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Review Article On Seizure.

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ABSTRACT

The objective of this research was to formulate and evaluate the aim of treating epilepsies is to control seizures without causing adverse effects to achieve the best possible quality of life for the patient. Usually, seizure frequency is counted by subjective patient reports, which may cause considerable problems due to incorrect descriptions of seizures and their frequency. Seizure Emergencies Are Potentially Life-Threatening Events That Are Under-Recognized. Status Epilepticus Is Associated With Considerable Rates Of Morbidity And Mortality. Experts Currently Believe That Any Episode Of Seizure Activity Lasting 5 Minutes Or Longer Should Be Considered Status Epilepticus. Treatment Should Be Initiated As Early As Possible; Evidence Has Shown That Once Seizures Persist For 5 To 10 Minutes, They Are Unlikely To Stop On Their Own In The Subsequent Few Minutes. Prehospital Treatment With Benzodiazepines Has Been Shown To Reduce Seizure Activity Significantly Compared With Seizures That Remain Untreated Until The Patient Reaches The Emergency Department. The Consequences Of Delayed Treatment Of Status Epilepticus Include A Serious Risk Of Subsequent Prolonged Seizure Activity Or Epileptogenesis, Memory Deficits, And Learning Difficulties. The Importance Of Timely Intervention In Generalized Tonic-Clonic Status Epilepticus Must Be Emphasized. Recent Research Has Found That Emergency Department Personnel Fail To Recognize The Condition In Children In 34% Of Cases. The results obtained in this research work clearly indicated to reduce seizure frequency and severity, improve function, to enhance quality of life, promote coping, to improve external circumstances ,prevent premature death.

Keywords: Seizure, Emergency, Classification.

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INTRODUCTION

A Seizure Is A Sudden, Uncontrolled Electrical Disturbance In The Brain. It Can Cause Changes In Your Behavior, Movements Or Feelings, And In Levels Of Consciousness. If You Have Two Or More Seizures Or A Tendency To Have Recurrent Seizures, You Have Epilepsy. There Are Many Types Of Seizures, Which Range In Severity. Seizure Types Vary By Where And How They Begin In The Brain. Most Seizures Last From 30 Seconds To Two Minutes. A Seizure That Lasts Longer Than Five Minutes Is A Medical Emergency. Seizures Are More Common Than You Might Think. Seizures Can Happen After A Stroke, A Closed Head Injury, And An Infection Such As Meningitis Or Another Illness. Many Times, Though, The Cause Of A Seizure Is Unknown. Most Seizure Disorders Can Be Controlled With Medication, But Management Of Seizures Can Still Have A Significant Impact On Your Daily Life. The Good News Is You Can Work With Your Health Care Professional To Balance Seizure Control And Medication Side Effects [1-12].

Definition

Uncontrolled Electrical Activity In The Brain, Which May Produce A Physical Convulsion, Minor Physical Signs, Thought Disturbances, Or A Combination Of Symptoms. The Type Of Symptoms And Seizures Depend On Where The Abnormal Electrical Activity Takes Place In The Brain, What Its Cause Is, And Such Factors As The Patient's Age And General State Of Health.

TYPES OF SEIZURES

Focal Seizures: Focal Seizures With Impaired Awareness, Focal Seizures Without Loss Of Consciousness.

Generalized Seizures: Absence Seizures, Tonic Seizures, Atonic Seizures, Clonic Seizures, Myoclonic Seizures, Tonic-Clonic Seizures.

CAUSES

Seizures Can Be Caused By Head Injuries, Brain Tumors, Lead Poisoning, Maldevelopment Of The Brain, Genetic And Infectious Illnesses, Lack Of Sleep, Low Blood Sodium (Hyponatremia), Medications, Alcohol Abuse And Fevers. In Fully Half Of The Patients With Seizures, No Cause Can Yet Be Found.

PATHOPHYSIOLOGY

Febrile Seizures Occur In Young Children At A Time In Their Development When The Seizure Threshold Is Low. This Is A Time When Young Children Are Susceptible To Frequent Childhood Infections Such As Upper Respiratory Infection, Otitis Media, Viral Syndrome, And They Respond With Comparably Higher Temperatures. Animal Studies Suggest A Possible Role Of Endogenous Pyrogens, Such As Interleukin 1beta, That, By Increasing Neuronal Excitability, May Link Fever And Seizure Activity. Preliminary Studies In Children Appear To Support The Hypothesis That The Cytokine Network Is Activated And May Have A Role In The Pathogenesis Of Febrile Seizures, But The Precise Clinical And Pathological Significance Of These Observations Is Not Yet Clear.

Febrile Seizures Are Divided Into 2 Types: Simple Febrile Seizures (Which Are Generalized, Last < 15 Min And Do Not Recur Within 24 H) And Complex Febrile Seizures (Which Are Prolonged, Recur More Than Once In 24 H, Or Are Focal). Complex Febrile Seizures May Indicate A More Serious Disease Process, Such As Meningitis, Abscess, Or Encephalitis. Febrile Status Epilepticus, A Severe Type Of Complex Febrile Seizure, Is Defined As Single Seizure Or Series Of Seizures Without Interim Recovery Lasting At Least 30 Minutes.

Symptoms

Temporary Confusion, A Staring Spell, Uncontrollable Jerking Movements Of The Arms And Legs, Loss Of Consciousness Or Awareness, Cognitive Or Emotional Symptoms, Such As Fear, Anxiety.

Diagnosis

EEG Brain Activity ,High-Density EEG, CT Scan ,Pinpointing Seizure, Location, A Neurological Exam, Blood Tests, Lumbar Puncture , An Electroencephalogram (EEG), Computerized Tomography (CT), Magnetic



Resonance Imaging (MRI), Positron Emission Tomography (PET), Single-Photon Emission Computerized Tomography (SPECT).

TREATMENT

Medication

Treatment For Seizures Often Involves The Use Of Anti-Seizure Medications. Several Options Exist For Anti-Seizure Medications. The Goal Is To Find The Medicine That Works Best For You And That Causes The Fewest Side Effects. In Some Cases, Your Doctor Might Recommend More Than One Medication. Finding The Right Medication And Dosage Can Be Complex. Your Doctor Will Consider Your Condition, Your Frequency Of Seizures, Your Age And Other Factors When Choosing Which Medication To Prescribe. Your Doctor Will Also Review Any Other Medications You May Be Taking, To Ensure The Anti-Epileptic Medications Won't Interact With Them.

Surgery And Other Therapies:

If Anti-Seizure Medications Aren't Effective, Other Treatments May Be An Option: Surgery, Vagus Nerve Stimulation, Responsive Neuro stimulation. During Responsive Neuro stimulation, Deep Brain Stimulation, Dietary Therapy.

Lifestyle And Home Remedies:

Take Medication Correctly, Get Enough Sleep, Wear A Medical Alert Bracelet, Be Active, Make Healthy Life Choices, personal Safety, Take Care Near Water, Wear A Helmet, Take Showers, Your Furnishings, Display Seizure First-Aid Tips.

To Help Someone During A Seizure, Take These Steps:

Carefully Roll The Person Onto One Side, Place Something Soft Under His Or Her Head, Loosen Tight Neckwear, Avoid Putting Your Fingers Or Other Objects In The Person's Mouth, Don't Try To Restrain Someone Having A Seizure, Clear Away Dangerous Objects, If The Person Is Moving, Stay With The Person Until Medical Personnel Arrive, Observe The Person Closely So That You Can Provide Details On What Happened, Time The Seizure, Stay Calm.

COMPLICATIONS:

Drowning, Car Accidents, Pregnancy Complications, Emotional Health Issues.

NURSING INTERVENTIONS

Maintain Airway, Assess, Monitor And Document Seizure Activity, Administer Antiepileptics (PRN And Scheduled) Medications Per Orders, Reevaluate Any Medications That May Lower The Seizure Threshold (Some Antibiotics, Educate Patient And Family On Hospital Procedures, And When To Notify Staff, Provide Emotional Support.

CONCLUSION

Many people with epilepsy lead productive and outwardly normal lives. Medical and research advances in the past two decades have led to a better understanding of epilepsy and seizures than ever before. Advanced brain scans and other techniques allow greater accuracy in diagnosing epilepsy and determining when a patient may be helped by surgery. More than 20 different medications and a variety of surgical techniques are now available and provide good control of seizures for most people with epilepsy. Other treatment options include the ketogenic diet and the first implantable device, the vagus nerve stimulator. Research on the underlying causes of epilepsy, including identification of genes for some forms of epilepsy and febrile seizures, has led to a greatly improved understanding of epilepsy that may lead to more effective treatments or even new ways of preventing epilepsy in the future.



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