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Epilepsy 1

58
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Epilepsy 1
Epilepsy management and clinical research could be improved in low and middle income countries (LMICs) by epinet database

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Background: Epilepsy affects approximately 70 million people worldwide. Compared to high-income countries, LMICs lack neurologists, have difficulty accessing essential medicines, and may have a severe lack of medical equipment for diagnosis and management. Clinical trials in these countries are rare because of regulatory issues and a lack of infrastructure.
Objective: To use EpiNet to provide systematic documentation of epilepsy in LMICs in preparation for clinical trials of low-cost antiepileptic drugs.
Material and methods: EpiNet is an international database accessible worldwide by clinicians *via* a secure, password-protected website. Epilepsy overview, seizure history, electroclinical syndrome, aetiology, investigations, and drug treatment can be recorded prospectively or retrospectively in EpiNet. All data is provided back to the doctor in summary form, and can be printed out and sent to the primary caregiver, or given to the patient. Each clinician is provided with an on-line database of all their patients. Patients can be entered into multinational prospective registries, or randomised in clinical trials undertaken by EpiNet study group. Trials are independent of pharmaceutical companies.
Results: As of the beginning of May 2015, 7700 patients had been registered from more than 20 countries in the EpiNet database. Over 800 patients have been registered from LMICs in Asia, South and Central America, and Africa.
Conclusion: The EpiNet database represents a cost-free, practical, proven tool that could give great benefits to people with epilepsy. The database provides a valuable clinical tool for clinicians. It can also facilitate global research collaborations for the management of epilepsy in LMICs.

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59
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Epilepsy 1
Cosmetic effects of anti-epileptic drugs among adult sudanese epilepsy patients, Omdurman

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Background and aims: Adverse effects are leading causes of treatment failure with antiepileptic drugs(AEDs). We studied the cosmetic effects of AEDs and their association with medications adherence and quality of life.
Methods: The study was performed on Sudanese epilepsy patients attending Daoud charity clinic (June - September 2014). Five main variables were used: (1)Cosmetic effects profile; (2)Morisky Medication Adherence Scale(MMAS-8); (3)WHO Quality of Life Brief-26; (4)socio-demographic data, and (5)Epilepsy related data. A senior neurologist assessed the cosmetic effects through clinical examination of the patients. Consents have been obtained from all patients.
Results: There were 42 patients (31% females); mean age 34.1 ± 10.4 years. Hair loss was the most commonly reported cosmetic effect by female patients(75%) who were taking sodium valproate. (26.2%) of patients had weight gain and none of them thought weight gain is an adverse effect. Neither quality of life score, nor Adherence score were correlated with any of the cosmetic effects of AEDs ($P > 0.05$). A significant positive correlation was found between the duration from the last attack and the quality of life score($P = 0.03$). The Gum overgrowth was correlated with the Hirsutism and Acne($P < 0.05$).
Conclusion: We concluded that our patients prioritize medication intake in spite of the presence of cosmetic effect, and this - together with the absence of association between quality of life and the cosmetic effect - may be attributed to different Sudanese patients' perception to these cosmetic effects from other populations in addition to the unique Sudanese culture.

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60
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Epilepsy 1
Diagnostic value of pre-surgical F18-FDG PET/CT and MRI in refractory focal epilepsy. Histopathological and surgical outcome correlation

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Background: F18-FDG Positron Emission Tomography/ Computed Tomography (PET/CT) is useful in pre-operative study of refractory epilepsy patients.
Objetive: To evaluate the diagnostic value of pre-surgical PET/CT and MRI in refractory focal epilepsy patients.
Patients and method: We reviewed 298 F18-FDG PET/CT scans performed to refractory focal epilepsy patients, selecting only those cases which were subsequent operated. PET/CT, MRI, histopathology and surgical outcome were reviewed.
Results: Twenty two percent of patients (65/298) were operated, 87,7% with curative and 12,3% with palliative surgery, corresponding to 35 males and 30 females (mean: 21,4 y, SD: 17,5 y, range: 3 m – 61 y). Principal diagnosis were Focal Cortical Dysplasia (FCD: 29,2%), Hippocampal Sclerosis (HS: 16,9%), Tuberous Sclerosis (TS: 15,4%), and others Malformations of Cortical Development (MCD: 10,8%). PET/CT and MRI were positives in 100% and 87,7% of cases, respectively. MRI did not show abnormalities in 8 patients (5 FCD type I, 1 FCD type II, 1 microdysgenesis, 1 gliosis). Including cases with single (FCD, Tumor, HS, glial scar) and multiples lesions (TS, Encephalitis, multifocal MCD), PET/CT and MRI were able to correctly localize the epileptogenic focus in 96,9% and 61,5% of cases, respectively. After curative surgeries, 72% of patients reach Engel I and 13% Engel II (mean follow-up: 25,6 month, SD: 18,0 m, range: 3-59 m).
Conclusion: PET/CT showed high yield in focus localization, better than MRI. FCD type I and multiples cortical lesions cases would benefit particularly with a PET/CT.

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61
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Epilepsy 1
Impact of lacosamide use for the treatment of refractory and super-refractory status epilepticus applying quantitative electroencephalography analysis

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Background: Refractory status epilepticus (RSE) and super-refractory status epilepticus (SRSE) are entities associated with high mortality and permanent disabilities among survivors. The main therapeutic goal is to stop ictal clinical and electrographical activity. Lacosamide (LCM) is a functionalized amino-acid approved for the adjuvant treatment of partial-onset seizures. Quantitative electroencephalography (QEEG) is used for topographic display and analysis of brain electrophysiological data.
Objective: To describe the impact of LCM use for the treatment of RSE and SRSE applying QEEG.
Patients and methods: All patients admitted to the Neurointensive Care Unit with diagnosis of RSE and SRSE who received LCM at some point of their treatment, between October of 2012 and March of 2015 were included. We assessed seizure frequency reduction after the first doses of LCM applying QEEG.
Results: Eleven patients were analyzed, 7 were men (63.6%) with a mean age of 40 years (SD = 20.8). All patients had focal epilepsy, 6 (54.5%) met drug-resistance criteria, 10 (90.9%) had RSE and 6 (54.5%) had convulsive status epilepticus. Seizure frequency decreased in 9 patients (81.8%) including the one with SRSE diagnosis, one (9%) presented an increase and the missing showed no change. Median seizure frequency post-LCM decreased significantly (median pre-LCM: 7 seizures [IQR 4-18] and post-LCM: 5 seizures [IQR 2-7], $p = 0.016$, Wilcoxon signed-rank test).
Conclusion: LCM therapy was associated with significant reduction in seizure frequency and may be a potential management for RSE and SRSE. Further research is needed to determine the efficacy of LCM for RSE and SRSE treatment.

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62
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Epilepsy 1
Knowledge, attitudes and perception about epilepsy among different population groups in the city of La Paz – Bolivia

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Objective: Determine the knowledge, perception and myths of epilepsy among different population groups.
Foundation: The city of La Paz – Bolivia has a population with different social, cultural, linguistic and economic layers, making a heterogenic demographic ensemble among their behavior regarding health aspects.
Method: It has been elaborated a questionnaire about different topics the population has regarding epilepsy, especially about etiology, work activity, pupillage, social relationships and treatment. The questionnaire has been administered to school students, school teachers, professional and non – professional adults in the urban and suburban zones. Afterwards, the data has been analyzed, comparing the results among the different inquiry groups.
Results: The perception and myths is greater among people with lower cultural level. Medical treatment is best referred among people with a higher cultural level. Migrant population still believes that a traditional medical doctor is a key factor regarding epilepsy treatment, using bat's blood, potions or "spirit wash". People with epilepsy use traditional medicine as an alternative to occidental medicine. There still is the belief that a cure administered by a church pastor can heal epilepsy
Conclusions: Beliefs and myths about the etiology and treatment of epilepsy still persist among people with low cultural level or people greatly influenced by traditional medicine. People with greater cultural level perceive epilepsy as a disease that should be treated by a doctor.

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63
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Epilepsy 1
An update on migrating focal seizures of infancy

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Since 1995 when Coppola et al described a group of patients with characteristic focal migrating seizures, the number of cases and their

varieties are increasing. Around a hundred forty cases are found in the literature. Genetic mutations and EEG criteria are described.

Clinical features may consist of lateral deviation of the eyes with eye jerks, twitching of the eyelids, limb jerks, chewing movements, apnea, flushing, and salivation. Seizures last several minutes longer than usual focal seizures in infancy. The seizure manifestations may vary from one seizure to the next in a given patient.

The combination of these different features produces a wide range of manifestations, and some seizures are clinically mild and easily overlooked and spasms rare.

Continuous video-EEG frequently reveals subclinical seizures as well. Spectrum of clinical manifestations lead to sub-classifications of cases.

Here we review the literature and present our local experience of patients with this rare syndrome.

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