

() 8:30 AM TO 5:00 PM

## The 3rd Annual Pediatric Neurology Conference, 1<sup>st</sup> of March, 2024

#### "Epilepsy: Advancing the Knowledge, Improving the Care"

8:30 - 8:45	Registration & opening remarks ( Prof. Akram Al-Mahdawi)		
Session 1			
Session moderators: Prof. Akram Al-Mahdawi & Dr Manal Bahnam			
8:45 - 9:10	Focal Epilepsy in Children: Is it the Same Semiology as in Adults?	Ghaieb Al-Jandeel ( <i>Iraq</i> )	
9:10 - 9:35	Autonomic Seizures	Ammar Mohammed Hallomi ( <i>Iraq</i> )	
9:35 - 10:00	Update in Neonatal Seizures and Classification	Hula R. Shareef ( <i>Iraq</i> )	
10:00 - 10:10	Typical Absence versus Frontal Absence: Case Presentation	Huda Kareem ( <i>Iraq</i> )	
10:10 - 10:15	Discussion		
10:15 - 10:30	Coffee break		
Session 2			
Session moderators: Prof. Lamiaa Al-Saadi & Assistant Prof. Bassam Musa Sadik			
10:30 - 10:55	Developmental and Epileptic Dyskinetic Encephalopathies	Chahnez C. Triki ( <i>Tunis</i> )	
10:55 - 11:20	Developmental and Epileptic Encephalopathy: What Do we Know?	Adel A. Kareem ( <i>Iraq</i> )	
11:20 - 11:40	Fit versus Faint	Ali Kadhim Al-Husseinawi (Iraq)	
11:40 - 12:00	Pediatric Seizure Mimics	Omar Abdulraheem Thu- Noon ( <i>Iraq</i> )	
12:00 - 12:05	Discussion		

Session 3			
Session moderators: Dr Safaa Al-Shamari & Dr Qusay Abed Fahad			
12:10 - 12:25	How to Select the Right Patient for Vagal Nerve Stimulation (VNS)	Hula R. Shareef ( <i>Iraq</i> )	
12:25 – 12:50	MRI Findings in Childhood Epilepsy at Children Welfare Teaching Hospital	Sura Jawad Abd-Rhada (Iraq)	
12:50 - 13:10	EEG Setting and Special Considerations in Pediatrics	Fatima Zahid Saadoon ( <i>Iraq</i> )	
13:10 - 13:30	Clinical and Electrophysiological Spectrum of Absences in Children: Case – based Review	Noor Hamza Al-Janabi ( <i>Iraq</i> )	
13:30 - 13:55	Genetic Testing in Neurodevelopmental Disorders and Epilepsy	Dana Marafi (Kuwait)	
13:55 - 14:05	Amplituede-integrated Electroencephalography for Neonatologists and Practitioners in the NICU	Numaan N. Al- Hamadani ( <i>Iraq</i> )	
14:05 - 14:10	Discussion		
14:10 - 15:10	Launch		
Session 4			
Session moderators: Prof. Ali Al-Shalchi + Assistant prof. Mohammed Abdul Sattar			
15:10 - 15:35	Anti-seizure Drugs Choices	Husham Zuhair Hammood ( <i>Iraq</i> )	
15:35 – 15:55	Management of Neonatal Seizure	Assad Ghanim Jaddoa ( <i>Iraq</i> )	
15:55 – 16:20	Children with Drug Resistant Epilepsy: Evaluation and Management	Nebal Waill Saadi ( <i>Iraq</i> )	
16:20 - 16:35	Withdrawal of Antiepileptic Drugs	Sarwer Jamal Al-Bajalan ( <i>Iraq</i> )	
16:35 – 17:00	An Approach to Presurgical Workup in Patients with Refractory Epilepsy	Fatima Jaafar ( <i>Lebanon</i> )	
17:00 - 17:10	Epilepsia Partialis Continua: Case Presentation	Basma Adel ( <i>Iraq</i> )	
17:10 - 17:20	The Role of Steroid in Epilepsy	Sarah Baqer Othman ( <i>Iraq</i> )	
17:20 - 16:25	Discussion		
17:25 - 17:50	Works of Art Exhibition + Lotto		
17:50 - 18:00	Closing Remarks		



#### Professor Akram Al-Mahdawi

Regional advisory of Royal College of Physicians of Edinburgh. Chairman of Iraqi Neurology Council /Iraqi Board for Medical Specialization. Chairman of scientific committee of Neurophysiology Board. Member of scientific committee of pediatric neurology board. Chairman of Iraqi Neurology Society. Vice president of the Pan Arab Union of Neurological Societies (PAUNS). Iraqi representative in WFN delegate. E-mail: <u>akramalmahdawi@gmail.com</u>

#### Welcoming speech

We are pleased to invite you to the Conference "Third annual Iraqi paediatric neurology conference", which will take place on 1<sup>st</sup> of March, 2024. Taking into consideration the rapid developments and breakthroughs around the world, it is only imaginable the amount of hardship and difficulties faced in initial steps throughout this field and yet one thing is for sure, the pace is growing a lot faster with plans to establish more fellowships in paediatric neurology to match the world-wide development in neurology. Intended to be set as a landmark in the field, the conference of "paediatric neurology" aims at bringing together leading academic scholars and scientists to share their experiences in an open and constructive dialogue which more specifically represents a wonderful opportunity for on-going formation that may bring about potential solutions to bridge the gaps to ultimately come up with national and international framework of education system in the future



#### **Ghaieb Aljandeel**

Senior Consultant Epileptologist & Clinical Neurophysiologist. Senior Lecturer and Member of Teaching Faculty of Iraqi Council for Medical. Specializations in: Iraqi Boards of Neurology, of Pediatric Neurology and of Clinical. Neurophysiology. Sec General of Iraqi League Against Epilepsy. Chair of ILAE-Eastern Mediterranean Region (2021-2025). Member of ExCom of LIAE. Member of ExCom of Global Advocacy Council/ILAE. Email: <u>aljandeel@hotmail.com</u>

#### Focal seizure semiology in children: Is it the same as in adults?

Seizure semiology, the observable clinical features of seizures, exhibits nuanced variations influenced by age. Childhood seizures commonly manifest with generalized tonic-clonic or absence semiology, while neonatal seizures may present with subtle motor manifestations or autonomic features. In adolescence, focal seizures with altered awareness become more prevalent, potentially reflecting the maturation of specific brain regions. Conversely, aging populations demonstrate alterations in seizure semiology due to age-related structural and functional changes in the brain. Elderly individuals may exhibit atypical semiology, including focal seizures with subtle manifestations or non-convulsive status epilepticus, posing diagnostic challenges. Epileptic seizure semiology adds valuable knowledge to the formulation of a hypothesis for the epileptogenic zone. The concept that the child is not simply a little adult is more applicable on the epileptic seizures than elsewhere. Seizure semiology of in infants and children is simple and elementary, compared to that of adolescents and adults, becoming more complex with maturation of brain. In this age group, seizure semiology may be generalized in a setting of a focal lesion or may show focal signs but with misleading localization values; the difficulty of reliably assessing the level of consciousness, together with lacking of proper vocabulary to describe what is seen, smelled or felt or to describe the aura, may add further complexities. This review threw light on age effect on seizure semiology and at least clarified the fact that focal seizure semiology and focal epileptiform discharges don't necessarily mean focal seizures. Understanding age-related variations in seizure semiology is crucial for accurate diagnosis, effective management, and personalized treatment strategies across the lifespan.



## **DR. Ammar Mohammed Hallumy**

Consultant neurologists/Epileptologist, Baghdad Medical City, Neurology Unit / Epilepsy Unit. Trainer of undergraduate and postgraduate Students, & fellows in (neurology, neurophysiology and epilepsy fellowship). Member of the Iraqi Society of Adult Neuro. Email: <u>Dr.hallumy@yahoo.com</u>

#### **Autonomic Seizures**

Patients with epilepsy frequently experience autonomic dysfunction and impaired cerebral autoregulation. Autonomic Seizures defined as an epileptic seizure that is characterized by altered autonomic function of any type at seizure onset or in which manifestations consistent with altered autonomic function are prominent even if not present at seizure onset. Aim To review the pathophysiology of autonomic symptoms and signs during epileptic seizures. Recommendation to increase awareness of general physician, pediatric and adult neurologist for this type of seizure, as those patients are at high risk for sudden, unexpected death in epilepsy (SUDIP)



#### Hula R. Shareef, MD

Consultant pediatric neurology, children welfare teaching hospital, medical city complex, Baghdad. Supervisor of pediatrics and pediatric neurology, Iraqi council of medical specialization. Supervisor of Iraqi neurophysiology board, Iraqi Epilepsy fellowship/ Iraqi council of medical specialization. Department rapporteur of Arab board/Iraq of pediatric neurology, and the Autism fellowship. Executive committee of Iraqi Chapter of Epilepsy. Email: hularaoof@yahoo.com

#### Update in Neonatal Seizures and Classification

Neonatal seizures are defined as seizures occurring within 4 weeks after birth in full-term infants or within 44 weeks of postmenstrual age in preterm infants. The estimated incidence of these seizures is 2.29 cases per 1000 live births. Higher rates have been reported among preterm neonates than among full-term neonatel The International League against Epilepsy (ILAE) has developed a diagnostic framework to classify neonatal seizures, which facilitates the use of common terminology and assists clinicians in making treatment decisions. Most neonatal seizures are transient and result from acute metabolic disturbances, infectious processes, or acute focal cerebral lesions. Such seizures are considered to be provoked. In full-term neonates, the most common cause of provoked seizures is hypoxic ischemic encephalopathy, followed in frequency by stroke and infection. In preterm neonates, the most common cause is intra-ventricular hemorrhage. Identifying the provoking event is essential for determining management. Provoked seizures are not considered to be epilepsy, which is defined as two or more unprovoked seizures, and provoked seizures typically do not require long-term treatment with antiseizure medication. Neonatal epilepsy syndromes, which are uncommon, frequently have genetic causes, and unlike provoked seizures, some of these syndromes require long-term treatment.



### Huda Kareem Hussein, MD

Pediatrician. A fellow of Brain and Nerve Diseases in Children, Arab Council of Health Specialization, Children welfare teaching hospital. Email: <u>dr.huda1987kareem@gamil.com</u>

#### **Typical Absence versus Frontal Absence: Case Presentation**

Absence seizure is a type of generalized seizure that is characterized by sudden discontinuation of activity with loss of awareness, responsiveness and memory and an equally abrupt recovery. Absence seizures are classified into typical absence seizure, atypical absence seizure and absence with special features, myoclonic absence and eyelid myoclonia. Typical absence seizure is characterized by sudden onset of 3 Hz., generalized, high amplitude symmetrical spike - wave discharges. Atypical absence seizures are associated with a slower spike - wave frequency on EEG (1.5 - 2.5 Hz) that may be irregular or asymmetrical. There are many epilepsy syndromes associated with absence seizure like childhood absence epilepsy, epilepsy with myoclonic absences, absence with eyelid myoclonia (Jeavons syndrome), LGS, juvenile absence epilepsy, juvenile myoclonic epilepsy. In this talk we will present a case of rare type of absence seizure. Focal onset of generalized absence seizure which is predominantly from frontal lobe, so called frontal absence seizure.



## Chahnez Charfi Triki, MD

Professor of Neurology at the Faculty of Medicine (FMS) of the University of Sfax in Tunisia. She is head of the pediatric neurology department at the CHU Hédi Chaker in Sfax and director of research in Sfax medical school. Professor in charge of a professional master's degree in epileptology at the FMS in 2000 and president of Tunisian association for the development of epileptology. She is the past chair of ILAE-EMR and the current vice president of IBE for EMR. She is elected in 2023 ILAE-IBE Ambassador of epilepsy. Email: chahnezct@gmail.com

## **Developmental and Epileptic-Dyskinetic encephalopathies**

Developmental epileptic encephalopathies (DEEs) constitute a heterogeneous group of severe epileptic syndromes occurring mainly in infants. Genetic etiologies are responsible for 40 to 50% of cases, mainly in early EED, and approximately 800 genes are involved in the cause of EED. Among other symptoms, movement disorders (MDs) are common. MDs are hyperkinetic in 85% of cases, appear very early and persist even after the crisis has disappeared.

The association of paroxysmal MDs with self-limited epilepsies, such as paroxysmal kinesigenic dyskinesia and self-limited familial infantile epilepsies, characterized by the coexistence of choreoathetosis with infantile seizures, due to PRRT2 pathogenic variants is well recognized. Recently, greater attention has been paid to the presence of MDs in DEES and several studies have attempted to more precisely describe this association and find its pathophysiological explanation.

In clinical practice, recognizing the association of epileptic seizures and MDs is very important. Indeed, these MDs can be responsible for an erroneous diagnosis of epileptic seizures with unnecessary increase in ASM, can help in referral to a genetic study and above all make it possible in certain cases to offer the patient precision medicine.



#### Adel A. Kareem, MD

Consultant pediatric neurologist, Children Welfare Teaching Hospital in medical city complex, Baghdad. Iraqi and Arab Board in pediatric Iraqi Board for Medical Subspecialty in Pediatric neurology and neurodisability. Rapporteur of the Iraqi Pediatric Neurology fellowship committee and a head of Arab board of subspecialty in pediatric neurology and pediatric metabolic disorder. E. mail address: <u>adelkareemlh@gmail.com</u>

#### Developmental and Epileptic Encephalopathy: what we do know?

The term "developmental and epileptic encephalopathy" (DEE) refers to when cognitive functions are influenced by both seizure and interictal epileptiform activity and the neurobiological process behind the epilepsy. Many DEEs are related to gene variants and the onset is typically during early childhood. In this setting, neuro-cognition, whilst not improved by seizure control, may benefit from some precision therapies. In patients with nonprogressive diseases with cognitive impairment and co-existing epilepsy, in whom the epileptiform activity does not affect or has minimal effect on function, the term "developmental encephalopathy" (DE) can be used. In contrast, for those patients with direct impact on cognition due to epileptic or epileptiform activity, the term "epileptic encephalopathy" (EE) is preferred, as most can revert to their normal or near normal baseline cognitive state with appropriate intervention. These children need aggressive treatment. Clinicians must tailor care towards individual needs and realistic expectations for each affected person; those with DE are unlikely to gain from aggressive antiseizure medication whilst those with EE will gain. Patients with DEE might benefit from a precision medicine approach in order to reduce the overall burden of epilepsy.



## Ali khadhim al- husseinawi

Consultant pediatrician, sub speciality pediatric neurologist. Chief of pediatric neurology department, Child Central Teaching Hospital /Baghdad/Iraq. E-mail: pacificalik@gmail.com

## **Fit Versus Faint**

Fits, also called seizures are defined as transient loss of consciousness due to either excessive neuronal firing or asynchronous neuronal firing in the brain. Faints, also called syncope are transient loss of consciousness due to decrease in the blood supply or oxygen delivery to the brain . How to differentiate between them on clinical background? This can possess a potential challenge even for expert neurologists especially in patients from pediatric age groups.



#### **Omar A. Thoalnoon, MD**

Pediatric neurologist, Al\_ Ramadi Teaching Hospital for Maternity and Children. Iraqi Board in pediatrics. Iraqi Board in pediatric neurology and neuro disability. E.mail address: <u>dr.omaralhadeethy@gmail.com</u>

#### **Pediatric Seizure Mimics**

Unusual movements in children frequently generate concern of underlying seizures from parents and lead to professional review. Stigma associated with epilepsy heightens anxiety and a wish to confirm or exclude the diagnosis as soon as possible. These considerations could lead to a wrong diagnosis of epilepsy being given with unwarranted exposure to medications with potential side effects and cost burden to families. In many cases, seizure mimics are consistently triggered by an event, location, or emotion, and often resolve with distraction or tactile stimulation. Suspicion should be raised for seizures when events occur out of deep sleep, there is a loss of consciousness with the event, movements are not suppressible and there is a period of fatigue afterword (minutes to hours). Further, a past medical history of developmental delay (e.g.autism), developmental regression, or neurologic injury increases patients' risk for seizures.



## Hula R. Shareef, MD

Consultant pediatric neurology, children welfare teaching hospital, medical city complex, Baghdad. Supervisor of pediatrics and pediatric neurology, Iraqi neurophysiology Board, and Iraqi Epilepsy Fellowship, Iraqi council of medical specialization. Department rapporteur of Arab board/Iraq of pediatric neurology, and the Autism fellowship. Executive committee of Iraqi Chapter of Epilepsy. Email: <u>hularaoof@yahoo.com</u>

## How to Select the Right Patient for Vagal Nerve Stimulation (VNS)

Vagus nerve stimulation (VNS) was the first neuromodulation device approved for treatment of epilepsy. In more than 20 years of study, VNS has consistently demonstrated efficacy in treating epilepsy. After 2 years, approximately 50% of patients experience at least 50% reduced seizure frequency. Adverse events with VNS treatment are rare and include surgical adverse events (including infection, vocal cord paresis, and so forth) and stimulation side effects (hoarseness, voice change, and cough). Future developments in VNS, including closed-loop and noninvasive stimulation, may reduce side effects or increase efficacy of VNS.

Food and Drug Administration (FDA) as an add-on therapy for adults and children 4 years and older. It is approved to treat focal or partial seizures that do not respond to seizure medications This is called drug-resistant epilepsy or refractory epilepsy.

Vagus nerve stimulation (VNS) may prevent or lessen seizures by sending regular, mild pulses of electrical energy to the brain via the vagus nerve.



## Sura-Jwad Abdul – Rhada, MD

Senior radiologist. M.B.Ch.B, FIBMS - RAD fellowship of Iraqi Board of Medical Specialist -Radiology 2017. Email: <u>surajwadabd@gmail.com</u>

# MRI Finding in childhood epilepsy at Welfare Teaching Hospital

Brain MRI is imaging modality of choice in evaluation of pediatric epilepsy, as it gives better anatomic definition and characterization of focal pathology, establishing etiology, optimal therapeutic choice and appreciation of the epilepsy outcome. In this lecture we will discuss different cases presented with epilepsy to Children Welfare Teaching Hospital to identify key imaging findings than can affect clinical decision making.



## Dr Fatima Zaher Saadoon, MD

M. B. Ch. B, FIBMS (Clinical Neurophysiology). Clinical neurophysiologist and head of Video EEG unit, Baghdad Teaching Hospital, Medical City Complex. Trainer in Clinical Neurophysiology/ Iraqi Board of Medical Specialization and trainer in Neurology Medicine, Arab Council of Health Specialization. Member of the International Federation of Clinical Neurophysiology (IFCN), the International League Against Epilepsy (ILAE), and the American Association of Neuromuscular & Electrodiagnostic Medicine (AANEM). Email: <u>Fatima.jaafar.91@hotmail.com</u>

## **EEG Setting and Special Considerations in Pediatrics**

Electroencephalography (EEG) is an important part of the evaluation of many disorders in infants and children, including seizures, spells, transient central nervous system (CNS) symptoms, behavioral disorders, altered states of consciousness, and lesions or conditions resulting in a disturbance of cerebral function. The basic principles of clinical EEG in adults are also apply to pediatrics, however, special considerations are pertinent to pediatric recordings. EEG in neonates, infants, and young children differs little from recording the EEGs of adults. This presents a number of special problems and challenges that will be discussed in this lecture.



#### Noor Hamza Al-Janabi, MD

Clinical neurophysiologist, Children Welfare Teaching Hospital. email: Noor.hamza64@gmail.com

# Clinical and Electrophysiological Spectrum of Absences in Children: Case – based Review

According to the dictionary of epilepsy typical absence seizures is a very brief clouding or loss of consciousness lasting 3–15 s associated with symmetrical EEG discharge of 3 Hz spike-and-wave complexes may be associated with mild tonic, atonic, tonic and autonomic components, and automatisms. The international league against epilepsy (ILAE) has simplified the classification of absence seizures as follows: 1. Absence seizures: Typical or atypical, each with distinct features 2. Absences with special features: myoclonic absences and eyelid myoclonia. Atypical absence seizures contrary to the typical absences that's Occur only in the context of mainly severe symptomatic or cryptogenic epilepsies, onset and termination is not so abrupt and clinical symptoms of mild-tosevere impairment of consciousness. Ictal EEG is of slow less than 2.5 Hz spike and slow wave. In this review, we have outline the significant clinical, interictal and ictal EEG aspects of absence seizure in children, differentiating classes, types, syndromes with absence seizures that currently valid by ILAE, and probable syndromes that are not official recognized by the ILAE. We studied cases with clinical and electrophysiological diagnosis of absence seizures with and without antiepileptic medication, electroencephalogram (conventional / video EEG) were applied. Used provocation method such as hyperventilation and breath counting, IPS. Absence seizures are easy to miss, but tests such as EEG or, ideally, video-EEG can confirm the diagnosis. Emphasis should be placed on differentiation between absence seizures of idiopathic, genetic generalized epilepsies, epileptic encephalopathy, focal seizures and non-epileptic paroxysmal events (NEPEs), for prognosis, treatment and to minimize the possibility of therapeutic disaster.



#### Prof. Numan Nafie Hameed

(MD, FRCPCH, FIBMS, DCH) and Board certified in Pediatrics. International member of American Academy of Pediatrics. He was trained in Cambridge hospitals, University college London hospitals, Ankara, Cairo and children Welfare Teaching Hospital. Examiner in Arab and Iraqi board of pediatrics and Arab board of Neonatology subspecialty. He supervised and published more than forty articles in national and international medical journals. Editorial member and reviewer of many national and international medical journals. Email: numanalhamdani@yahoo.com

# Amplitude-Integrated Electroencephalography for Neonatologists and Practitioners in the Neonatal Intensive Care Unit

Amplitude-integrated electroencephalography (aEEG) is a valuable modality for continuously monitoring cerebral function in an intensive care setting. It was first described in 1960 by Maynard et al as a tool to monitor the intraoperative cerebral function of adults during anesthesia. However, it did not gain much acceptance as the technology kept evolving and required constant recalibration. It gained favor in the 1980s when neonatologists reintroduced it for use in newborns. Subsequently, its use in the newborn population has been increasingly recognized and it has become the standard of care in the first 6 hours after birth to assist in diagnosing hypoxic-ischemic encephalopathy to determine the need for therapeutic hypothermia. Early detection and institution of target therapy of central nervous system injury is the principal advantage of aEEG in the NICU. Some knowledge and hands-on training is all that are required for the interpretation of aEEG.

Neonatologists need to understand and interpret various patterns of aEEG patterns in both preterm and term infants. They also need to learn the indications, technical aspects, and limitations of aEEG. The aEEG should be a part of neonatal training programs. aEEG is an essential tool used in the NICU to monitor infants with central nervous system pathology and encephalopathy.

This review provides a summary of aEEG, including clinical indications, interpretation of different tracing patterns, and seizure identification, which are essential skills for teams caring for sick newborns. I will also discuss the limitations of the clinical application of aEEG in this population.



#### Assistant professor Dr. Dana Marafi

Department of Pediatrics at the College of Medicine at Kuwait University. She specializes in child neurology with special focus on epilepsy and neurogenetics. Dr. Marafi graduated with high honors from College of Medicine in Kuwait University in 2009. She completed her pediatrics residency training at George Washington University in 2013 followed by Child Neurology residency at Baylor College of Medicine in 2016. She then completed her fellowship training in three disciplines, neurophysiology, epilepsy and medical genetics research, and earned a Master of Science in Clinical Investigations in 2020. Email: dana.marafie@uk.edu.kw

#### Genetic Testing in Neurodevelopmental Disorders and Epilepsy

In this talk the lecturer will share her experience working in child neurology and neurogenetics clinic in Kuwait for the past four years. She will review the definition, prevalence and causes of neurodevelopmental disorders (NDD). She will also review the international recommendations on genetic testing in NDD and epilepsy and the present benefits of genetic testing on children with NDD through case examples.



#### Husham Zuhair Hammoodi, MD

Assistant professor and Consultant pediatrician and pediatric neurology, pediatric neurology unite, children welfare teaching hospital/medical city complex, Baghdad. Email: <u>heshamz813@gmail.com</u>

#### **Anti-seizure Drugs Choices**

In recent years, several new anti-seizure medications with differing mechanisms of action have been introduced in clinical practice. The choice of therapy should integrate the best available evidence of efficacy, tolerability, and effectiveness derived from clinical trials with other pharmacologic considerations, the clinical expertise of the treating physicians, and patient values and preferences.

The use of a drug in clinical practice requires rigorous evidence that it positively affects a health outcome (ie, has efficacy) and is safe.

In epilepsy, if an anti-seizure medication reduces the risk of seizure occurrence without unacceptable adverse effects, it may be considered for use in clinical practice



## Asaad Ghanim Jaddoa, MD

Pediatric Neurologist, Epileptologist, Director of pediatric epilepsy center in Karbala Teaching Hospital for Children. Karbala Teaching Hospital for Children. Email: <a href="mailto:aasad20009@gmail.com">aasad20009@gmail.com</a>

#### **Management of Neonatal Seizures**

Seizures are the most common neurological emergency in the neonatal period. Most seizures in newborns are acute provoked (or symptomatic), other causes include malformation of cortical development, self--limited epilepsy syndromes, the developmental and epileptic encephalopathies (DEEs), and etiology--specific syndromes.

There is substantial management variability. The Neonatal Task Force of the International League Against Epilepsy (ILAE) developed evidence--based recommendations about antiseizure medication (ASM) management in neonates in accordance with ILAE standards.

This review presents the recent guidelines and recommendations from the International League Against Epi-lepsy regarding the treatment of neonatal seizures.

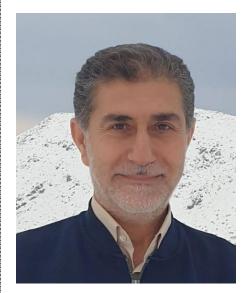


#### Assistant Prof. Dr. Nebal Waill Saadi

Assistant professor of pediatrics, College of Medicine, University of Baghdad. Pediatric neurologist, Children Welfare Teaching Hospital, Medical City Complex. Member of executive committee of Iraqi League against Epilepsy. Supervisor and trainer in Pediatrics and Pediatric Neurology Specialty, Iraqi Board of Medical Specialization. Member of scientific committee of pediatric neurology specialty, Iraqi Board of Medical specialization. Published more than thirty researches in national and international journals. E-mail: <u>nebalpedneu2013@gmail.com</u>

#### **Children with Drug Resistant Epilepsy: Evaluation and Management**

Antiepileptic medications are effective in reducing seizures in the majority of epileptic individuals. In 10% to 20% of patients, epileptic seizures remain uncontrollable even with the administration of antiepileptic medications (AEDs), either in isolation or in combination. Even though they make up a small percentage of epileptic patients, drug-resistant patients have a heavy psychological and financial burden from their condition and demand a lot of time and attention from their doctors. In general, intellectual incapacity, mental comorbidity, physical harm, abrupt unexpected death, and low quality of life have been linked to drug-resistant epilepsy. Patients with drug-resistant epilepsy may be able to receive an early evaluation for alternative therapies such vagal nerve stimulation, surgery, or a ketogenic diet. We aimed to describe the way a pediatric neurologist can approach in a step-wise manner to a child with drug resistant epilepsy, in order to predict those who may develop resistance earlier, to identify the underlying cause, and recognize areas for improvement.



## Assistant Professor Dr Sarwer Jamal Al-Bajalan

A consultant neurologist & assist. prof. at Sulaimani University & Shar Teaching Hospital-Iraqi Kurdistan Region with an interest in multiple sclerosis, epilepsy. Head of Sulaimni Multiple sclerosis clinic. Supervisor and trainer of undergraduates & postgraduate (MSc, PhD & Neurology Board students). He has More than 20 publications on Epilepsy & other disorders. Email: <u>sarwer.ismael@univsul.edu.iq</u>

## Withdrawal of Antiepileptic Drugs

- Advantages of AEDs discontinuation
- Disadvantages of AEDs discontinuation
- When to stop AEDs
- How to stop AEDs
- AEDs Withdrawal and Seizure Recurrence in Children
- Seizure Control after Recurrence
- Factors Predict Seizure Recurrence After AED Withdrawal
- Factors to Consider in Children
- Seizure Recurrence Prediction models
- AEDs withdrawal in the Guidelines
- Take home Massage



## Fatima Jaafar, MD

Pediatric Neurologist and senior epilepsy fellow, she had her pediatric and adolescent medicine residency at the American university of Beirut, followed by a pediatric neurology fellowship at the same institution, and currently a senior epilepsy fellow). Email: <u>Fatima.jaafar.91@hotmail.com</u>

## An Approach to Presurgical Workup in Patients with Refractory Epilepsy

She will present an approach to presurgical evaluation in children with epilepsy. This evaluation plays a critical role in the management of medically refractory seizures in order to determine if the patient is a candidate for surgical treatment to achieve complete seizure freedom without causing any neurological deficits. This presentation explores the usual process of presurgical evaluation including different technical modalities used and the criteria for surgery selection.



## Basma Adel Ibrahim, MD

Senior lecturer in the department of paediatric, Collage of Medicine, Al Mustansiriyah University. Iraqi board in pediatric Iraqi board in pediatric neurology and neuro disability. Email: <u>bssmaadel@yahoo.com</u>

## **Epilepsia Partialis Continua: Case Presentation**

A child with chronic disease (celiac) with poor compliance on gluten free diet, suffered from resistant type of focal epilepsy (epilepsia partialis continua).

- 1. What was the possible causes of his seizure?
- 2. What was the antiepileptic drugs prescribed for him?
- 3. What was the investigation done for him?
- 4. What was the diagnosis?



## Sarah Baqer Othman, MD

Pediatrician. A fellow of Brain and Nerve Diseases in Children, Arab Council of Health Specialization, Children welfare teaching hospital. Email: sarahbaqerothman17@gmail.com

## The Role of Steroid in Epilepsy

Corticosteroids have been used for the treatment of patients with epilepsy for over 60 years. In addition to the beneficial effects of ACTH/corticosteroid or both on convulsive state, some data suggest improvement in long term language and cognitive development. Although the exact mechanism of action of steroids remains elusive, several hypothesis exist. None of these exclude the possibility that steroid act by modifying a wide range of cytokines (immunomodulation) which in turn influence brain excitability .In this talk we will show ---display a number of epilepsy syndrome that respond uniquely to ACTH and corticosertoid therapy, we will present two case scenarios with different epilepsy disorders that were responding to steroid.