SEIZURE TRIGGERS

M A R I A R A Q U E L L O P E Z . M . D
M I A M I V H A
DEFINITION OF SEIZURE VS. EPILEPSY

• Epileptic seizure:

  Is a transient symptom of abnormal excessive electric activity of the brain.
EPILEPSY

- More than one epileptic seizure.
TYPE OF SEIZURES

- Seizures
  - Partial
    - Simple Partial
    - Complex Partial
  - Generalized
    - Absence
    - Tonic-Clonic
    - Myoclonic
    - Atonic
ETIOLOGY

• Epilepsy is a heterogeneous condition with varying etiologies including:
  1. Genetic
  2. Infectious
  3. Trauma
  4. Vascular
  5. Neoplasm
  6. Toxic exposures
TRIGGERS FOR EPILEPTIC SEIZURES

• What is a seizure trigger?

It is a factor that can cause a seizure in a person who either has epilepsy or does not.

• Factors that lead into a seizure are complex and it is not possible to determine the trigger in each patient.
TRIGGERS

A. Most common ones

Stress

Missing taking the medication
THE MOST OFTEN REPORTED BY PATIENTS

• Sleep deprivation and tiredness

• Fever
OTHER COMMON CAUSES

- Infection
- Fasting leading into hypoglycemia.
- Caffeine: particularly if it interrupts normal sleep patterns.
- Other medications like hormonal replacement, pain killers or antibiotics.
OTHER TRIGGERS

External precipitants

• Alcohol consumption or withdrawal.

*Specific triggers that are related to Reflex epilepsy
  Bathing
  Eating
  Reading
OTHER TRIGGERS

• Flashing light: especially with patients with idiopathic generalized seizure disorder
STRESS

- Stress is the most common patient–perceived seizure precipitant, studies of life events suggest that stressful experiences trigger seizures in certain individuals.

- Animals epilepsy models provide more convincing evidence that exposure to exogenous and endogenous stress mediators has been found to increase epileptic activity in the brain, especially after repeating exposure.
SOLUTION ABOUT STRESS

- Intervention of copying with stress
STRESS MANAGEMENT

- Include trying to get in a place of peace utilizing multiple techniques:
  - Regular exercise
  - Yoga and medication
  - Therapy or psychological support with a provider
  - Support group
  - Nurture healthy relationships
  - Practice positive thinking
  - Balancing your life.
MEDICATION COMPLIANCE

- Missing medications is the most common cause of breakthrough seizures.

- Solution:
  - Pills boxes.
  - Alarms.
  - Regular schedule.
  - Care giver supervision
SLEEP DEPRIVATION

• Sleep hygiene
  1. keeping sleep schedule unchanged during week and weekends.

  2. Avoid heavy meal 1 – 2 h before going to sleep.

  3. Avoid T.V in the room.

  4. The bed is only to sleep or sex not for watching tv or relaxing.

  5. Avoid Alcohol.
FEVER

• Especially important for children under the age of 5.
• However for adults is also important:
  • Red flag of infection.
  • Early intervention and treatment can prevent consequences.
INFECTION

- Infection increases the metabolic stress and may decrease the seizure threshold.
FOOD

• Skipping food can lead into hypoglycemia and that is a dangerous state that can have detrimental consequences such as seizures and brain damage.

• Unhealthy diet rich on caffeine and sugars can produce disrupted sleep and may also increase anxiety.

• Have a regular schedule for each meal, balance meals and portions.
CAFFEINE EXCESS

As previously said, excess of caffeine can disturb sleep, cause headaches and disrupt health in general.
AVOID MEDICATIONS

• Always keep aware any medical provider about you suffering the condition of having epilepsy.
• There are certain medications that needs to be prevented due to increase risk of seizures such as
  • Pain killer: Tramadol, Demerol, Vicodin.
  • Antibiotics: Cephalosporins and high doses of certain antidepressants.
MENSTRUAL CYCLES

• Women with focal seizures, especially temporal lobe epilepsy are more prone to have seizures during the period of menstruation.
• This pattern is known as catamenial seizures.
• Therapeutic approaches may involve the use of natural progesterone or changes of the doses of current antiepileptics.
CONCLUSIONS

• Dealing with seizure precipitating factors is somewhat neglected and underestimated.
• Acknowledging and avoiding seizures precipitants may improve seizure control in many patients.
• Knowledge of seizures precipitants has practical implications, which include patient treatment and counseling.
• Knowing the triggers facilitate the diagnosis of the type of epilepsy.
• Patients are sometimes able to stop the seizures knowing the triggers and using common techniques such as resting, medication and relaxation helps.
QUESTIONS
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