The term epilepsy is derived from the Greek term epilepsia meaning to “take hold or to seize”.

Epilepsy is the most prevalent and serious neurologic disorder affecting all age groups, affecting 1% of the population.

It is associated with a wide array of behavioral changes ranging from minor alterations of consciousness during a brief seizure to chronic schizophrenia-like psychoses and mood disorders persisting throughout the interictal period.

The association between epilepsy and psychiatric disorders has a long history.

Many historical figures had epilepsy, including Julius Caesar, Peter the Great, Napoleon, James Madison, Alexander the Great, Charles V, Joan of Arc, Saint Paul, Dostoevsky, Flaubert, Moliere, Jonathan Swift, Lord Byron, Handel, Tchaikovsky, Vincent Van Gogh, Alfred Nobel, Pythagoras, and Socrates.
Some of the behaviors observed in epileptic patients are a direct manifestation of the epileptic cerebral discharge, whereas others may be related to the existence of a lesion giving rise to both the epilepsy and the behavior change.

Epilepsy & Behavior

- Parictal behavioral changes
- Ictal behavioral changes
- Postictal behavioral changes
- Intertitial neuropsychiatric alterations
  - Personality changes
  - Schizophrenia-like psychoses
  - Mood disturbances
  - Anxiety disturbances
  - Dissociative disturbances
  - Disorientation
  - Epileptic states, acomia
  - Multiple personality
  - Aggression
- Altered sexual behavior
- Forced normalization with behavioral disorders
- Anticonvulsant-related psychopathology

Causes of Psychoses in Epileptic Patients

- Parictal psychoses
- Ictal psychoses
  - Complex partial status epilepticus
  - Petit mal status epilepticus
- Postictal psychoses
- Intertitical psychoses
- Schizophrenia-like psychoses
- Mood disorders with psychosis
- Paranoid psychosis
- Forced normalization/alterate psychoses
- Anticonvulsant-related psychoses
  - Anticonvulsant toxicity
  - Anticonvulsant withdrawal
- Psychoses with underlying brain disorder
Etiologies of Depression in Epilepsy

- Psychological reaction to diagnosis and associated social and occupational limitations
- Paroxysmal mood changes
- Interictal depression
- Depression coexisting with interictal psychosis
- Forced normalization/alternate behavior disturbance with mood abnormalities
- Anticonvulsant-induced mood alterations
- Anticonvulsant withdrawal with mood symptoms
- Mood disorder with underlying brain disorder

Social Issues in Epilepsy

- Some of the most important issues for patients with epilepsy is social.
- Although in discussions with patients physicians talk mostly about seizure frequency, medication side effects, and the results of testing, patients may have a different set of concerns, such as how to deal with the embarrassment of a seizure.

- Moreover, patients want to know how seizures are going to affect their ability to obtain, or retain, a job, or succeed in school, and they want to know what seizures will mean for their social life, marriage, family, and the advisability of having children.

- Patients are also curious to know how seizures will affect their ability to obtain a driver's license and influence their independence.
- Overall, there is considerable fear, misinformation, and stigma associated with epilepsy.

- For obscure historical reasons, epilepsy is viewed by many as a disorder linked to insanity, or in some cases, evil.
- Successful treatment therefore requires that these special issues be addressed with the patient.

- There is much discussion about driving and epilepsy. Although patients with frequent seizures should not drive, those with infrequent seizures may drive under some conditions.
- Different states have different requirements for seizure-free intervals, varying from a few months to 2 years.
- The shorter time intervals allow people with epilepsy to make other arrangements for temporary transportation, theoretically encouraging honesty in reporting.
Social Issues in Epilepsy

- Persons with seizures can obtain exemptions allowing them to drive if the seizures are exclusively nocturnal, or they have a prolonged and consistent warning that would allow time to bring the car to a safe stop.
- Most, but not all, states make it the responsibility of the patient to notify the motor vehicle division.
- Required physician reporting encourages dishonesty between the patient and the physician about the occurrence of seizures, preventing appropriate treatment.

Employment

- Most people with epilepsy work full time at productive jobs.
- Occupations that involve driving, operation of life- or limb-threatening machinery, caustic chemicals, or prolonged periods on heights or underwater should not be undertaken by those with uncontrolled seizures.

Employment

- The 1990 "Americans for Disability Act", prohibits discrimination on the job against people with epilepsy.
- If people with epilepsy cannot perform their job because of seizures, attempts must be made to accommodate them within the context of their employment.

School

- Children with epilepsy can perform well in school, although some do not.
- Failure may be because of social and peer pressure, or poor self-image and lessened expectations.
- Other children perform poorly because of an underlying brain injury/disorder.
- Another major factor in poor school performance is antiepileptic medication; barbiturates are particularly problematic in this regard.

Injuries From Seizures

- Although the goal of therapy is to allow people with epilepsy to live their lives as fully as possible, there must be an appreciation of the potential for injuries resulting from this condition.

Injuries From Seizures

- Patients with infrequent seizures (e.g., small seizures less than every 3 months) may have no need for restrictions, whereas those with frequent seizures should be particularly careful around water, including bathtubs (it may safer to shower sitting), heights (brief climbs up ladders or stairs are usually safe), some machinery, and other potentially dangerous situations.
Injuries From Seizures
- These risks are present in both the home and the workplace.
- For the best care, safety precautions should be individualized for each patient.

Imitators of Epilepsy
- Sleep disorders, such as narcolepsy cataplexy, or excessive daytime sleepiness, resemble seizures.
- Patients sometimes present with tremors, tics, dystonic posturing, or other forms of abnormal movement such as Huntington’s disease that are sometimes confused with simple partial seizures.

Psychiatric Imitators of Epilepsy
- Most difficult to differentiate from epilepsy.
- These include panic attacks, hyperventilation, episodic dyscontrol, and psychogenic seizures that provide diagnostic difficulties.
- With breath-holding spells, which are variants of temper tantrums in children, the child becomes angry, holds his or her breath, turns blue, loses consciousness, and exhibits some jerking.

Psychiatric Imitators of Epilepsy
- Night terrors are screaming episodes during sleep that are typically seen with children.
- Although breath-holding spells and night terrors are alarming, they are benign.

Psychological Seizures
- Also called psychosomatic seizures, pseudoseizures, psychogenic seizures, or nonepileptic seizures where “subconscious” stress causes the patient to have seizure-like episodes.
- In most cases a nonepileptic seizure does not reflect a conscious effort to “fake” a seizure, but a psychosomatic phenomena without awareness.

Psychological Seizures
- The treatment for psychogenic seizures includes psychological counseling, cognitive-behavioral therapy, not antiepileptic medications.
- Video-EEG monitoring is usually needed to confirm a diagnosis of psychogenic seizures because the expected EEG changes associated with a seizure will be absent.