

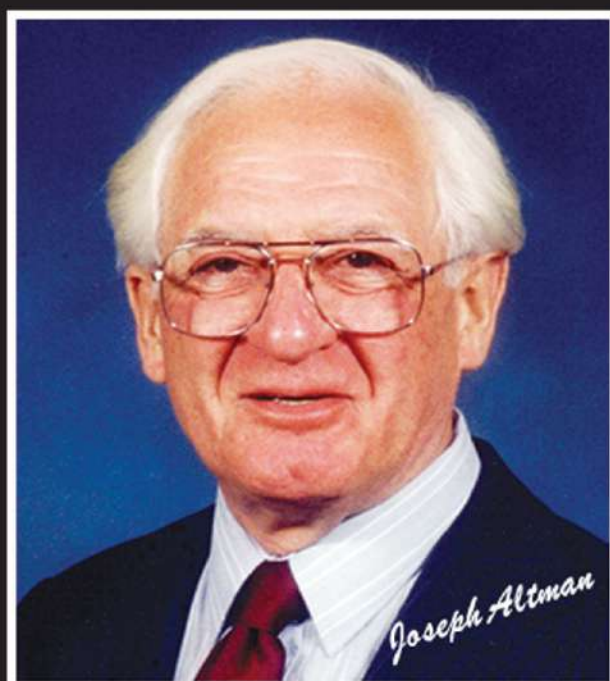
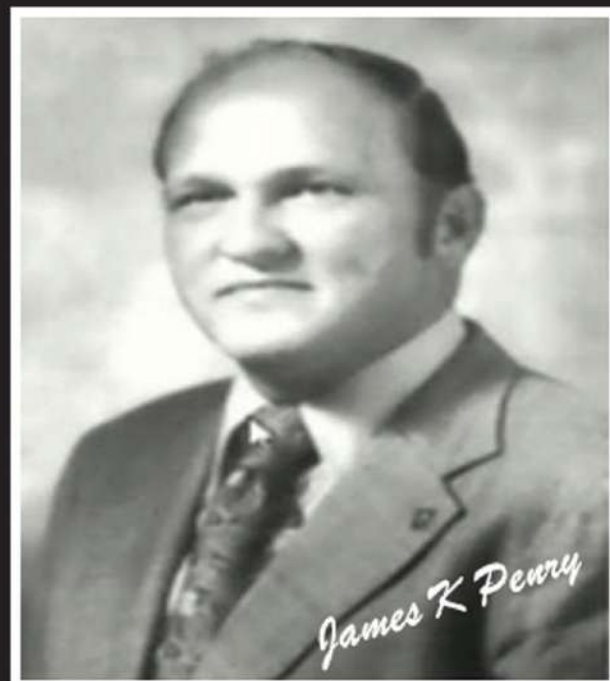
January – March 2021

Issue - 1

Epilepsy India



Newsletter of the Indian Epilepsy Association & Indian Epilepsy Society



Contributors to V N S
An Adjunct Treatment for EPILEPSY

CONTENTS

Office Bearers	2
Editorial	3
ADHD in Childhood Epilepsy	4-6
Vagus Nerve Stimulation (VNS)	7-9
International Epilepsy Day	10 - 16
Announcements	17 - 18

OFFICE BEARERS

INDIAN EPILEPSY ASSOCIATION :

President : Dr M.M. Mehndiratta
President Elect : Dr B.Vengamma
Secretary General : Dr B. Rajendran
Treasurer : Muralidharan KV
Immediate Past President : Dr G.T. Subhas

GOVERNING COUNCIL MEMBERS :

Dr Vinayan KP, Dr Gagandeep Singh, Dr R Surekha
Mr. Ignatius Misquitta, Dr PV Rai, Dr Navneet Kumar,
Dr Atma Ram Bansal, Dr Sita Jayalakshmi

INDIAN EPILEPSY SOCIETY :

President : Dr Sanjeev Thomas
President Elect : Dr Man Mohan Mehndiratta
Secretary General : Dr Manjari Tripathi
Treasurer : Dr Vinayan KP
Past President : Dr V V Nadkarni

EXECUTIVE COMMITTEE MEMBERS:

Dr P.Sarat Chandra, Dr Nalin Chaudhary,
Dr Lakshmi Narasimhan, Dr Gautam Ganguly,
Dr Atma Ram Bansal

WEBMASTER :

Dr RV Narayana, Dr Jayachandran

EPILEPSY INDIA EDITORIAL COMMITTEE :

EDITORS :

Dr Bindu Menon
Dr Chanda Kulkarni

EDITORIAL BOARD MEMBERS :

Dr H.V. Srinivas, Dr K. Radhakrishnan
Dr M.M. Mehndiratta, Dr Satish Chandra
Dr Sanjeev Thomas, Dr Gagandeep Singh
Dr Arabinda Mukherjee, Dr Ms.Suchitra Narayan
Dr Sita Jayalakshmi, Dr Lakshmi Narasimhan
Dr Sangeeta Rawat, Dr Manjari Tripathi

EDITORIAL OFFICE :

16-7-129, Ramamurthy Nagar,
2nd Street, Minibypass Road,
Nellore 524003
neurology.nellore@gmail.com

Editorial...



Dr. Bindu Menon



Dr. Chanda Kulkarni

Welcome to the first Issue of EI newsletter 2021!

While we write this editorial, we are reminded of our EI issue released during the first quarter of 2020. Where, we were humbled by the professional and personal adjustments from everyone due to the pandemic. Each one of us waged the war and forged ahead, we all are aware of the various ups and downs that we faced in life. We now welcome 2021 with a strong hope and pray that the life settles down to normalcy soon!

The cover page has profile pictures of Dr. S. Jacob Zabara, James K Penry and Joseph Altman, who have contributed immensely to bring out the Vagus Nerve Stimulation (VNS) as one of the modalities in treatment of epilepsy. Their biography including that of Henry TR, is on the last page.

In the context of and continuation the pioneering work done by these scientists, it was felt appropriate to summarize the therapeutic aspects of VNS as an option for medically refractory epilepsy. The same is briefly presented by Dr Dheeraj Masapu and Dr Chandra Kulkarni. Though, Epilepsy can be pharmacoresistant it is important to note that the VNS may help in some and majority might not be candidates for epilepsy surgery.

The Attention Deficit Hyperactive Disorder (ADHD) is one of the most common neurobehavioral disorders of Childhood. ADHD starts in childhood and may persist to adulthood. There is a high co-morbidity of epilepsy and attentional and behavioural problems. Dr S. Shanmukhi, gives us an over view of ADHD.

International Epilepsy day was celebrated globally on February 8th. However, we are overwhelmed to report many educational awareness activities of chapters across who have conducted and shared the reports of the various events carefully despite prevailing restrictions due to pandemic. We congratulate all of them. However, request the chapters to conduct the activities in a safe mode and forum observing all precautions.

Kindly go through the announcement section in the newsletter carefully for the important meetings including other updates.

Wishing us all a safe, healthy and pandemic free 2021

Best regards

Bindu & Chanda



DR S.SHANMUKHI

(M.Phil, PhD, Clinical Psychologist)
Consultant Clinical Psychologist,
Krishna Institute of Medical Sciences, Secunderabad

Attention deficit hyperactivity disorder (ADHD) is a mental health disorder which can cause increased levels of hyperactive and impulsive behaviors. People with ADHD may have problem in focusing their attention on a single task or sitting in one position for long periods of time. ADHD usually starts before age 8. Both adults and children can have ADHD.

ADHD is the most frequent school-related problem found in Children/youth with epilepsy. There is a high incidence of ADHD in epilepsy which is related to the area of the brain where the epilepsy might be coming from: Some areas of the brain have been noticed as especially important for attention and information processing. The therapies that are proven effective for treating ADHD are psychosocial, non-medical behavioral therapy/modification, stimulant medication, or a combination of the two.

In the general population, the prevalence of ADHD is approximately 5%¹. There is a high co-morbidity of epilepsy and attentional and behavioural problems², including ADHD, and it has been estimated that at least 20% of patients with epilepsy may present with features of ADHD³. The significantly higher prevalence of attention disorders reported consistently across studies are of concern because they impact academic learning and school performance^{4,5}.

Brief teacher and parent rating scales are used to indicate ADHD as a problem. Parents and teachers use the impairment rating scale (IRS) to know what they see as the child's primary issues in narrative format. Raters then rate how the child's symptoms have affected each of the domains.

- 1.relationship with peers/siblings
 - 2.relationship with parents or teachers,
 - 3.his or her academic progress,
 - 4.your classroom/family in general
 - 5.his or her self-esteem, and
 - 6.overall problem/need for treatment
- Commonly used ADHD Rating Scales

For Children :

- Vanderbilt Assessment Scale.
- Conners Rating Scales

For Adults :

- Adult ADHD Clinical Diagnostic Scale (ACDS).
- Brown Attention-Deficit Disorder Symptom Assessment Scale (BADDS)

The basic structure of behavior therapy is to set specific rules on child's behavior and to enforce them consistently, with positive reinforcements for following them and negative reinforcements for not doing. To get started on your own, Dr. Pelham suggests seven strategies, based on ADHD behavior therapy techniques:

1. Make sure your child understands the rules.

Telling your child to “do this particular activity” or to “avoid doing a particular activity” is not good enough. To ensure that your child knows the rules, create lists and post them around the house. For example, make a list of detailing the specific things your child must do before getting ready for the school.

2. Give clear commands.

Call out your child's name to make sure you have his attention. Then tell the child exactly what you want him to do. If you're in the grocery store, for instance, you might say, “Ram, stand next to me and do not touch anything.” It's not enough to tell your child to “be good,” because he may not understand what that means. Finally, tell the consequences for disobeying the command — and always follow through.

3. Don't expect perfection.

Have a balance between praising your child and giving criticism. A good way is to praise your child for doing something well at 3-5 times as occasionally as you criticize bad behavior.

The child would end up in failure if you expect immediate and perfect results. Instead, focus on rewarding small aspects — and gradually work your way towards the desired outcome. By criticizing too much, you may lower your standards a little. And drive yourself — and your child — crazy.

4. Use “when/then” statements to encourage good behaviors done by the child and reward him/her.

If your child asks for permission to do a desirable activity before completing his work or assignments, say, “Yes, when he/ she finishes doing their writing and homework, then he/she can go out with friends to play.” With younger children, it's very important that the rewarding take place immediately after the work completed.

5. Set up a star/token system for rewards and consequences.

One way for encouraging your child to follow your commands involves a Star and a supply of Stars or tokens. Each time your child does what you tell, put a star in a chart. Each time he doesn't, take out one star from it. At the end of the day, he earns a small reward based on the number of stars that remain on the chart, and then starts over again.

6. Twist your discipline techniques as your child gets older.

Certain measures like time-outs, may not work as well with young children and teens as they do with kids. If your high-schooler breaks a rule, you might give him a five-minute chore — such as cleaning up the bedroom — rather than a five-minute time-out.

In older children, it's good to negotiate the terms and rewards for good behavior. For example, your child may request access to the phone or time spent with friends if he is helpful around the house and does well at school.

7. Ask your child's teachers to set up a similar behavioral modification at school.

One of the best way for parent-teacher cooperation is the daily report card. Meet with the teacher to decide on desired classroom behaviors —"completing assignments within the particular time period" or "contributing to class discussions." At the end of each school day, the teacher evaluates child's constancy to behavioral goals, and send the report home with the child.

Behaviour Interventions should be tailored to each individual child to help control symptoms, cope with disorders, improve overall psychological well-being, and manage their social relationships. Family involvement is important in both ADHD and epilepsy which will help for treatment plan.

References :

1. Dunn DW, Austin JK, Harezlak J, et al. ADHD and epilepsy in childhood. *Dev Med Child Neurol* 2003;45:50–4.
2. Sanchez-Carpentiro R , Neville B. Attentional ability in children with epilepsy. *Epilepsia* 2003;44:1340–9.
3. Gross-Tsur V , Manor O, van der Meere J, et al. Epilepsy and attention deficit hyperactivity disorder: is methylphenidate safe and effective. *J Pediatr*1997;130:670–4.
4. Hermann BP, Jones JE, Sheth R, Koehn M, Becker T, Fine J, et al. Growing up with epilepsy: A two-year investigation of cognitive development in children with new onset epilepsy. *Epilepsia* 2008;49:1847-58.
5. Davis SM, Katusic SK, Barbaresi WJ, Killian J, Weaver AL, Ottman R, et al. Epilepsy in children with attention-deficit/hyperactivity disorder. *Pediatr Neurol* 2010;42:325-30.
6. William Pelham, ADHD Behavior Therapy for Kids: 7 Steps to Better Discipline. www.additudemag.com.by additude editors medically reviewed by michele novotni, on October 11, 2019.



DR DHEERAJ MASAPU.MD. DM
Consultant,
Neuroanaesthetist
SAKRA World Hospital



DR CHANDA KULKARNI,
MD*PhD;FSASMS
Senior Consultant & HOD, Clinical Pharmacology
SAKRA World Hospital

In 1985, Dr Jacob Zabara, a neurophysiologist in Philadelphia, first suggested that electrical vagal nerve stimulation can be used to treat patients with medically refractory seizure disorders by disrupting hypersynchronous electroencephalographic (EEG) activity. This device, based on cardiac pacemaker design, was first placed in 1988 in a patient with intractable epilepsy by J.K. Penry.

VNS has been approved by the U.S. Food and Drug Administration (FDA) as an add-on therapy for adults and children 14 years and older for medically refractory epilepsy. In a multicentre, prospectively randomized, parallel, double-blind study, patients reported a statistically significant reduction in seizure frequency in the group who received VNS.

What is Vagus Nerve Stimulation?(1)(2)

VagusNerve Stimulation (VNS) refers to surgical placement of an easily programmable, medical device implanted for electrical stimulation of the vagus nerve.

How does the vagal nerve stimulator device work?

The VNS an implantable device consists of a constant current pulse generator/stimulator, with a single subcutaneously placed lead wire, and a silicone rubber-imbedded platinum electrode wrapped around the left vagus nerve (Fig. 1). The combined pulse generator/stimulator delivers an electrical stimulation burst based on programmed parameters.

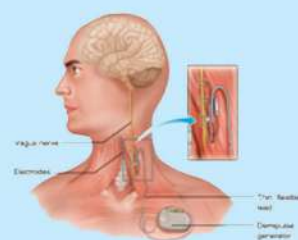


Fig 1 - VNS layout

The VNS generator/stimulator is noninvasively programmed by radiofrequency signals via an externally placed programming wand and software on a standard personal computer or personal digital assistant for programming, data retrieval, device interrogation, and diagnostics.

How does VNS device decrease the Seizures ?

Vagus nerve stimulation (VNS) is a type of neuromodulation. It is designed to change how brain cells work by giving electrical stimulation to certain areas involved in seizures.

The vagus nerve is part of the autonomic nervous system, which controls functions of the body that are not under voluntary control. The vagus nerve sends information from the brain to other areas of the body. It also carries information from the body to the brain.

The exact mechanism of action of VNS is unknown. Several theories have been postulated and following theories have been proposed to that may be involved in controlling seizures:

- Increasing blood flow in key brain areas
- Raising levels of some chemicals in the brain (called neurotransmitters) that control seizures
- Changing Electroencephalogram (EEG) patterns during a seizure

How is it placed inside the body? (2)

The device is implanted under general anaesthesia. It is placed in the neck under the left cervical bone in front of the chest after locating the Vagus nerve. The left is preferred over the right vagus nerve for VNS because of the greater number of cardiac efferent fibres from the right vagus nerve. Approximately 3 cm of the Vagus nerve is exposed to allow for proper electrode attachment.



Fig 2 - Simple procedure used for VNS insertion

After the isolation of vagus nerve, a small pocket for generator placement is created above anterior left chest. The generator is then connected to the electrode array and placed into the subcutaneous chest pocket. After checking Lead impedance and system integrity, the generator is then programmed, and vagal nerve stimulation is initiated.

How Helpful Is Vagus Nerve Stimulation?

This VNS therapy does not cure epilepsy. It's designed to help control seizure frequency i.e. the number of seizure episodes and severity of seizures. There are studies which have demonstrated that the recovery time after a seizure may also shorten for some patients and majority have shown improved Quality of Life [QOL].

Is the procedure safe?(1)

The procedure is simple and safe. An expert anaesthesiologist supervises the placement of this device. Following the procedure, patients are monitored in the post anaesthesia care unit for a period of six to twelve

hours depending on the patient's status.

What are the restrictions/contraindications for use of Vagus Nerve Stimulation?

People with significant asthma or other breathing problems, sleep apnoea, or abnormal heart rhythms (arrhythmias) or a low heart rate (bradycardia) may be advised against using vagus nerve stimulation.

Conclusion :

In conclusion, VNS can be a safe and efficacious treatment modality for epilepsy in many patients in whom the foci is either generalized or could not be identified.

Additional indications for use of vagal nerve stimulation currently under investigation include - obesity, Alzheimer's disease, chronic pain syndromes, and some neuropsychiatric disorders.

However, it is important and mandatory that a team of experts consisting of Neurologist, Epileptologist, Neurosurgeon, and Neuroanesthetist, collectively decide based on pre-screening and eligibility criteria of individual patients before implanting the VNS device.

REFERENCES

1. Hatton KW, McLarney JT, Pittman T, Fahy BG. Vagal nerve stimulation: Overview and implications for anesthesiologists. Vol. 103, Anesthesia and Analgesia. Lippincott Williams and Wilkins; 2006. p. 1241–9.
2. Howland RH. Vagus Nerve Stimulation. Curr Behav Neurosci Reports. 2014 Jun;1(2):64–73.

.....

INTERNATIONAL EPILEPSY DAY

Reported By : DR. R.K.SUREKA

JAIPUR

A) EPILEPSY AWARENESS THROUGH NUKKAD NATAK AND FILM SHOW AT PREM PATHSHALA (RUN BY I-INDIA) – AN NGO.

Epilepsy care and research foundation and Indian Epilepsy Association Jaipur chapter celebrated International Epilepsy day by organizing an exhibition on Epilepsy, two nukkad natak and a film show titled “Shaadi” (based on myths & superstitions of epilepsy) at Pratham Pathshala, a school run for children of BPL at village Jhag in Jaipur by a NGO “I India”.

Dr. R.K.Sureka, Neurophysician and President of Indian Epilepsy Association Jaipur chapter explained to the students that Epilepsy is not caused by spirits but it is caused by brain tumors, brain trauma, birth injuries and brain infection especially Cysticercosis - a disease caused by eating unwashed salads and raw unwashed vegetables. He stressed that salads, fruits, should be washed properly and people should wear helmets while driving to prevent head injuries which is another important cause of Epilepsy.

A movie and two nukkad natak depicting the life of an epileptic woman were staged and students were given message that on getting epileptic attacks one should not smell shoe, or put water in the mouth and epilepsy is not a contagious disease. It was impressed that woman can get married and bear children as a normal woman. The program was attended by students, epileptic patients, ward senior doctors and director of I India (an NGO working for poor slum people)

B) EXHIBITION & TALK ON EPILEPSY MYTHS & SHORT MOVIE “SHAADI” AT MAHATMA GANDHI MEDICAL COLLEGE, JAIPUR FOR FACULTY & STUDENTS OF COLLEGE OF VARIOUS DEPARTMENTS.

On International Epilepsy day 8th February, 2020, which is celebrated on 2nd Monday of February each year, a film “Shaadi” on Epilepsy directed by Dr. Sureka depicting various myths specially those associated with marriage in epileptics was shown to patients and general public. An exhibition and awareness talk on Epilepsy was organized by Neurology Department of Mahatma Gandhi Medical College Jaipur and Jaipur Chapter of IEA which was attended by 250-300 faculty and students of various departments of medical college.

Dr R K Sureka, Professor & Head, Neurology Department, Mahatma Gandhi Medical College Jaipur was main speaker who dealt various myths and facts associated with Epilepsy in common population. He tried to remove the various stigmas associated with Epilepsy through his talk and an Exhibition which was put up for the general public.



Photo 1: Depiction of Nukkad Natak at Prem Pathshala School (run by I-India) – an NGO.



Photo2: International Epilepsy Day Celebrations & Exhibition on various aspects of epilepsy at Mahama Gandhi Medical College & hospital , Jaipur.

INTERNATIONAL EPILEPSY DAY

Reported By : DR. V.V.NADKARNI

INDORE

The public awareness program was organized as a part of International Epilepsy Day, on 8th February 2021, by Neurology unit of Department of Medicine in hospital campus of MGM Medical College. Superintendent & Head of the Department of Medicine Dr PS Thakur; Dr VP Pandey, Head of Neurosurgery; Dr Rakesh Gupta and faculties, residents, nurses, staff of allied health services and patients with their relatives graced the occasion. Indore epilepsy Visheshagya Association Samiti (IEVAS) appreciated and supported the event. Dr Ashish Patel and Dr Monika Porwal, briefed the audience about basics of epilepsy, its types and management. Dr Archana Verma elaborated the concept of myths and misconceptions regarding the epilepsy to help allay the social stigma prevalent in the society.

The care givers shared their experiences during Covid era which raised a ray of hope among the audience. A positive support group was established to create public awareness to assist in understanding epilepsy and in rendering the available services to the needy persons.

MGM Medical College and Hospital, Indore is a 1300 bedded multispecialty hospital which delivers free consultation, free medication and electrophysiological services to persons with epilepsy along with other facilities. The epilepsy surgeries are conducted by the department of Neurosurgery.



INTERNATIONAL EPILEPSY DAY

Reported by : DR. ATUL AGARWAL

UTTAR PRADESH

Jhansi 1) Programme was organized under aegis of Bundelkhand Neurology Foundation, department of neurology MLB Medical college, Jhansi in association with National Medico Organization. Chief Guest of programme was Dr N S Sanger, Principal Medical college, Jhansi. Special guest was Shri Rajeev Singh, Parichha MLA of Babina constituency. Target audience was teaching faculty of different departments, undergraduate and post graduate students of medical college, dignitaries of different strata of society along with patients and their attendants. More than 150 persons attended this event. Posters showing different aspects of epilepsy were displayed in local language for better understanding. A help desk was established for patients and attendants at entry of hospital. Pamphlets about epilepsy awareness were distributed. Programme was widely covered by print and electronic media which further added in public awareness. An article on epilepsy by Dr Arvind Kankane was also published in local news papers. (pic 1&2)

2) Webinar on Zoom platform of Rotary club was organized 7-8 PM in association with Bundelkhand Neurology Foundation, Indian Academy of Neurology and Indian Academy of Paediatrics, Jhansi branch. Keynote speaker was Dr Nirmal Surya, president elect Indian Academy of Neurology, Dr Arvind Kankane, Associate professor neurology, MLB Medical college Jhansi and Dr Aradhana Kankane, associate professor Paediatrics, MLB Medical college Jhansi. Apart from lecture on public awareness, various myths and misbeliefs about epilepsy were mitigated by interactive discussion. Webinar was attended by 120 persons from different walks of life including IMA members, IAP members, members of Rotary Club and general public.

3) Lucknow World Epilepsy day was celebrated at **Medanta Hospital**. The Importance of awareness about Epilepsy, its myths, stigma, treatment and prevention was highlighted among the nursing staff and also among the media personnel. A special highlight of the event was presentation of one patient with epilepsy surgery conducted in the hospital and role of surgery in difficult to treat Epilepsy was emphasised.

The event was addressed by Dr Atul Agarwal, Secretary UP Chapter of Indian Epilepsy Association, who outlined the role of prevention of epilepsy. Dr A K Thacker introduced the subject with particular reference to medical and surgical gap in epilepsy. Dr Ritwiz Bihari explained the clinical picture of different types of seizures, their diagnosis and treatment. Dr Sudhakar Pandey presented the surgical case and Dr Ravi Shankar, who did the epilepsy surgery, showed the surgical methodology and interacted with the media personnels. The event was chaired by Prof Dr Rakesh Kapoor, Medical Director.

4) Aligarh by Nagesh Varshney



INTERNATIONAL EPILEPSY DAY

Reported By : DR CHANDA KULKARNI

BANGALORE

Inauguration – Mr Lovekesh Phasu- COO [in the middle]; Nagano Yuichi – MD; Naoya Matsumi DMD Dr Satish Rudrappa –Director Neurosciences; Dr Shiva Kumar – Epileptologist; Dr Chanda Kulkarni – Clinical Pharmacologist and the award winning group extreme right lower corner are also seen in the picture



An Educational Awareness Program on Epilepsy was held as a part of International Epilepsy Day, on 18th February – 2021, at Sakra World Hospital, Bangalore. Following are the brief highlights of the same.

- **MORNING SESSION** - Program was inaugurated in the morning with a walkathon and a banner with a theme “LEAD THE CHANGE – RAISE EPILEPSY AWARENESS” at the hospital premises followed by lighting the lamp by executives of SAKRA. The doctors, DNB students, as well as nursing staff, participated in the same. All participants wore a mask with the purple text – ‘International Epilepsy Day’, with balloons & a wrist band to signify color code for epilepsy. A brief introductory talk on epilepsy along with significance of awareness program were highlighted by Dr Shiva Kumar, Epileptologist & Dr Satish Rudrappa, Director – Neurosciences, to the audience.

- **AFTERNOON SESSION** - The afternoon session started with a SEMINAR to cover various aspects of epilepsy for which the topics were allotted in advance. There were eight teams comprising of junior doctors/DNB students & Nursing staff. Each of the six member team was represented by an identified leader who presented the respective topic allotted to the team, using power point slides over 6 minutes. Of the eight teams the six teams judged as best then participated in ‘QUIZ’ round which had MCQs covering all aspects epilepsy – history, diagnostics, types, treatment, psychosocial issues, myths & misconceptions etc. The final round was a ‘DEMONSTRATION on DOS’ & DONT’S’ of epilepsy’ by six teams in which each team actively participated and enjoyed enacting in the session.

All the participants showed complete involvement in the above activities. The event ended with distribution of awards and certificates for the winning teams and vote of thanks to all the judges of the event. The activity was organized by Dr Chanda Kulkarni, co-editor Epilepsy India and by Dr Shiva Kumar; both the Life members, of Indian Epilepsy Association [IEA], The Bangalore Chapter and IEA Central Office.

INTERNATIONAL EPILEPSY DAY

Reported By : **DR CHANDA KULKARNI**
DR. SHIVA KUMAR

BANGALORE



Dr. Shiva Kumar - delivering lecture; Dr. Chanda Kulkarni - introducing role of IEA – BLR Chapter in awareness program. Also seen are Staff and Nursing Students, of Patel Group of Institutions. Dr. Shiva Kumar, Epileptologist and Dr. Chanda Kulkarni, Clinical Pharmacologist, Sakra World Hospital and Life Members - IEA-BLR Chapter were invited to deliver an educational awareness program on Epilepsy as a part of International Epilepsy day, by Patel Group of Institutions, for the third consecutive year. Audience included more than 150 BSc II & III yr nursing students as well as many staff of Nursing College.

Program started with introduction & distribution of purple wrist bands, & special masks. Dr Shiva Kumar in his presentation covered the various aspects of epilepsy which included – definitions, epilepsy prevalence in India and around the world, the common causes, various diagnostic tools used, the treatment options available including diet/surgery/minimally-invasive VNS, the frequently encountered emergencies which nursing staff have to manage, the psychosocial issues, importance of counseling and role of a nurse/family/public in epilepsy care at home as well as if the episode were to occur in public. The Dos' & Don'ts including the 'first aid' offered when attack of epilepsy is witnessed during an episode in public. The presentation included power point slides and video clips.

Dr Chanda, covered myths and misconceptions about epilepsy. She distributed the published material as Newsletters from Central & local Chapter on the various activities taken up by Bangalore local chapter and Epilepsy Association respectively to emphasize the need to bring epilepsy out of shadows.

Program was concluded by distributing certificates to senior level Nursing students who participated in the program.

ANNOUNCEMENTS

Proposed changes to the Memorandum of Association of Indian Epilepsy Association
By Past President and senior member Dr. H V Srinivas.

MEMORANDUM OF ASSOCIATION of INDIAN EPILEPSY ASSOCIATION

PROPOSAL ONE

1) VI. GOVERNING COUNCIL

@ 18.

Existing Rule

President elect will automatically be the President in the following term.

For the posts of President Elect, Secretary General and Treasurer, the candidate should have served atleast one Term in GC as an elected Member (Not as Ex Officio Member)

Proposed Amendment

For the posts of President Elect, Secretary General the candidate should have served atleast TWO Terms in GC as an elected Member (Not as Ex Officio Member)

Reason for Amendment

To have more exposure to the working of the Association.

PROPOSAL TWO

2) **@20.

Election Procedure

Existing Rule

Ballot papers to be posted under certificate of posting /registered India Post / courier / or electronic voting / or any other method where proof of posting ballot papers is obtained, preferably Registered India Post.

Ballot papers to be returned within eight weeks from the date of dispatch from the office of the Returning officer.

The ballot papers to be returned in a triple envelope.i)The inner envelope (C) containing only unsigned ballot paper. ii) The middle envelope (B) containing, full name of the voter ,membership number and signature of the voter, iii) These two envelopes will be enclosed in pre paid envelope (A) which would bear only the name and address of the Returning officer &returned to the Returning officer All envelopes would be duly sealed and the outer most envelope duly stamped.(prepaid)

Proposed Amendment

The voting is by electronic method

Reason for Amendment

If ballot papers can be sent by electronic format (as mentioned in the rule) it automatically should have been that the voting is also through electronic method ! This is currently the norm in several Associations and it is time for IEA to adopt this.

PROPOSAL THREE

VI. GOVERNING COUNCIL

@ 18

Existing Rule

The Governing Council shall consist of : -

	Term (Years)	Electorate	Eligibility– continuous valid Life Membership for not less than ...years
President	2	All India	No Election
President Elect	2	All India	8
Secretary General	4	All India	5
Treasurer	4	All India	5
Editor	4	Appointed	5
Members	2	State / UT	3
Immediate Past President	2		

Proposed Amendment

To reduce the term of office for Secretary General and Treasurer from *4 years to 2 years*

Reason for Amendment

A shorter tenure of two years will have uniform period for all the elected members – two years.; and the election can be conducted for all posts once in two years.

Four years tenure is too long a period for individuals / professionals to commit and spare time for IEA activities.

ABOUT THE COVER PAGE

**JACOB ZABARA: [1932]; JAMES KIFFIN PENRY: [1929-1996];
JOSEPH ALTMAN: [1925–2016]**

Vagus nerve stimulation (VNS) is considered as one of the add-on treatment options for certain types of intractable epilepsy and involves delivering electrical impulses to the vagus nerve. VNS is now an accepted long-term treatment for epilepsy, used by over 15000 patients worldwide. Several mechanisms have been proposed by many scientists to explain efficacy of VNS.

- **Dr. Jacob [Jake] Zabara: Proposed de-synchronization theory** in 1992. The early experiments in dogs by Zabara discovered that VNS could reduce or eliminate seizures in dogs. In a canine model he showed repeated stimulation of cervical vagus nerve in the neck could stop seizures and is composed of 80% afferent fibres. Subsequent to this stimulation of the vagus nerve has been approved by FDA for its anticonvulsant activity. He for the first time postulated that de-synchronization of overly synchronized neuronal activities would confer the anti-seizure effects of VNS. This subsequently led to methods of direct VNS using implantable device in humans.
- **Henry TR: The Cerebral blood flow theory**, in 1998, which showed that cervical vagus nerve stimulation caused bilateral alteration in blood flow to the cortex, thalamus, hippocampus, amygdala, and posterior cingulate gyri, and may be responsible for activate inhibitory structures in the brain.
- **Joseph Altman: The neurogenesis theory.** His first major discovery was that neurons are generated in adult rat and cat brains (Altman, 1962, 1963), Joseph Altman was born in Budapest. He as a keen observer, was known creative powerhouse.
- **James K. Penry:** In 1988 Penry et al. performed the first human implant of a vagal stimulating device into a human. In 1997, FDA approved the use of VNS as an adjunctive treatment for medically refractory epilepsy.

Two pilot studies on 14 patients in whom programmable device was implanted with 14, and 35-month follow-ups showed 47% reduction in the frequency of seizures. Subsequent E03 study was approved, and carried out on 54 patient patients, with similar outcome. Subsequently, Muller et al., in 2010, reported a 50% reduction in the frequency of seizures within the first year. Englot et al., in 2011, in a meta-analysis of 74 clinical studies with 3321 patients, reported >50% reduction of seizure. Bao et al., in 2011, reported 64% response in a retrospective analysis of 45 cases.

The spectrum of benefits with VNS is recently being explored in the management of - depression, obesity, memory, and neurogenesis in addition to refractory seizures.

References:

- Epilepsia. 1990;31(Suppl 2):S40–3. [PubMed]
- Epilepsia. 1994;35:616–26. [PubMed]
- Wikipedia - 22 October 2020