lateral fissure angle <0° detected by ultrasound examination in Shenzhen Maternity and Child Healthcare Hospital were collected. Prenatal/postnatal genetic testing was performed, including karyotype analysis, chromosomal microarray analysis, and whole-exome sequencing to identify potential pathogenic causes. Follow-up was conducted to assess pregnancy outcomes and analyze relevant prognostic factors.

Among the 62 fetuses with a lateral fissure angle <0° detected by ultrasound, a positive genetic diagnosis was obtained in 42 cases (67.7%, 95% CI: 56.1% to 79.4%). The diagnostic variations included 5 microscopically visible chromosomal abnormalities, 10 microdeletions/microduplications, and 27 single nucleotide variants (SNVs). Two cases had positive diagnoses for both chromosomal abnormalities and SNVs. These 27 SNVs involved 17 genes, with LIS1, TUBA1A, NSD1, and NFIX genes (repeated three times each), and the APSM gene (repeated twice). Out of the 20 cases with negative genetic testing results, six infants were born, and among them, five had a good prognosis. Among the 42 cases with positive genetic testing results, six infants were born, and all of them had a poor prognosis.

This study demonstrated that the detection rate of pathogenic or likely pathogenic genetic variations in fetuses with a lateral fissure angle <0° reached 67.7% (95% CI: 56.1% to 79.4%). Fetuses with positive genetic testing results were associated with delayed neurodevelopment and intellectual disabilities after birth, while those with negative genetic testing results had a more optimistic prognosis. We recommend incorporating the evaluation of the lateral fissure angle in fetal neurosonography to assess lateral fissure development. When a fetal lateral fissure angle <0° is identified, genetic testing is recommended because these results can provide more comprehensive prognostic information for maternal-fetal medicine physicians and parents, thus enabling more appropriate counseling.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Learning/recall mismatching combined with ketamine treatment alter methamphetamine memory magnitude and mPFC mGluR5 level

Speaker Name: Lung Yu

Affiliation: National Yang Ming Chiao Tung University, Taiwan

Abstract:

This study was undertaken to assess whether brief recall and ketamine (KE) treatment in combination may affect MA memory magnitude. Moreover, it was also designed to examine whether animals' MA memory magnitude may associate with their medial prefrontal cortex (mPFC) metabotropic glutamate type 5 (mGluR5) expression levels. Methamphetamine (MA) conditioned place preference (CPP) was used to model an MA memory. Compared to the control animals, a single sub-anesthetic injection with KE (30 mg/kg) and combining 3-min recall and saline (Sal) treatment did not seem to affect MA CPP magnitudes. Notably, brief recall and KE (30 mg/kg) in combination was found to facilitate MA CPP rapid extinction. Paradoxically, mice' MA CPP magnitudes in the Retest associated positively with their mPFC mGluR5 expression levels. And such upregulated mGluR5 levels were eminent in local GABA neuron. These results prompt us to hypothesize that combining a brief recall and KE treatment may facilitate MA memory extinction. Moreover, mPFC mGluR5 levels seemed to play a role in mediating MA CPP magnitudes.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Transcranial electric field treatment produce Alzheimer's disease modifying properties in mouse model

Speaker Name: Jong-Ki Kim

Affiliation: Daegu Catholic University, South Korea

Abstract:

Iron accumulation in the brain accelerates disease progression and is hypothesized as a key driving factor of inflammatory bridging to tauopathy in Alzheimer's disease. To cure iron toxicity and tauopathy, we assessed the therapeutic effects of noncontact transcranial electric field stimulation to the brain on toxic iron deposits in either the Aβ fibril structure or pathogenic iron-sequestrating bodies including protein aggregates, ferritin, and ferritin-laden microglia in a mouse model of Alzheimer's disease (AD). Treatment of capacitive electrode-based alternating electric field (AEF) on a magnetite-bound Aβ-fibril or AD mouse showed the degradation of the Aβ fibril or the removal of iron deposition and the Aβ-plaque burden from e-Fenton effects in field intensity-dependent and frequency-specific manner. Western blot analysis and immunohistochemistry revealed downregulating inflammatory response such as ferroptosis, active microglia, reactive astrocytes and preventing tau aggregation, and the results of the behavioral tests suggest correlated improvement in cognitive impairment after single AEF treatment. Tissue clearing and 3D-imaging analysis revealed no induced damage to the neuronal structures of normal brain tissue following AEF treatment. In conclusion, our results suggest that the effective degradation of insoluble iron deposit together with iron-sequestrating pathogenic bodies play a role in promoting Alzheimer's disease-modifying properties and offers a potential molecular-targeting electroceutical treatment option for AD.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Online inferential processing among children with dyslexia during Chinese narrative comprehension: Evidence from eye-movement study

Speaker Name: Lin Fan

Affiliation: Beijing Foreign Studies University, China

Abstract:

The study aimed to investigate the cognitive mechanisms underlying reading deficits in Chinese children with developmental dyslexia (DD). Eye-tracking technology was used to measure participants' reading performance, specifically focusing on their ability to construct causal situation models during narrative comprehension. The sample for the study consisted of 80 Chinese-speaking children, including 26 children with DD, 28 age-matched readers, and 26 reading level-matched readers. The study compared the participants' reading performance in explicit and inferential texts to examine their construction of causal representations.

The results of the study showed that the total reading time for the inference-evoking sentence was significantly longer than that in the explicit version. However, there was no significant difference in the reading time of the target words in comprehension questions between the two versions. This suggests that all three groups of participants were able to generate bridging inferences online during their Chinese narrative comprehension. Furthermore, the DD group consumed more processing resources in both types of texts compared to the age-matched control group. The DD group performed significantly worse in inferential processing, as indicated by indicators of reading speed, reading efficiency, first reading time, second reading time, total reading time, average reading time, and fixation counts. However, the DD group exhibited similar performance to the reading level-matched control group.

These findings have implications for language intervention for children with DD. The study suggests that targeting inferential processing skills may be beneficial in improving reading abilities in children with DD.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Prenatal diagnosis of fetal cortical developmental malformations using 3D-ICRV rendering technology

Speaker Name: Yimei Liao

Affiliation: Shenzhen Maternity & Child Healthcare Hospital, China

Abstract:

Objective This study aimed to assess the correlation between abnormal SF on intrauterine neurosonography and MCD, and to explore the value of Whole-Genome Sequencing (WGS) in prenatal detection.

Methods This was a prospective study of fetuses with a sonographic diagnosis of abnormal SF between 2018 and 2020. Intrauterine and/or postnatal MRI examinations were performed to confirm the findings. Amniotic fluid/cord blood obtained by amniocentesis or tissue samples from umbilical cord after birth were collected for WGS. Pregnancy outcome and final diagnosis were recorded.

Results During the study period, 28 fetuses with abnormal SF were identified, with an average gestational age of 24·8±2·0 weeks (range 21·3-30·0 weeks). Abnormal SF presented in MCD (n=15, 53·6%), chromosomal anomalies (n=3, 10·7%) or single-gene genetic syndromes (n=3, 10·7%) with the affected fetuses showing developmental delay, hydrocephalus or leukomalacia (n=4, 14·3%), corpus callosal agenesis with large interhemispheric cysts (n=1, 3·6%), benign subarachnoid space enlargement with arachnoid cysts (n=1, 3·6%), and multiple malformations (n=1, 3·6%). All cases were categorized into six types depending on SF morphology in the axial plane: no plateau-like or a small insula, no SF, irregular corrugated SF, frontal operculum dysplasia, and open operculum. A related pathogenic genetic variant was detected in 57·1% (16/28) and de novo SNVs accounted for 78·6% (11/14).

Conclusions Familiarity with the abnormal ultrasonographic appearances of fetal SF is crucially involved in early detection of MCD and chromosomal anomalies/syndromes. Abnormal SF may indicate a subsequent poor neurodevelopmental prognosis, and single test strategy such as WGS is suggested.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: A study on efficacy and safety of tacrolimus, azathioprine and mycophenolate mofetil therapy for myasthenia gravis

Speaker Name: Li Yang

Affiliation: The Second Xiangya Hospital of Central South University, China

Abstract:

This retrospective, prospective study compared the efficacy and safety of tacrolimus (TAC), azathiopride (AZA) and mycophenolate mofetil (MMF) in the treatment of patients with myasthenia gravis(MG). METHODS: A total of 202 adult-onset MG patients admitted to the Second Xiangya Hospital of Central South University in Hunan Province from January 2018 to September 2022 were selected. They were divided into TAC, AZA and MMF groups. Each patient was reviewed or followed up for at least 6 months, and the time for each patient to reach minimal manifestation status (MMS) or better, the ADL score and QOL-15r score before and after treatment, recurrence and adverse events, etc., were recorded. RESULTS: 1.There was no significant difference in the proportion of patients who reached MMS at the end of follow-up (P=0.156). 2. After therapy, the improvement of ADL score (P=0.298) and QOL-15r score (P=0.126) in three group. 3.After treatment, the proportion of adverse effects in TAC group, AZA group and MMF group was 25.53%, 24.32% and 17.65%(P=0.687), respectively. 4.The time to first relapse in TAC group, AZA group and MMF group was 10 months, 9 months and 3 months (P=0.001*), but there was no significant difference in the overall recurrence rate at the end of follow-up(P=0.571). 5.It was found that the difference between the age of taking immunosuppressants and the age of MG onset in TAC group was an independent risk factor for recurrence by COX regression analysis. CONCLUSIONS: 1.The treatment of MG with TAC, AZA and MMF are all effective treatments for myasthenia gravis, and there is no significant difference in their effecacy. 2. TAC, AZA and MMF are safe in the treatment of MG patients, and there is no significant difference in the safety. 3. Delay in treatment when taking TAC is an independent risk factor for relapse in patients with MG.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Drug and alcohol abuse in patients with intractable epilepsy

Speaker Name: Raafat A Abdeldayem

Affiliation: Faculty of Medicine Mansoura University, Egypt

Abstract:

Background; Seizures often occur in substance abusers.

The aim of the present work; is to study the etiology of non-response to antiepileptic drugs by estimating their serum levels and screening of drugs and substance abuse in patients with resistant epilepsy.

Materials & Methods; this study was conducted on 924 patients with intractable epilepsy were included. All assays run on the system use of homogenous immunoassay technique EMIT (Enzyme Multiplied Immunoassay Test) and confirmed by GC/MS (gas Chromatography/Mass Spectrum).

Results; Confirmed Positive results for drugs and substances abuse were detected in 246 of 924 patients (26.62%) by GC/MS. Cannabis was the first abused drug (29.27%), 17 patients show serum level of antiepileptic drugs (carbamazepine, valproate and phenytoin) within therapeutic range, but 169 patients' levels were below it and 60 patients with levels above it.

Conclusions; Substances abuse may be the cause of resistant epilepsy as they are epileptogenic by themselves or due to drug-drug interaction with the antiepileptic.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: IL-33 promotes sciatic nerve regeneration in mice by modulating macrophage polarization

Speaker Name: Zhikal Omar Khudhur

Affiliation: Tishk International University - Erbil, Iraq

Abstract:

Despite the innate regenerative capacity of peripheral nerves, regeneration after a severe injury is insufficient, and sensorimotor recovery is incomplete. As a result, finding alternative methods for improving regeneration and sensorimotor recovery is essential. In this regard, we investigated the effect of IL-33 treatment as a chemokine with neuroprotective properties. IL-33 can facilitate tissue healing by potentiating the type 2 immune response and polarizing macrophages toward the pro-healing M2 phenotype. However, its effects on nerve regeneration remain unclear. Therefore, this research aimed to evaluate the neuroprotective effects of IL-33 on sciatic nerve injury in male C57BL/6 mice. After crushing the left sciatic nerve, the animals were given 10, 25, or 50 µg/kg IL-33 intraperitoneally for seven days. The sensorimotor recovery was then assessed eight weeks after surgery. In addition, immunohistochemistry, ELISA, and real-time PCR were used to assess macrophage polarization, cytokine secretion, and neurotrophic factor expression in the injured nerves. IL-33 at 50 and 25 µg/kg doses could significantly accelerate nerve regeneration and improve sensorimotor recovery when compared to 10 µg/kg IL-33 and control groups. Furthermore, at 50 and 25 µg/kg doses, IL-33 polarized macrophages toward an M2 phenotype and reduced proinflammatory cytokines at the injury site. It also increased the mRNA expression of NGF, VEGF, and BDNF. These findings suggest that a seven-day IL-33 treatment had neuroprotective effects in a mouse sciatic nerve crush model, most likely by inducing macrophage polarization toward M2 and regulating inflammatory microenvironments.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Management of floating arm: A case report

Speaker Name: Nadia Zameni

Affiliation: Shahid Beheshti University of Medical Sciences, Iran

Abstract:

The floating arm is a rare fracture, and so far there have been few cases reported. The treatment of this type of fracture is challenging and depends on several factors including age, underlying conditions, daily level of activity, fracture pattern, surgeon's experience, and availability of devices.

This study report a 59-year-old man with a rare humeral fracture and a severe crush injury of the forearm. There is a paucity of evidence regarding the management of concomitant floating arm and soft tissue injuries in the literature.

The patient was managed by minimally invasive plate osteosynthesis (MIPO) and vacuum-assisted closure (VAC) followed by a split-thickness skin graft.

The concurrent presence of the two pathologies exacerbated the patient's condition and made the management challenging. In this case, the authors have used the MIPO approach to fix both fractures with minimal soft tissue injury. To manage the prominent soft tissue injury, we applied the VAC device. VAC has the advantages of reducing edema, controlling bacterial growth, and promoting granulation tissue formation, leading to faster cellular turnover and healing.

In patients with floating arm, especially with concomitant soft tissue damage, the MIPO approach is a safe, minimally invasive, and quick method with minimal bleeding.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS

JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Hermann grid illusion fails to fool patients with schizophrenia: Experimental support for a reduced lateral inhibition hypothesis

Speaker Name: Mehrana Kanani

Affiliation: Shiraz University, Iran

Abstract:

A large body of evidence indicated that patients with schizophrenia spectrum disorders show deficit in perceptual and visual processing, but little is known about the origin of this defect. One of the strategies used to reveal the origin of such defects is to use tests that have a strong neuropsychological basis in normal individuals. In this study, we used the Hermann grid task to reveal the source of visual deficit in patients with schizophrenia. Several findings have shown that the Hermann grid illusion results from lateral inhibition of neuro-visual pathway cells. We compared 26 patients with schizophrenia to 26 participants with high schizotypy traits and 26 normal controls in a computer test we designed for the Hermann grid illusion. Chi-square analysis revealed that the patients with schizophrenia and the participants with high schizotypy traits reported significantly less the Hermann grid illusion than healthy controls. Therefore, the results support the hypothesis of a defect in lateral inhibition of patients with schizophrenia. This might suggest that the visual pathway cells in schizophrenic patients failed to properly combine the data from the visual receptors as they do in healthy people.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Does venepuncture associated stress result in misdiagnosis of hyperprolactinemia?"

Speaker Name: Madhumita Das

Affiliation: Guwahati Neurological Research Centre Medical Lab

Abstract:

In the 1970s, stress was identified as a cause of transient hyperprolactinemia, and venepuncture was considered to be a source of stress in the patient. Stress-induced variation of neuroendocrine is the basis of this functional hyperprolactinemia. Serial blood sampling at intervals of few minutes was considered to be effective in correcting stress-induced hyperprolactinemia.

The aim of this study was to investigate the association of venepuncture-induced stress with elevation of serum prolactin.

This was a cross-sectional observational study conducted on a group of 150 outdoor patients visiting a tertiary care hospital. Serial sampling was performed by drawing venous blood at different time intervals (0, 30 and 60 min) by single venepuncture to measure serum prolactin to diagnose stress-induced hyperprolactinemia.

The study was conducted in two phases, Phase1 and Phase2. The Phase1 results were divided into two groups: Group1 (0 min) and Group5 (pool prepared from samples collected at 0 + 30 + 60 min). Likewise, the results of Phase2 were segregated into five groups: Group1 (0 min), Group2 (30 min), Group3 (60 min), Group4 (average of three groups), and Group5 (pool). In both phases, there was a significant ($p = 0.0003$ in Phase1 and $p = 0.02$ in Phase2) decrease in the mean prolactin (17.99 ± 24.76 ng/mL in Phase1 and 19.61 ± 23.42 ng/mL in Phase2) in Group5 compared that (19.67 ± 27.69 ng/mL in Phase1 and 21.06 ± 25.06 ng/mL in Phase2) in Group1. There was no significant difference in the mean prolactin measured from Group5 and Group4.

Venepuncture-triggered fear and apprehension may result in transient hyperprolactinemia, and a period of 60 min rest and relaxation results in significant reduction in the serum prolactin level. Moreover, measuring the prolactin from the pooled serum was found to be the better alternative over performing multiple tests.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS

JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Examination of OCT4 protein and gene expression during the transition of spermatogonia stem cells into neurons through the utilization of immunohistochemistry, immunocytochemistry, and bioinformatics analysis

Speaker Name: Danial Hashemi Karoii

Affiliation: University of Tehran

Abstract:

Spermatogonia Stem Cells (SSCs) hold promise as potential candidates for reprogramming and regeneration. Recent research has illuminated the possibility of reverting differentiated cells to a pluripotent state by overexpressing a specific set of pluripotent transcription factors. One such critical factor is OCT4, encoded by the pou5f1 gene, a member of the POU transcription factor family. OCT4 plays a pivotal role in controlling pluripotency and is typically abundantly expressed in pluripotent stem cells, but its expression diminishes or becomes suppressed upon differentiation.

In this investigated study, we examined the expression of OCT4 throughout the differentiation process of SSCs into neurons, which involves four distinct stages: SSCs in vivo and in-vitro, Embryonic Stem Cell-like (ES-like) cells, formation of Embryonic Bodies (EBs), and the final differentiation into Neurons. Our analysis utilized techniques such as Immunocytochemistry (ICC), Immunohistochemistry (IMH), and Fluidigm Real-Time polymerase chain reaction. Additionally, we employed databases like STRING to predict protein-protein interactions and perform enrichment analysis.

Our investigations into OCT4 expression revealed that it is present in SSCs, ES-like cells, and EBs during the differentiation of spermatogonia stem cells into adult neurons. Notably, the addition of retinoic acid (RA) to EBs led to a reduction in OCT4 expression, and it was not observed in the mature neuron cells. These findings suggest a significant relationship and interaction between OCT4 expression and the differentiation process of spermatogonia stem cells into neurons. Moreover, it underscores the biological functionality of OCT4 in tasks such as stem cell maintenance and somatic cell reprogramming.

Our discoveries contribute to a deeper understanding of the intricate process of differentiating spermatogonia stem cells into neurons. This knowledge has the potential to be instrumental in the development of novel and more efficient treatments for neurogenesis and neuronal repair.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Investigation on canonical Wnt signaling pathway at different stages of Temporal Lobe Epilepsy: An interventional study

Speaker Name: Kajal Rawat

Affiliation: Post Graduate Institute of Medical Education and Research (PGIMER)

Abstract:

Temporal Lobe Epilepsy (TLE) is a life-threatening neurological condition associated with recurrent seizure episodes. It is reported to be associated with epileptogenesis which originates during latent period spanning the chronic phase post-neurologic insult. Recent work has shown involvement of canonical Wnt signaling in the pathophysiology underlying epileptogenesis and TLE.

The present study aimed to assess the therapeutic potential of modulating canonical Wnt signaling at both acute and chronic stages of TLE using a repeated low-dose lithium chloride-pilocarpine induced rat model.

Repeated low-dose lithium-pilocarpine model of status epilepticus was developed and followed for 30 and 60 days to study acute and chronic stage, respectively. The Wnt modulators GSK-3β inhibitor, 6-bromoindirubin-3'-oxime and disheveled inhibitor, niclosamide were used in acute and+ chronic stage and several parameters were assessed including seizure-frequency, astrogliosis, synaptic-density and neuronal count in hippocampus. Western-blotting and qRTPCR were performed to examine protein expression and relative mRNA expression of the molecules involved in canonical Wnt/β-catenin signaling.

The western blotting and real time PCR results have shown that the key transcription factor i.e. nuclear β-catenin remain downregulated in acute stage and upregulated in chronic stage of TLE, suggesting the downregulation of canonical Wnt signaling in acute stage while upregulation of canonical Wnt signaling in chronic stage of TLE. The upregulation of canonical Wnt signaling using GSK-3β inhibitor, 6-Bio found to have antiepileptogenic (reduced seizure frequency) and neuroprotective (reduced gliosis and increased synaptogenesis) effects in acute stage TLE. While the downregulation of Wnt signaling using Disheveled inhibitor, niclosamide found to have beneficial effects in chronic stage of TLE.

Canonical Wnt signaling remain downregulated in acute stage and hence GSK-3β inhibitor 6-Bio was found beneficial in acute stage. While the Wnt signaling was found upregulated in chronic stage and hence disheveled inhibitor, niclosamide had shown neuroprotective and antiepileptogenic effects in chronic stage.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Crosstalk between PPARγ and WNT/β-catenin pathway: A potential approach in rat model of autism spectrum disorder

Speaker Name: Arushi Sandhu

Affiliation: Postgraduate Institute of Medical Education and Research (PGIMER)

Abstract:

Autism spectrum disorder (ASD) is complex neurodevelopmental condition, characterized by impaired social interaction and stereotypic behaviors. The clinical manifestation of ASD is linked to the disruption of fundamental neurodevelopmental pathways. Notably, the canonical WNT/β-catenin pathway is increased while PPARγ seems to be decreased in ASD.

This study investigates the therapeutic potential of pioglitazone, a PPARγ agonist, in rat model of ASD. The study also further explores the role of PPARγ and Wnt/β- catenin pathway and their interaction by using their modulators.

Pregnant female Wistar rats received 600 mg/kg Valproic acid (VPA) on Embryonic day 12 to induce autistic-like-behavioral and neurobiological alterations in offsprings. The potential therapeutic effect of pioglitazone was evaluated through behavioral, biochemical, and histopathology (H&E and Nissl stain). Best effective dose of pioglitazone was chosen to study its effect on WNT pathway. To further validate the opposing interplay between PPARγ and WNT pathway, we administered offsprings with 6-bromoindirubin-3'-oxime (6-BIO) (4µg/kg), which is a modulator of the WNT/β-catenin pathway.

VPA-exposed rats presented core autistic symptoms and VPA exposure also stimulated neurochemical and histopathological neurodegeneration in various brain regions. Three doses of pioglitazone (2.5, 5, 10mg/kg) were used for assessing various parameters and among them, 10mg/kg pioglitazone efficiently attenuated the autistic symptoms along with other neurochemical alterations like neuroinflammation, apoptosis and restored the neuronal loss in hippocampus and cerebellum. Further, 10 mg/kg dose of pioglitazone found to modulate WNT/β-catenin pathway via inhibiting the expression of associated proteins and utilization of 6-BIO confirmed the opposite interaction between pathways.

The observed amelioration in ASD rats resulting from pioglitazone administration can be linked to its possible neuroprotective effect, along with its role in downregulating WNT/β-catenin pathway. The antagonistic interplay between the PPARγ and WNT/β-catenin pathway presents a promising avenue for potential therapeutic interventions in treating ASD.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS

JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Exploring the effect of 6-BIO and Sulindac in modulation of Wnt/β-catenin signaling pathway in chronic phase of temporal lobe epilepsy

Speaker Name: Vipasha Gautam

Affiliation: Post Graduate Institute of Medical Education and Research (PGIMER)

Abstract:

The prospective involvement of the Wnt/β-catenin signaling pathway in epilepsy, with the proposed therapeutic uses of its modulators, has been suggested; however, comprehensive knowledge in this regard is currently limited. Despite postulations about the pathway's significance and treatment potential, a systematic investigation is required to better understand its implications in chronic epilepsy.

To investigate how the modulators sulindac and 6-BIO impact seizure scores, seizure frequency, and neurobehavioral tests. Additionally, to examine the gene and protein expression of the Wnt/β-catenin pathway, proteins related to apoptosis, and conduct histopathological and immunohistochemical studies. We investigated the role of key proteins like β-catenin, GSK-3β, and their modulators, in Wnt/β-catenin pathway during chronic phase of temporal lobe epilepsy.

We induced a status epilepticus model using lithium-pilocarpine in male wistar rats. We examined the effect of modulators on seizure scores, seizure frequency (by manually monitoring it for 5 hours each week), and neurobehavioral parameters in the chronic phase of temporal lobe epilepsy. After that, we conducted histopathological examinations, performed immunohistochemistry staining of the hippocampus, and used qRT-PCR and western blotting to analyze gene and protein expression.

In SE rats, seizure score and frequency were significantly high compared to control rats, with notable changes in neurobehavioral parameters and neuronal damage observed in hippocampus. Our study also revealed a substantial upregulation of the Wnt/β-catenin pathway in chronic epilepsy, as evidenced by gene and protein expression studies. Sulindac emerged as a potent modulator, reducing seizure score, frequency, neuronal damage, apoptosis, and downregulating the Wnt/β-catenin pathway when compared to 6-BIO.

Our findings emphasize the potential of GSK-3β and β-catenin as promising drug targets for chronic temporal lobe epilepsy, offering valuable treatment options for chronic epilepsy. The promising outcomes with sulindac encourages further exploration in clinical trials to assess its therapeutic potential.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Pharmacological assessment of Bergenia ligulata and Nelumbo nucifera Combination in Mitigating Aluminium Chloride-induced Neurotoxicity

Speaker Name: Nilay Solanki

Affiliation: Charotar University of Science and Technology

Abstract:

Neurodegenerative conditions involve the buildup of modified proteins in the brain and adjacent tissues, along with a gradual decline in nerve cell count. Neurotoxicity arises when exposure to harmful substances disrupts the normal functions of the nervous system, potentially leading to nerve cell disturbance or demise. These cells play a critical role in transmitting and processing signals within the brain and nervous system. Alzheimer's disease progressively diminishes an individual's ability to recall information, reason, and perform routine tasks. Our current investigation concentrates on exploring the potential protective impact of a blend comprising Bergenia ligulata and Nelumbo nucifera in mice afflicted with neurotoxicity triggered by aluminum chloride. Forty-six rats were divided into multiple groups, all subjected to AlCl3 inducing neurotoxicity except for one group receiving the combined therapy of Nelumbo nucifera and Bergenia ligulata. Various parameters were evaluated, including behavioral assessments, estimation of AChE (acetylcholinesterase), oxidative stress markers, and apoptotic markers. AChE levels increased due to AlCl3 exposure but decreased during the combined therapy. Additionally, the therapy reduced levels of GSH, SOD, and catalase while elevating MDA levels, resulting in a contrasting effect on oxidative stress. AlCl3 also influenced apoptosis by elevating Caspase-3 levels and reducing Bcl-2 levels. The therapy, however, mitigated apoptosis by decreasing Caspase-3 levels and enhancing Bcl-2 levels. These findings indicate that the combined therapy involving Bergenia ligulata and Nelumbo nucifera possesses neuroprotective properties against AlCl3-induced neurotoxicity in rats.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: Spinal Anesthesia for Laparoscopic Cholecystectomy in Case of Post-Polio Syndrome: A Case Report

Speaker Name: Prabin Subedi

Affiliation: Kathmandu Medical College and Teaching Hospital

Abstract:

Post-Polio Syndrome (PPS) poses challenges during the perioperative period due to its impact on motor neurons, the brain stem, and anesthetic sensitivity. Limited research exists on anesthesia in polio patients, showing general anesthesia with volatile agents, sedative-hypnotics, opioids, and neuromuscular blocking agents can lead to increased sensitivity and adverse effects. Spinal anesthesia was successfully employed in a 52-year-old male patient with acute calculous cholecystitis and PPS undergoing laparoscopic cholecystectomy. T4 sensory block was achieved using heavy bupivacaine, and low intra-abdominal pressure was maintained. Transient hypotension was managed with a vasopressor, and the patient experienced no perioperative neurological deterioration and discharge on the second postoperative day. Spinal anesthesia can be a valid technique for laparoscopic cholecystectomy in needy patients with multiple perioperative risks. This highlights the favorable outcomes of spinal anesthesia in high-risk polio patients.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: CNS Melioidosis: A Diagnostic Challenge

Speaker Name: Preeti Singh

Affiliation: Institute of Neurosciences Kolkata

Abstract:

Melioidosis is an emerging tropical disease caused by the bacteria Burkholderia Pseudomallei. It can virtually affect any organ with clinical presentations ranging from pneumonia to fatal sepsis. Central nervous system (CNS) involvement in melioidosis is rare (1.5-10%) with high mortality rate of 60 % . A high index of suspicion and isolation of organisms is the cornerstone for appropriate management

A 60 year female presented with low-grade fever for 3 weeks, headache and confusion for 5 days, and left-sided weakness for 3 days duration. She was admitted to a local hospital with one episode of generalized tonic-clonic convulsion. A contrast Computerized Tomography (CT) scan of the head showed a ring enhancing lesion in the right parietal lobe with significant perilesional edema. She was discharged on antitubercular drugs (ATT). On arrival at our hospital, she was very drowsy, with dense left hemiplegia. Routine blood investigations were normal except for a white blood counts (WBCs) of 16,300/mL and serum Alanine aminotransferase (ALT) of 110 IU/L. MRI brain was advised which showed multiple rings enhancing lesions in the right parietal lobe showing diffusion restriction.

Opinion from infection control specialist was taken and patient was started on injection Ceftriaxone. Next day her drowsiness increased . Guarded LP was done which showed 35 cells (N 40%, L 60%) sugar 44 mg/dl. Protein 115 mg/dl.Patient underwent mini craniotomy and biopsy of lesion. Post surgery her sensorium remained poor for the next few days .Extraocular movements were restricted along left motor neuron facial palsy. Gram stain showed growth of gram negative bacilli. ZN Stain and PAS stain was negative. CSF and tissue MTB gene expert was negative. Culture showed growth of burkholderia pseudomallei.

Histopathological examination:- Acute suppurative inflammation of the brain, associated with necrosis. The surrounding brain parenchyma shows many plasma cells and histiocytes with granulation tissue, epithelioid histiocytes are also seen, forming ill-defined granulomas. The rest of the brain shows mild gliosis and perivascular lymphocytic cuffing. Special stains do not reveal acid fast bacilli and fungal organisms. Viral inclusions are not seen. There is no evidence of malignancy.

Ceftriaxone was escalated to meropenem and cotrimoxazole . She steadily improved. Parenteral antibiotics was continued for 6 weeks. Repeat MRI was done which showed regression in rim enhancing lesion in right perirolandic cortex and paracenteral lobule. Increase in enhancement of nodular lesion more inferiorly which may represent temporal evolution.

Suggestive of significant residual disease with partial response. She was discharged on oral cotrimoxazole . Neurologically her left hemiparesis is improving steadily with rehablitation.

Instead of assuming a common diagnosis of tuberculosis and waiting for an empirical ATT response, a high index of suspicion, timely surgery, isolation of the organism and correct management can save individual from this lifethreatening CNS infection.

PEERS ALLEY MEDIA

5th Global Conclave on
NEUROLOGY AND NEUROLOGICAL DISORDERS
JUNE 25-26, 2024 | AMSTERDAM, NETHERLANDS

FEATURED TALKS

Title: A descriptive review of MEDICATION OVERUSE HEADACHE-from pathophysiology to the comorbidities

Speaker Name: Srdjan Ljubisavljevic

Affiliation: University clinial centre of Nis, Serbia

Abstract:

Medication overuse headache (MOH) is an im-portant problem worlwide areas of different controversy regarding its entity. This article reviews the risk factors, comorbidities, pathophysiology, clinical presenta-tion, effective management and prognosis of MOH, by summaries and integrates the results and finding in previously performed more than 15000 studies (from the year of 2010 to 2023) available from the scientific database of the University Medical Library in the University Clinical centre of Niš, which aimed to investigate and define a complexcity of this type of headache. Recent finding: It has been proposed that all acute migraine medications can lead to MOH, with differences in the propensity of different agents to cause the problem. Early data suggests that triptans and other pain killers used for the acute treatment of migraine, may be an exception. Recent studies show that practicioners and the general public are still largely unaware of the problem of medication overuse and its damaging effects. Summary: Although it is likely that MOH does occur and restricting the amount of acute medications is necessary to prevent it. It is also possible that increasing amounts of acute medications are simply a reflection of poorly controlled head-aches, rather than a couse. Further researches need to be developed to identify more precisious mechanism in MOH effecitive management and its evolution.

Amsterdam Royal Zoo

Art Collections at the Rijksmuseum

Dam Square

De Hoge Veluwe National Park, Otterlo

EYE Film Institute Netherlands

Great Art at the Van Gogh Museum

NETWORKING... CONFERENCING... FOSTERING

Attending a Conference isn't all about Learning and Networking

DISCOVERING

A right choice of conference destination is an important aspect of any international conference and keeping that in consideration, ***NEURO Conclave 2024*** is scheduled in the Beautiful city "Amsterdam'.

Hop-On Hop-Off Bus and Boat

Jordaan and Amsterdam's Canals

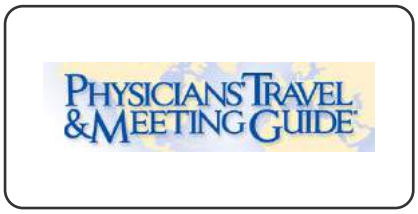
Jordaan Neighborhood

NEMO Science Museum

Oude Haven, Rotterdam

Oude Kerk's Tower

Sponsors | Media Partners



Peers Alley Media

1126 59 Ave East, V5X 1Y9, Vancouver BC, Canada

WhatsApp No: +1 778-244-7702

Program Director

NEURO Conclave 2024

CONNECT US