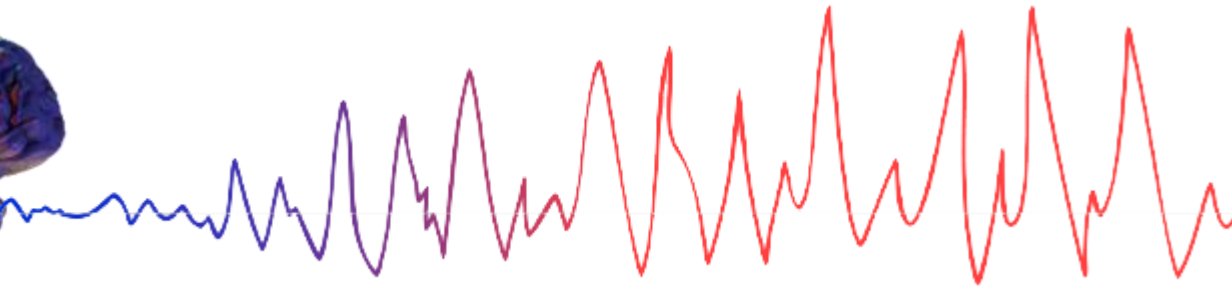
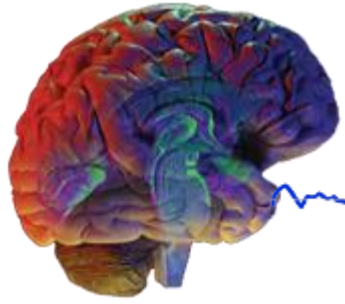


Epilepsy Care in the School Setting

Children's Epilepsy Educational Video Series





Epilepsy Care in the School Setting

Children's Epilepsy Educational Video Series

Presented by Susan McCallum, MSN, RN
Children's Comprehensive Epilepsy Center
404-785-3720
www.choa.org



Course Disclaimer

This is general information and not specific medical advice for you, your child, or loved one. Always consult your doctor or other healthcare provider if you have any questions or concerns. Call 911 or go to the nearest emergency department in case of an urgent concern or emergency.

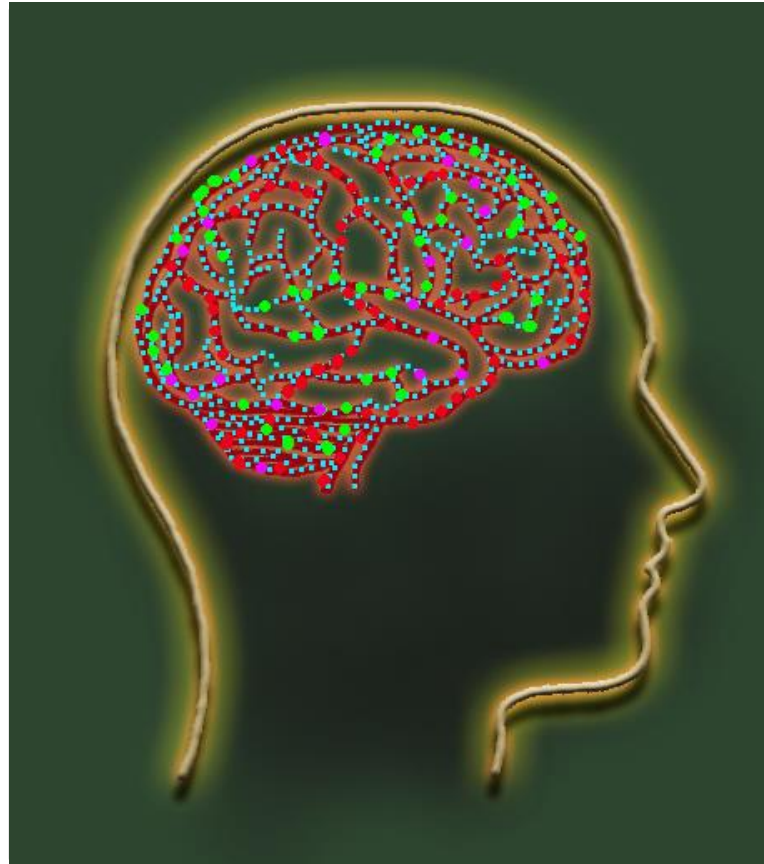


Educational Activity Disclosure

Epilepsy Overview - Part 1 of 4

Disclosures	Action
Criteria for Successful Completion	<ul style="list-style-type: none">• View entire recording• Completion of evaluation
Conflicts of Interest Statements for Planning Committee	The planning committee members have no relevant financial relationship to declare.
Conflicts of Interest Statements for Faculty/Presenters/ Authors	The content experts/faculty/presenters/authors have no relevant financial relationship to declare.
Commercial Support	No commercial support is being received for this event.
Sponsorship	No sponsorship is being received for this event
Non-endorsement of Products	No products are being displayed at this event
Continuing Education	<p><i>This continuing nursing education activity was provided by Children's Healthcare of Atlanta.</i> Children's Healthcare of Atlanta is an approved provider of continuing nursing education by the Alabama State Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.</p> <p>Contact hours: 0.5 Activity ID: 2017-0508-01 Expiration Date: 05/08/2019</p>





Credit: Martin Allison

Epilepsy Overview

Children's Comprehensive Epilepsy Center

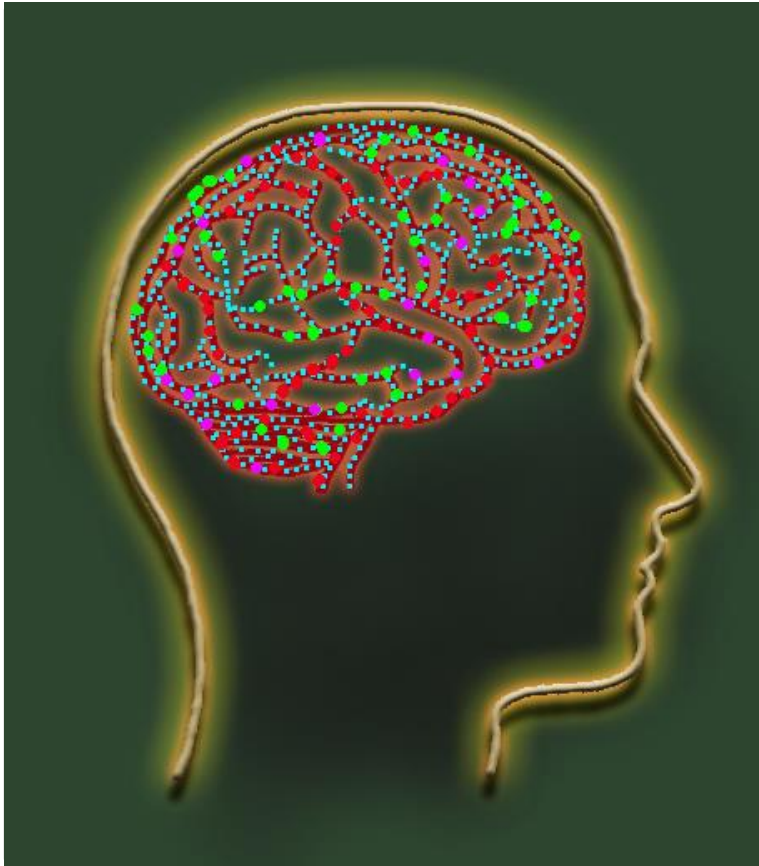
Presented by Susan McCallum, MSN, RN
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Children's Healthcare of Atlanta



Main Focus

This education video is intended for school nurses who:



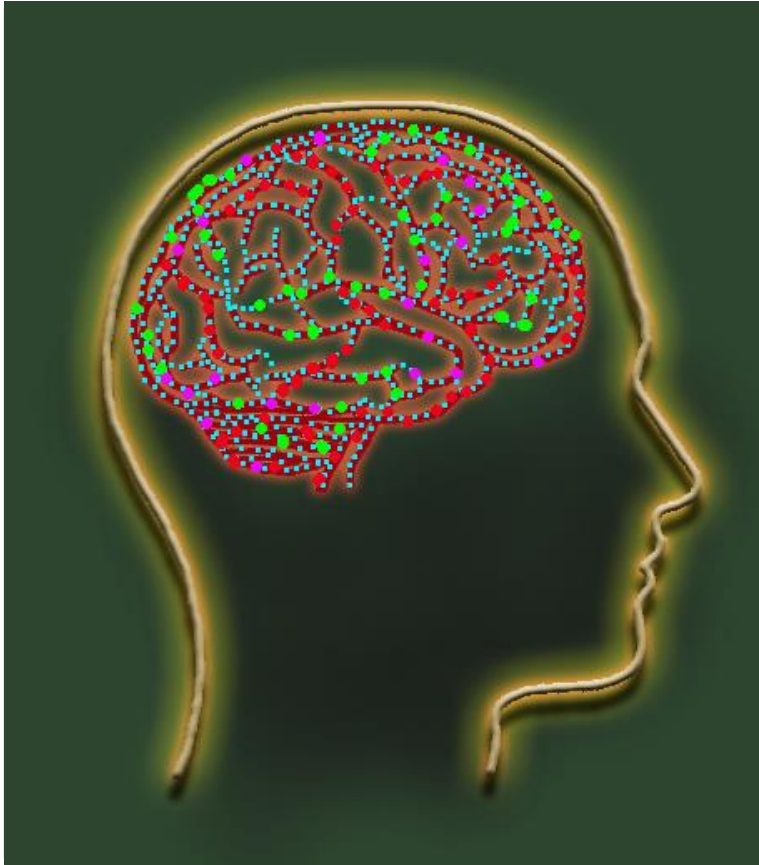
Credit: Martin Allison



Main Focus

This education video is intended for school nurses who:

- Care directly for students with epilepsy



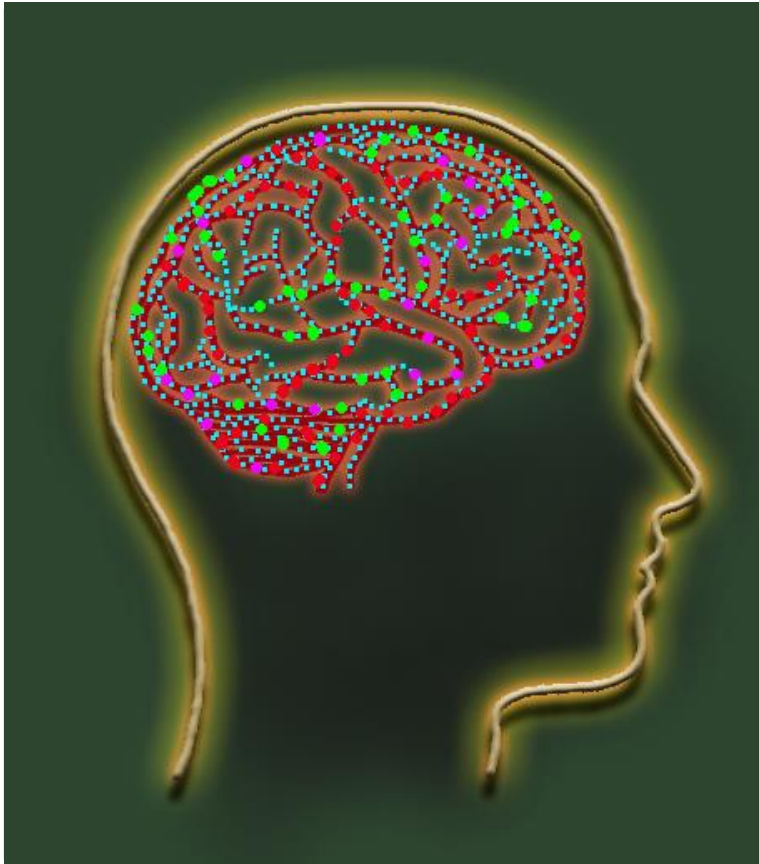
Credit: Martin Allison



Main Focus

This education video is intended for school nurses who:

- Care directly for students with epilepsy
- Provide first aid for seizures, including seizure medication



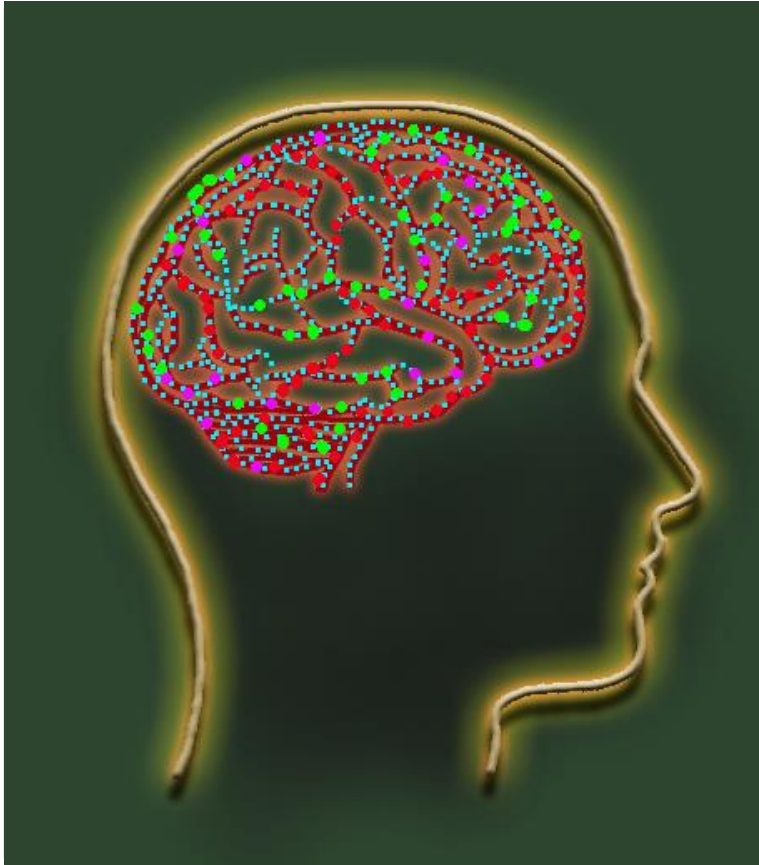
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Main Focus

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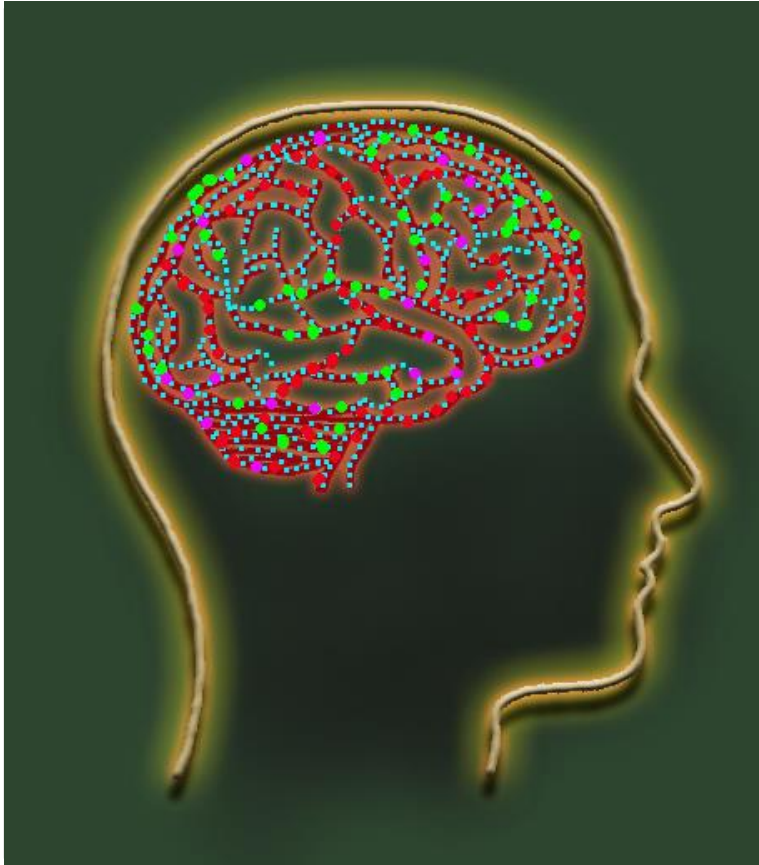
- Care directly for students with epilepsy
- Provide first aid for seizures, including seizure medication
- May teach non-licensed school personnel such as teachers, coaches, or after school staff how to respond to students experiencing a seizure



Credit: Martin Allison



Learning Objectives



Credit: Martin Allison



Learning Objectives

- Define epilepsy

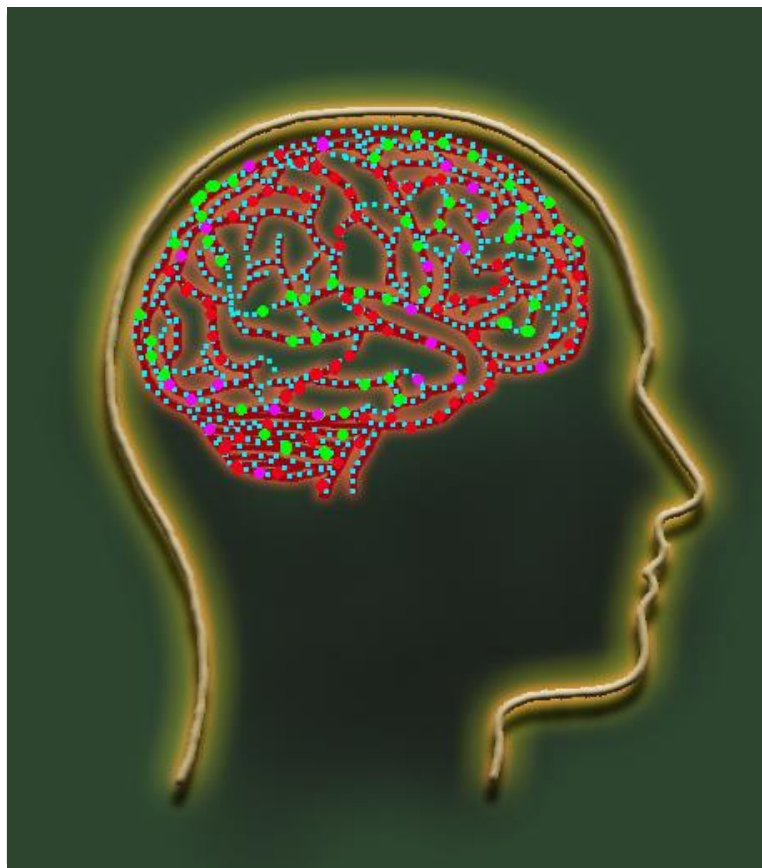


Credit: Martin Allison



Learning Objectives

- Define epilepsy
- Describe the difference between epilepsy and seizures

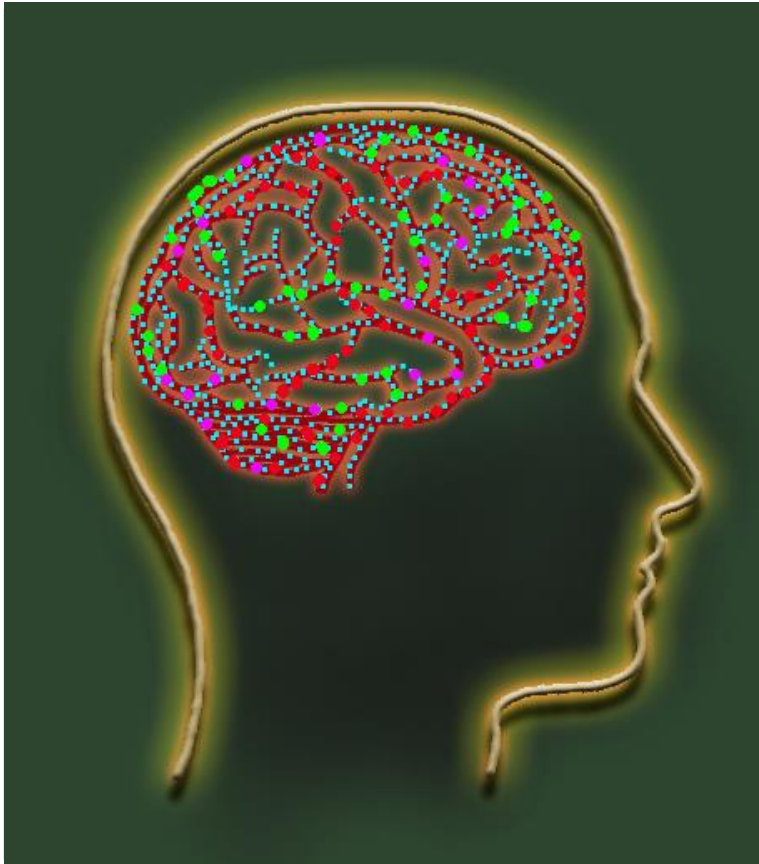


Credit: Martin Allison



Learning Objectives

- Define epilepsy
- Describe the difference between epilepsy and seizures
- Explain potential causes, triggers, or precipitants for seizures



Credit: Martin Allison



Epilepsy Facts



Epilepsy Facts

- Epilepsy is the most common childhood neurologic condition



Credit: Children's Hospital Colorado

Epilepsy Facts

- Epilepsy is the most common childhood neurologic condition
- About **3 million** people in the US currently living with epilepsy



Credit: Deposit Photos

Epilepsy Facts

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- 1 in 26 people in the US will have epilepsy at some point in their life



Credit: Deposit Photos

Epilepsy Facts

- Epilepsy is the most common childhood neurologic condition
- About **3 million** people in the US currently living with epilepsy
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- Acute seizures account for 2% of pediatric ED visits and cost approximately \$4 billion annually



Credit: Deposit Photos



Epilepsy Facts

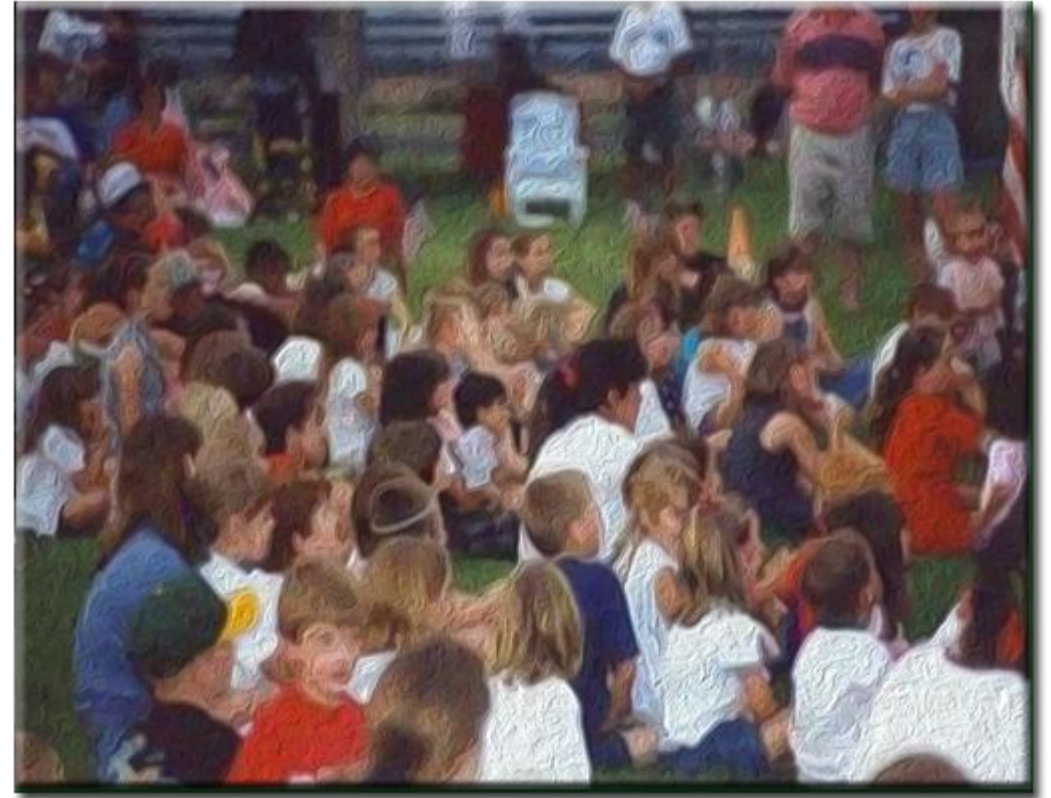
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- 1 in 26 people in the US will have epilepsy at some point in their life
- Acute seizures account for 2% of pediatric ED visits and cost approximately \$4 billion annually
- Epilepsy costs the US about **\$15.5 billion** in healthcare and other expenses annually



Credit: Martin Allison

Epilepsy Facts

- Children with current epilepsy diagnosis are more likely to access mental health treatment and special education services than children never diagnosed with epilepsy



Credit: Deposit Photos

What Is Epilepsy?



What Is Epilepsy

- Epilepsy is a disorder of the brain characterized by an enduring predisposition to generate seizures



Credit: Martin Allison



What Is Epilepsy

- Epilepsy is a disorder of the brain characterized by an enduring predisposition to generate seizures
- A **seizure** is the manifestation of sudden and intense bursts of electrical activity in the brain.



Credit: Martin Allison





Children's Healthcare of Atlanta



What Is Epilepsy

- Brain = millions of nerve cells carrying electrical charges



Credit: Martin Allison



What Is Epilepsy

- Brain = millions of nerve cells carrying electrical charges
 - Normal functioning brain = electrical charges moving in orderly and controlled fashion

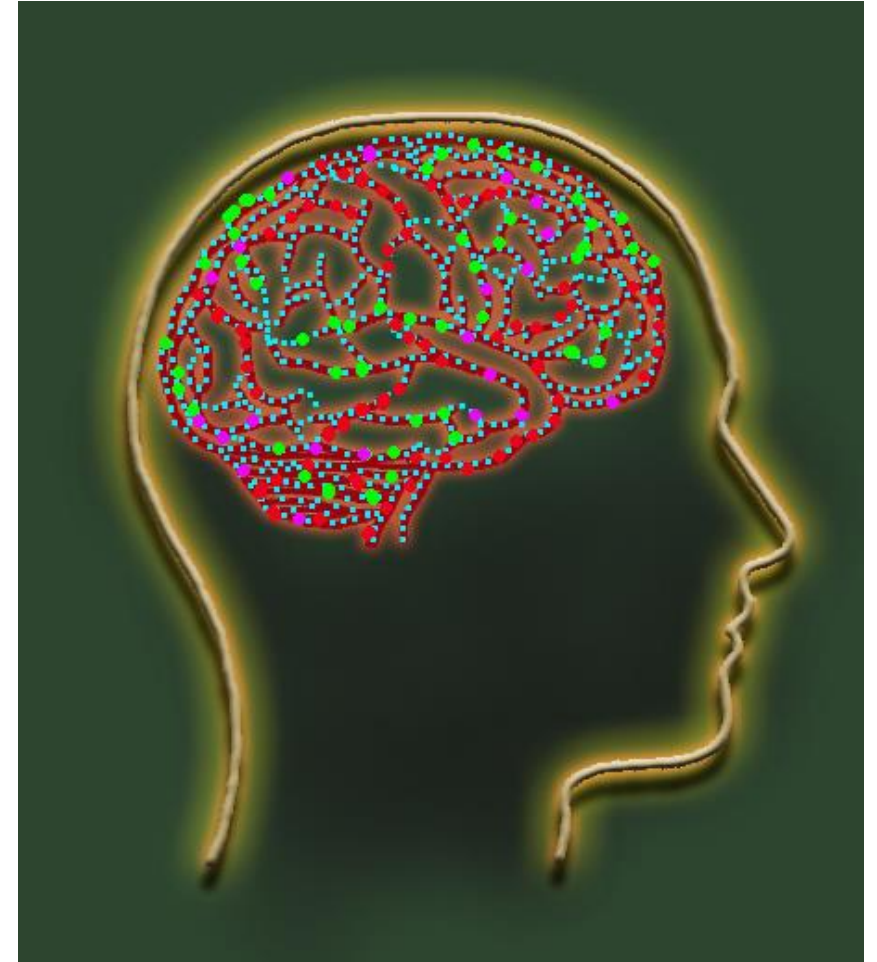


Credit: Martin Allison



What Is Epilepsy

- Brain = millions of nerve cells carrying electrical charges
 - Normal functioning brain = electrical charges moving in orderly and controlled fashion
 - Epileptic brain = nerve cells send out rapid electrical charges that disrupt the way the brain functions



Credit: Martin Allison

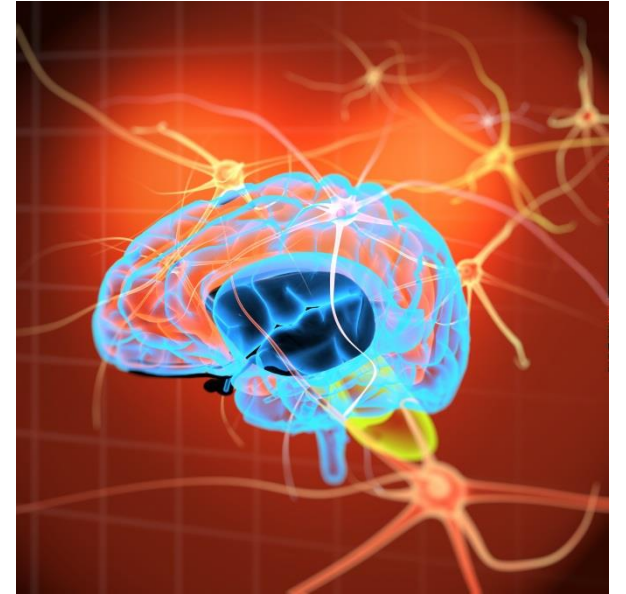


Seizure vs Epilepsy



Seizure vs Epilepsy

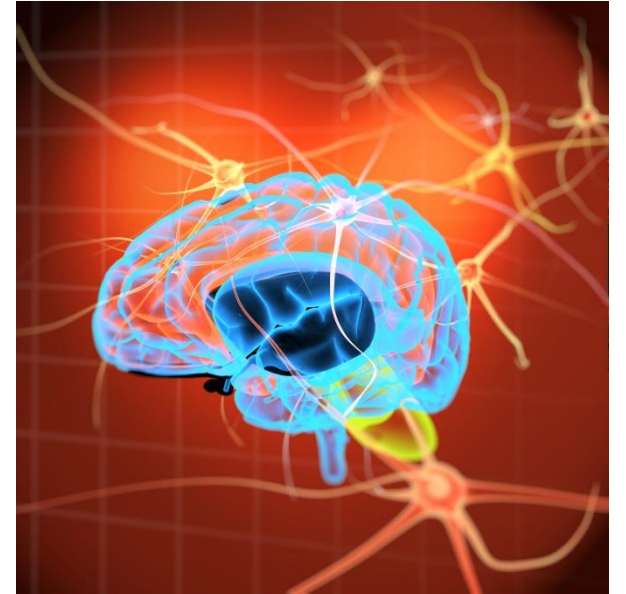
- Seizure is the manifestation of abnormal electrical discharges in the brain.



Credit: Deposit Photos

Seizure vs Epilepsy

- Seizure is the manifestation of abnormal electrical discharges in the brain
 - Subjective symptoms (taste, smell, or visual symptoms)

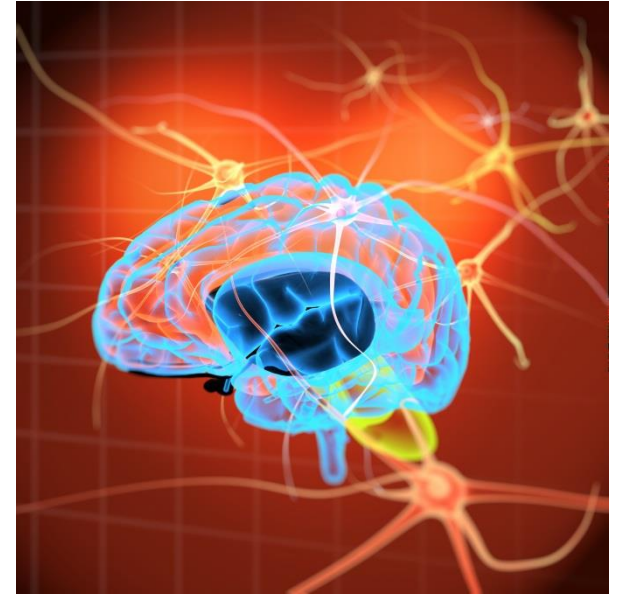


Credit: Deposit Photos



Seizure vs Epilepsy

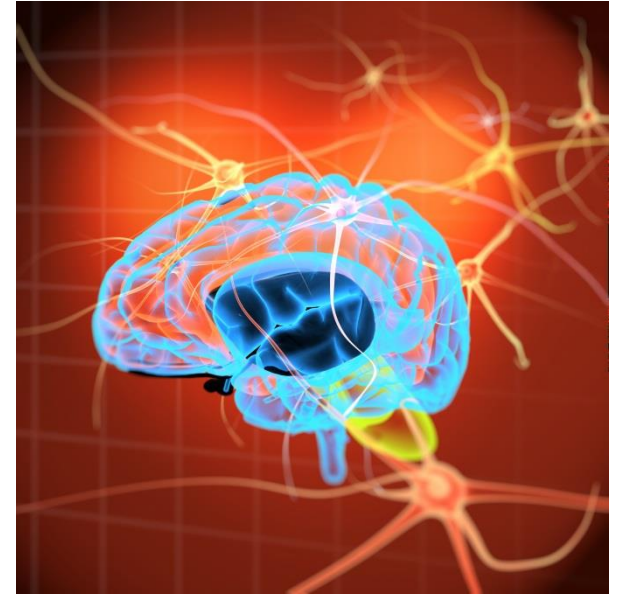
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Credit: Deposit Photos

Seizure vs Epilepsy

- Seizure is the manifestation of abnormal electrical discharges in the brain
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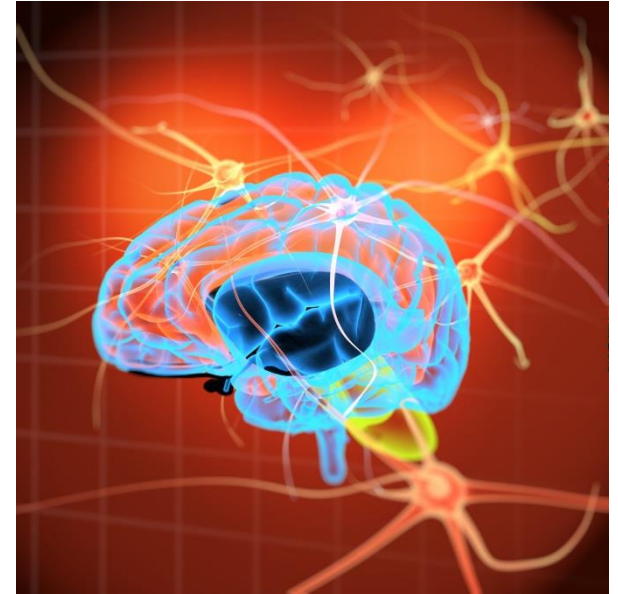


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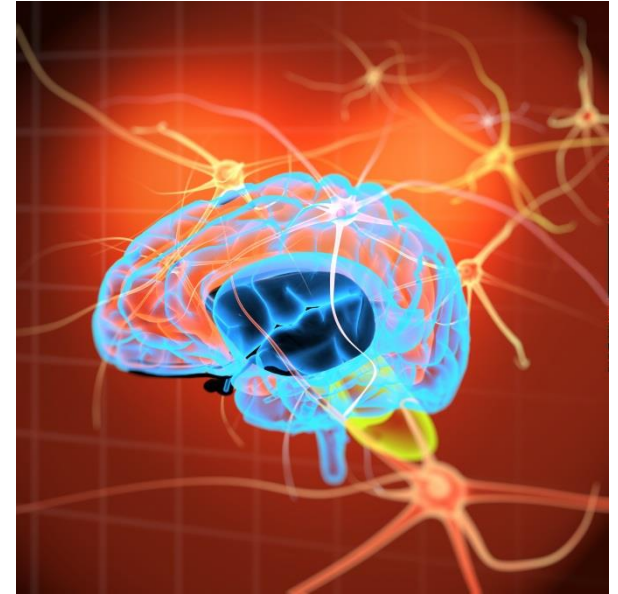


Credit: Deposit Photos



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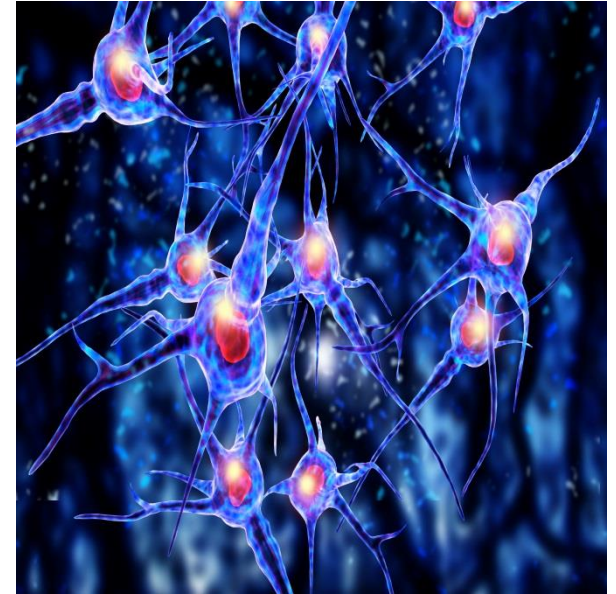


Credit: Deposit Photos



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- Epilepsy is a disorder of the central nervous system

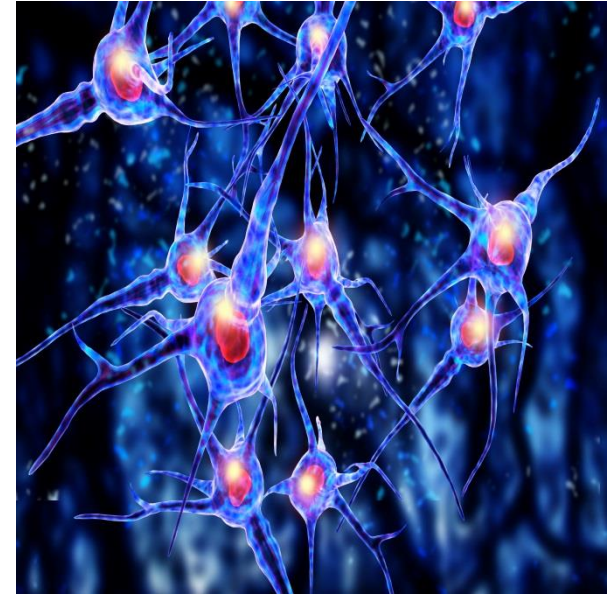


Credit: Deposit Photos



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Credit: Deposit Photos



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Credit: Deposit Photos



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Credit: Deposit Photos



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 - Sometimes referred to as “seizure disorder”
- All patients with epilepsy experience seizures, not all individuals with seizures have epilepsy



Credit: Deposit Photos

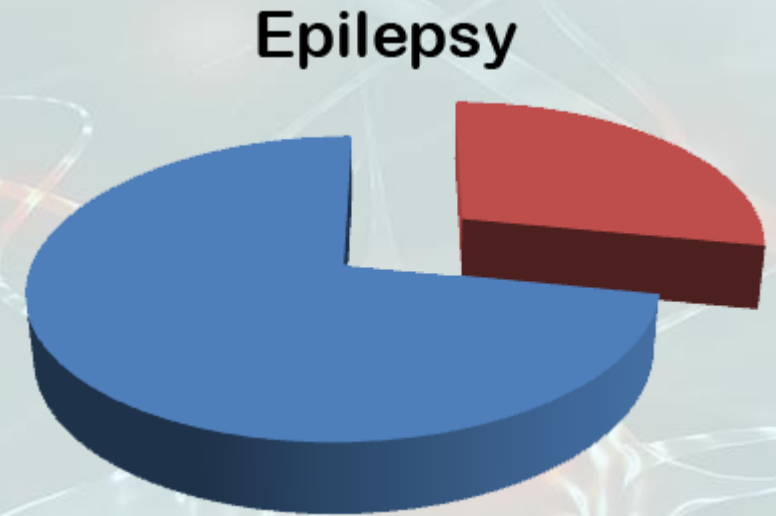


What Causes Epilepsy?



What Causes Epilepsy

- 6 of 10 epilepsy cases = idiopathic epilepsy

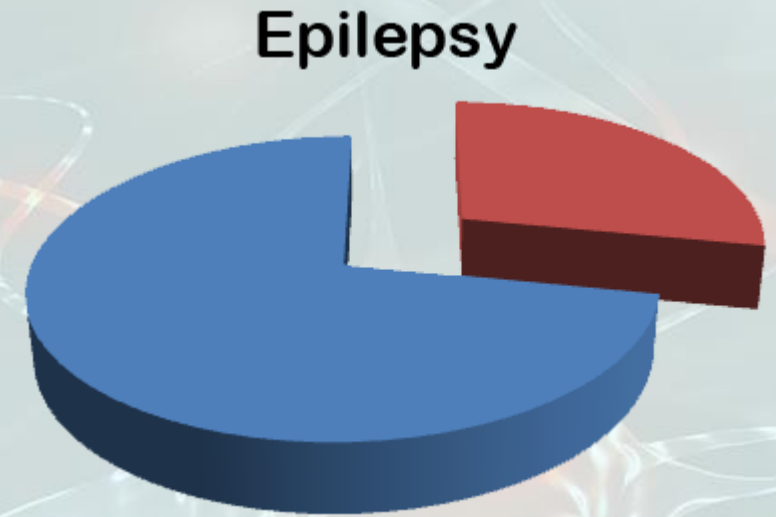


Credit: Deposit Photos



What Causes Epilepsy

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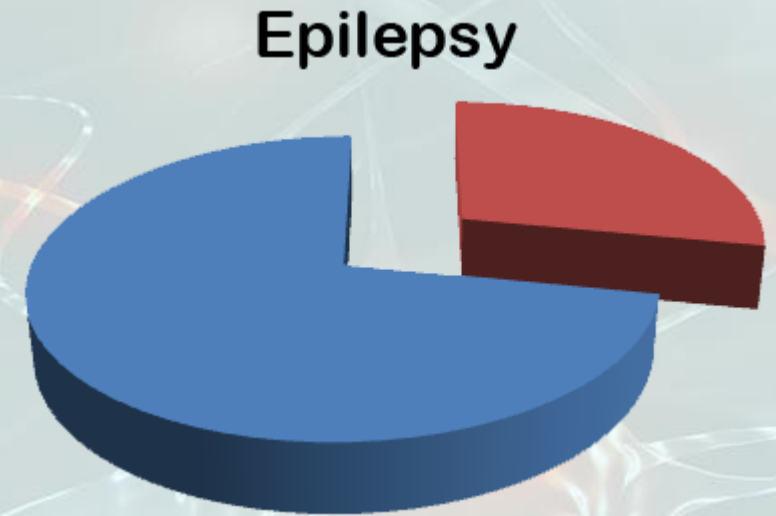


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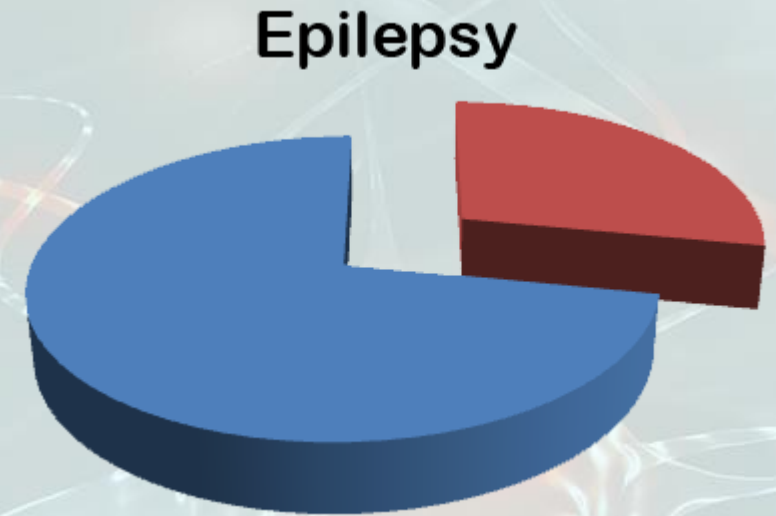


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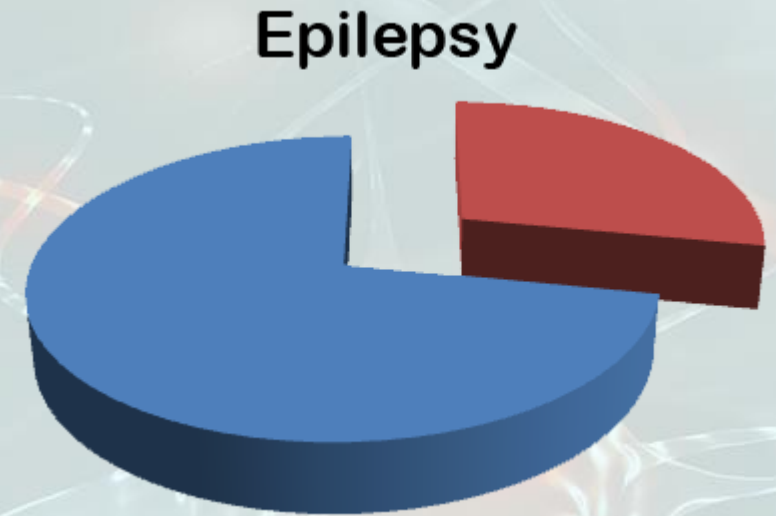


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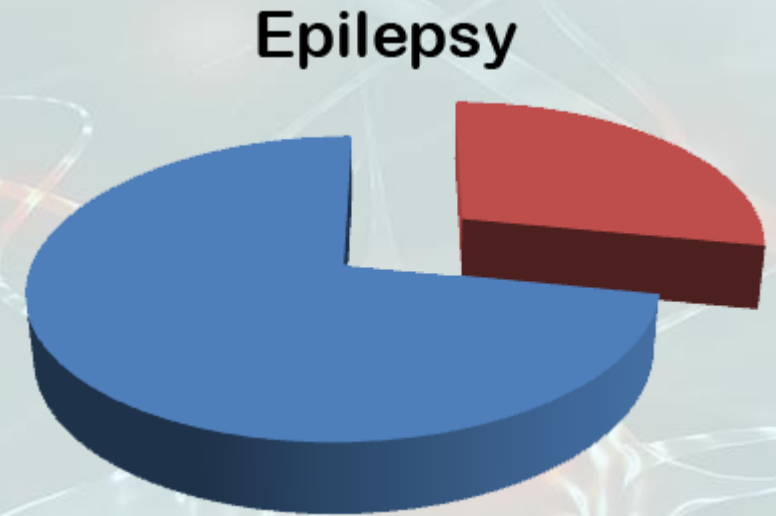


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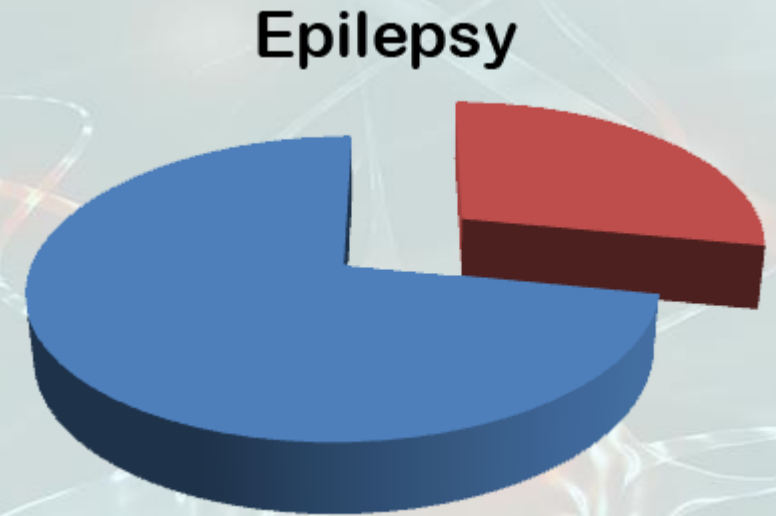


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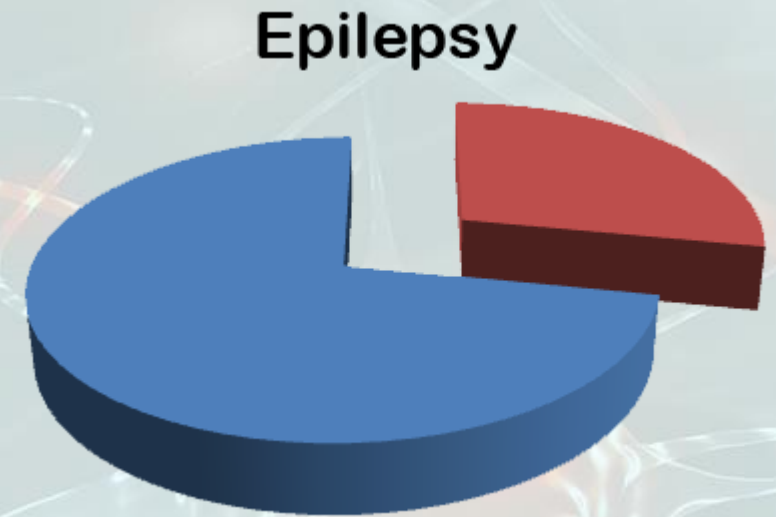


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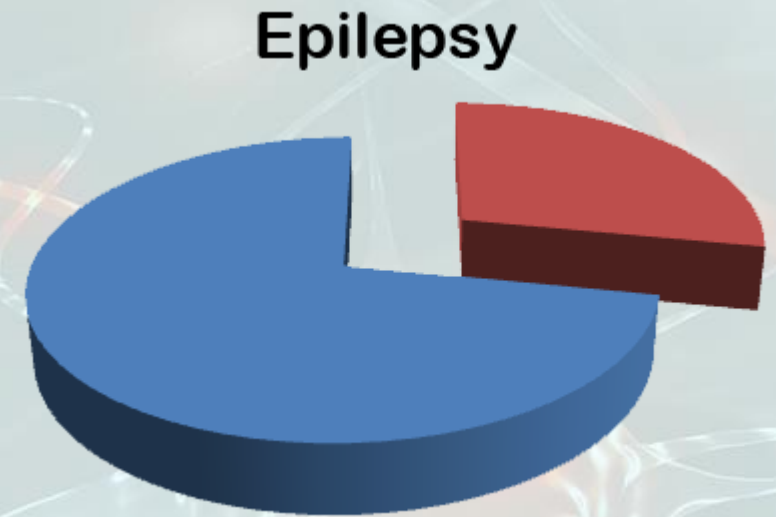


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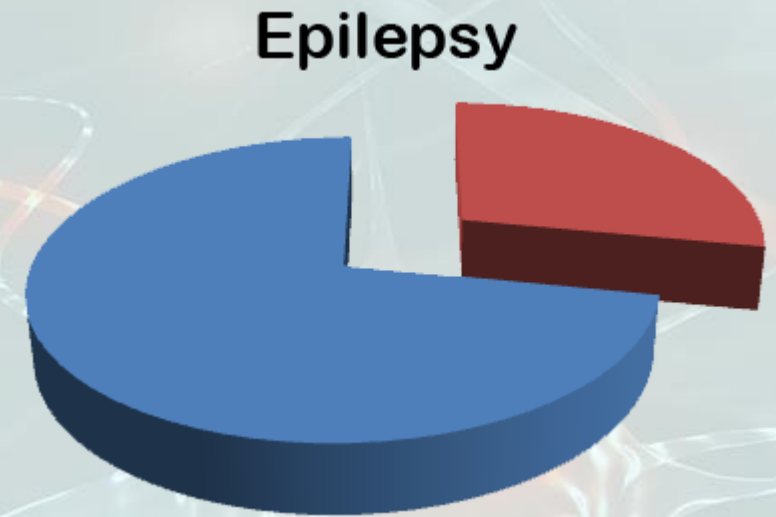


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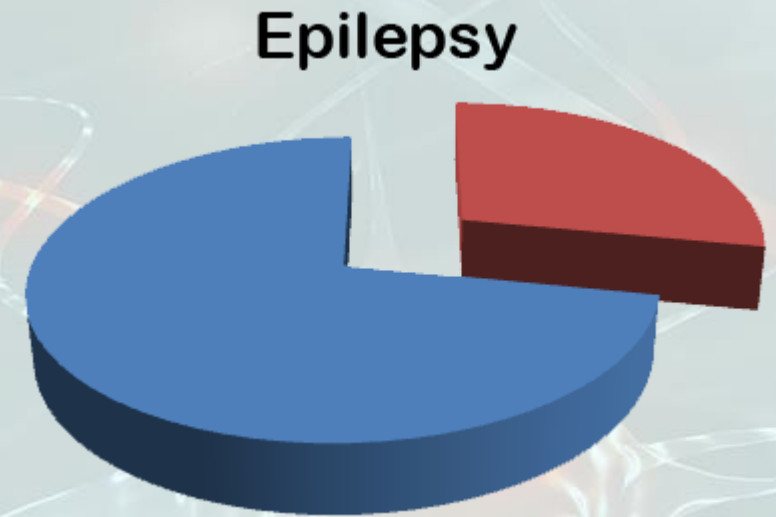


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 - Hypoxia (lack of oxygen to the brain)
 - Congenital abnormalities (birth injury, hypoxic encephalopathy, stroke, brain hemorrhage)



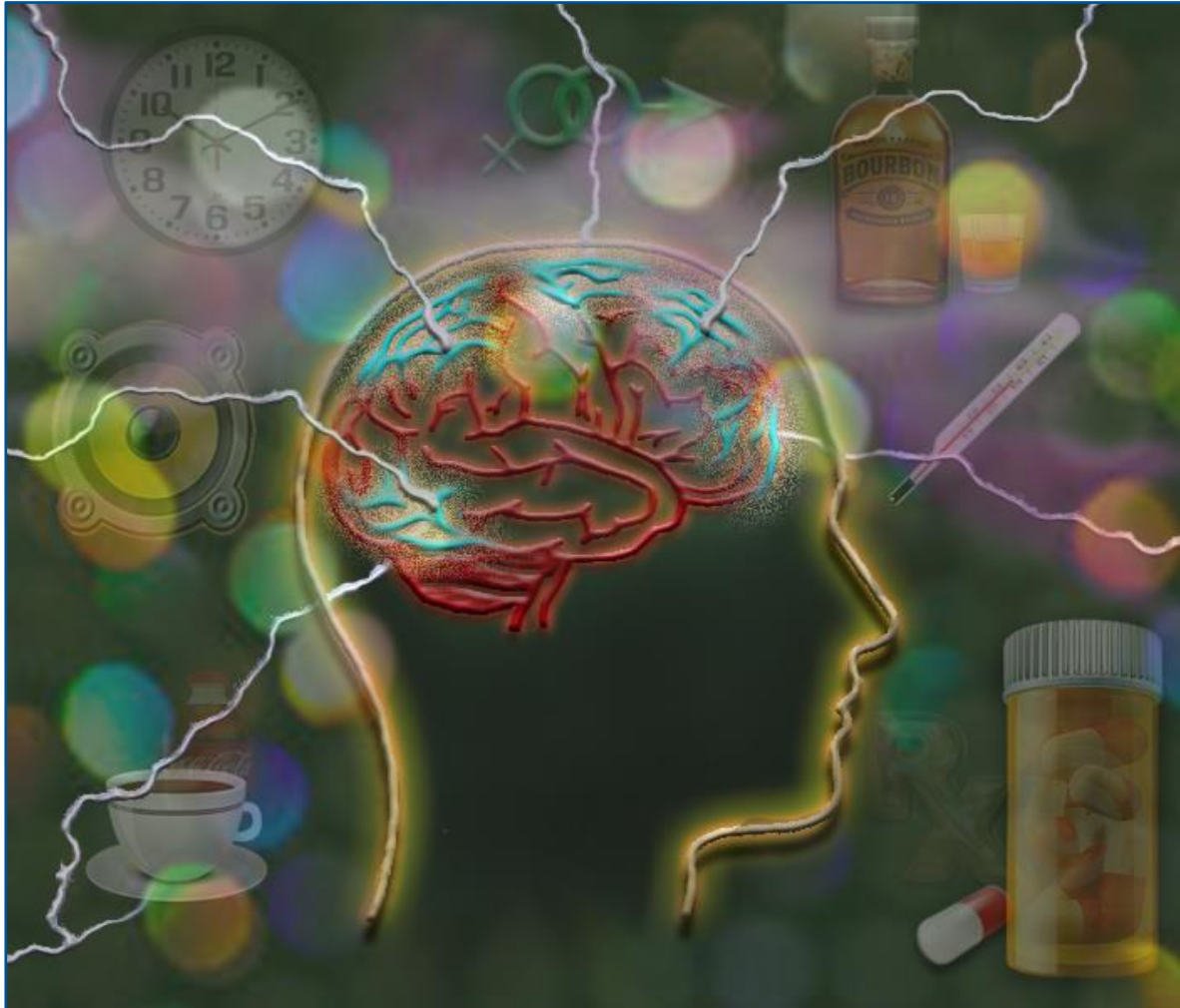
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Seizure Triggers or Precipitants



Seizure Triggers or Precipitants

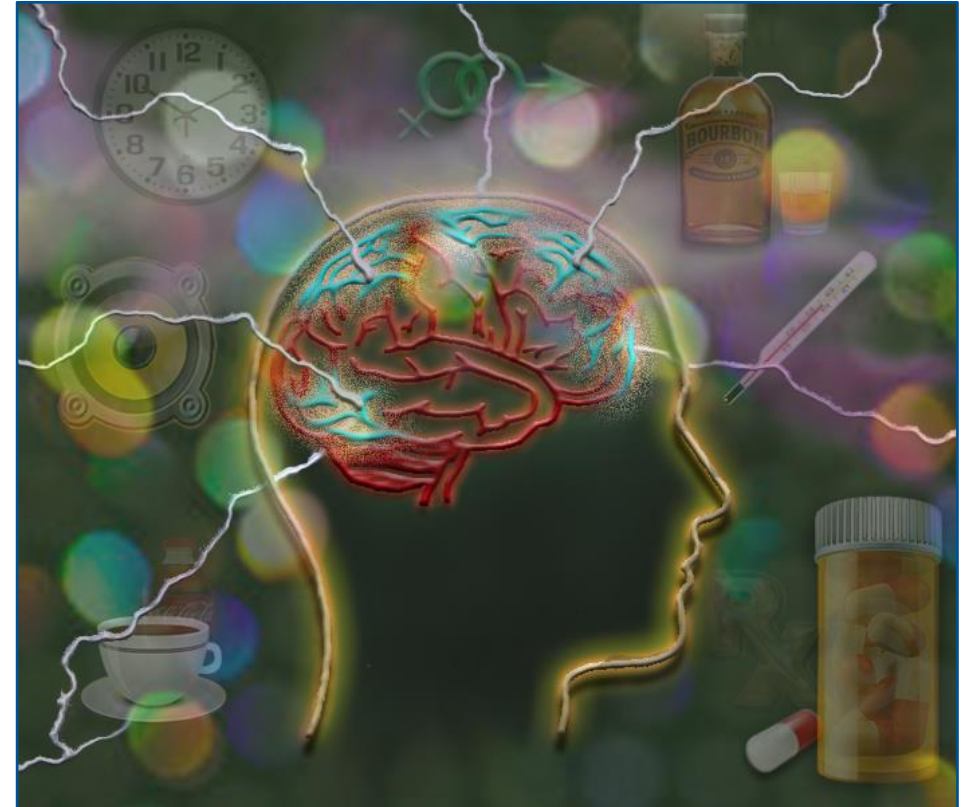


Credit: Martin Allison



Seizure Triggers or Precipitants

- Missed medication or a change in medication

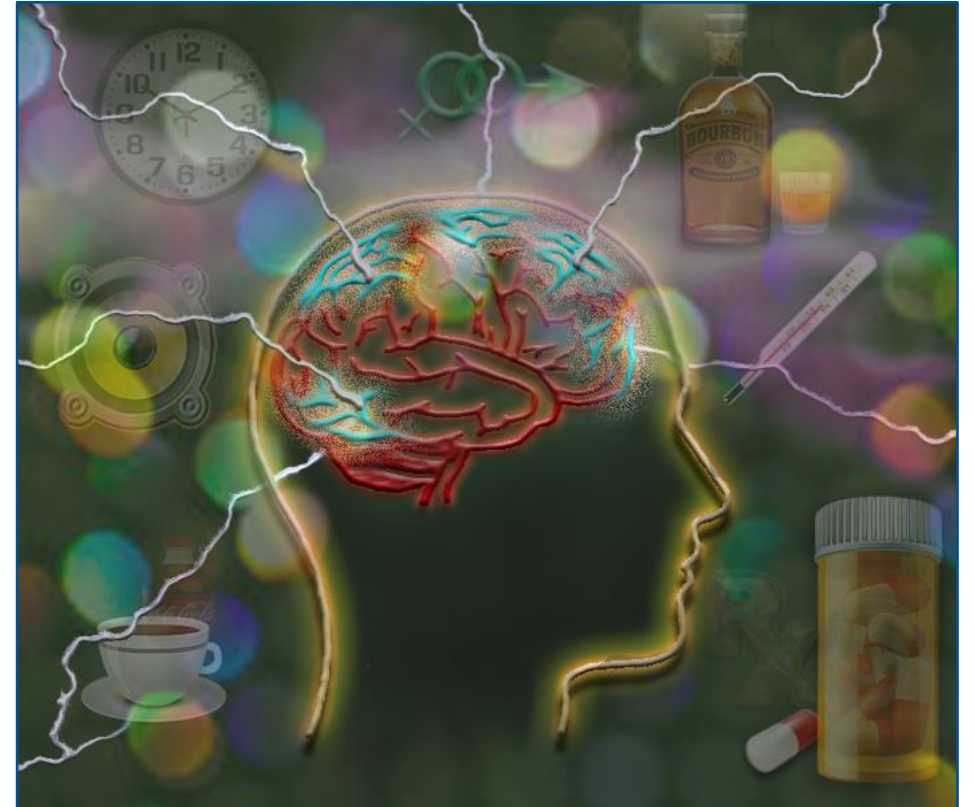


Credit: Martin Allison



Seizure Triggers or Precipitants

- Missed medication or a change in medication
 - Most common cause of breakthrough seizures

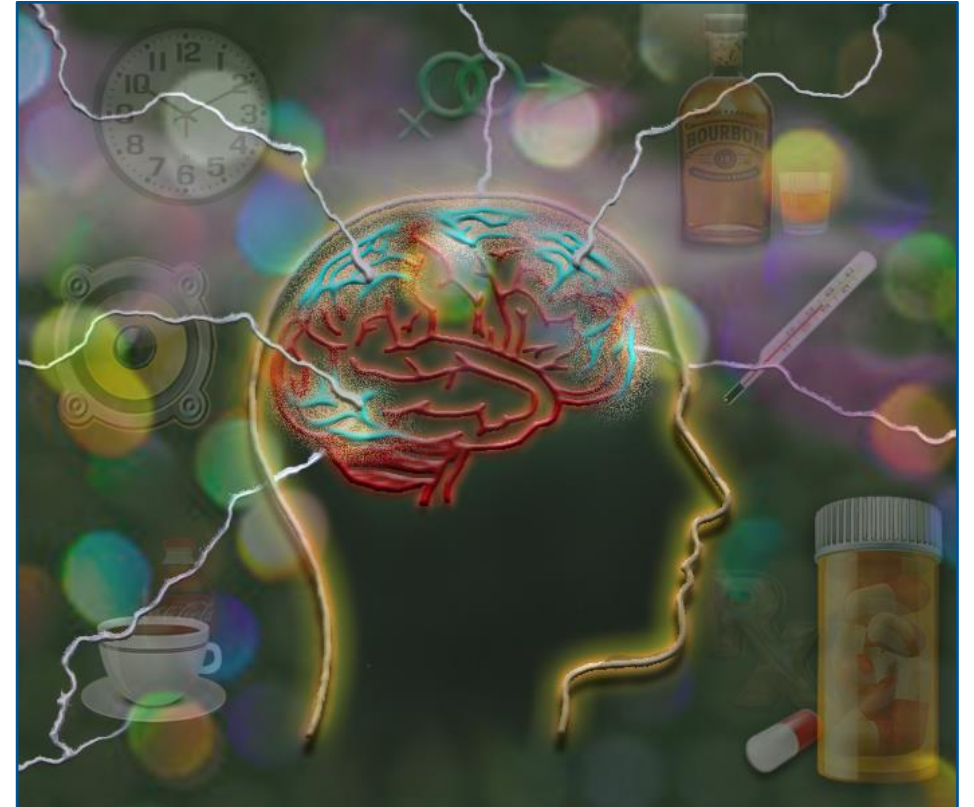


Credit: Martin Allison



Seizure Triggers or Precipitants

- Missed medication or a change in medication
- Lack of sleep or fatigue

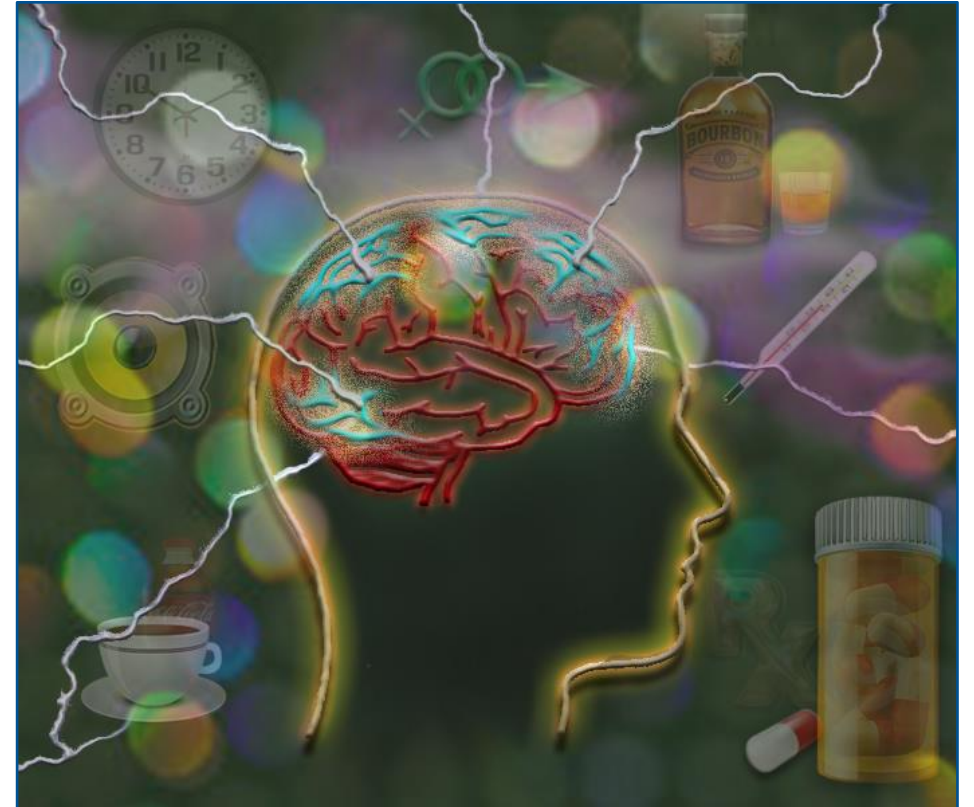


Credit: Martin Allison



Seizure Triggers or Precipitants

- Missed medication or a change in medication
- Lack of sleep or fatigue
 - Can increase intensity and length of seizures

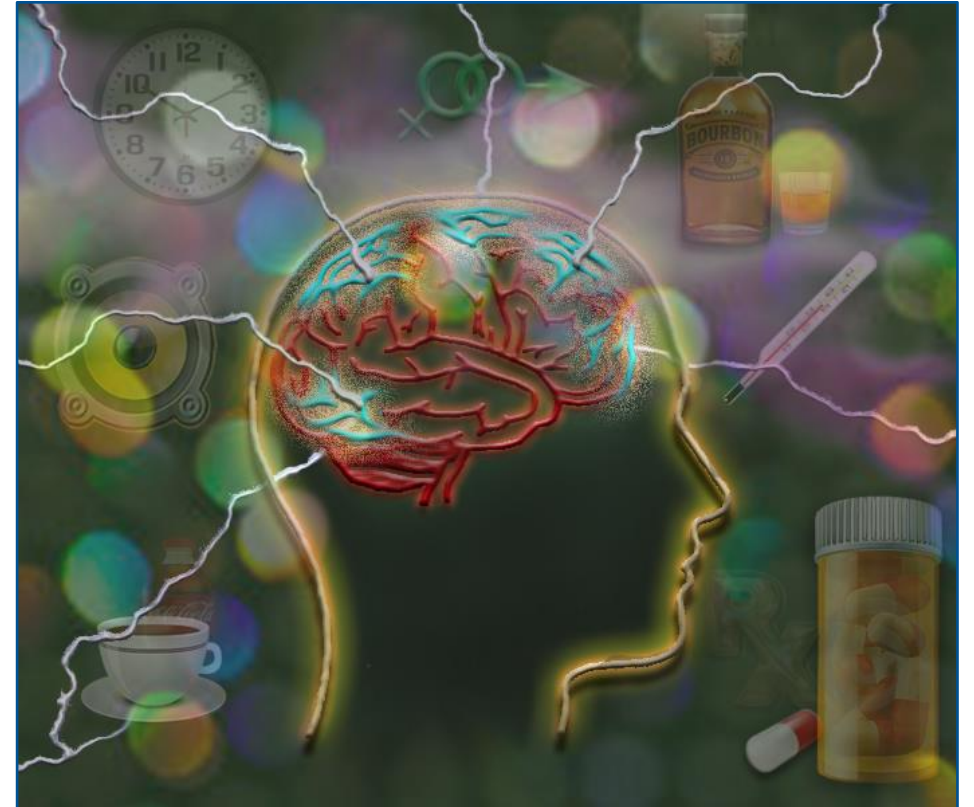


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Seizure Triggers or Precipitants

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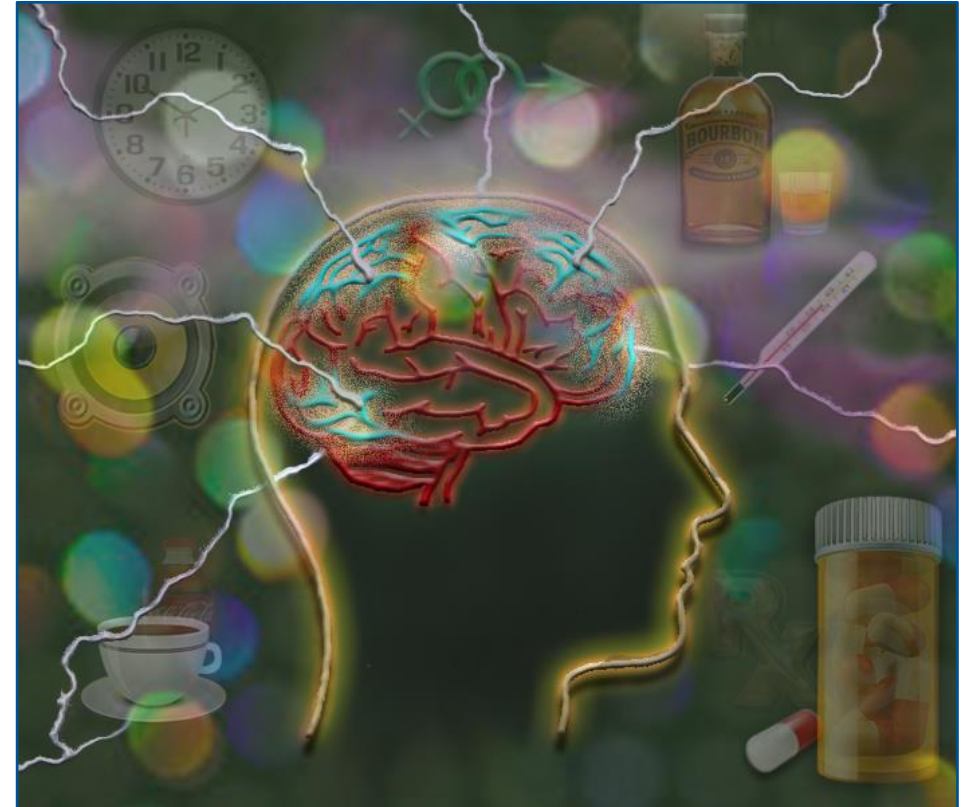


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Seizure Triggers or Precipitants

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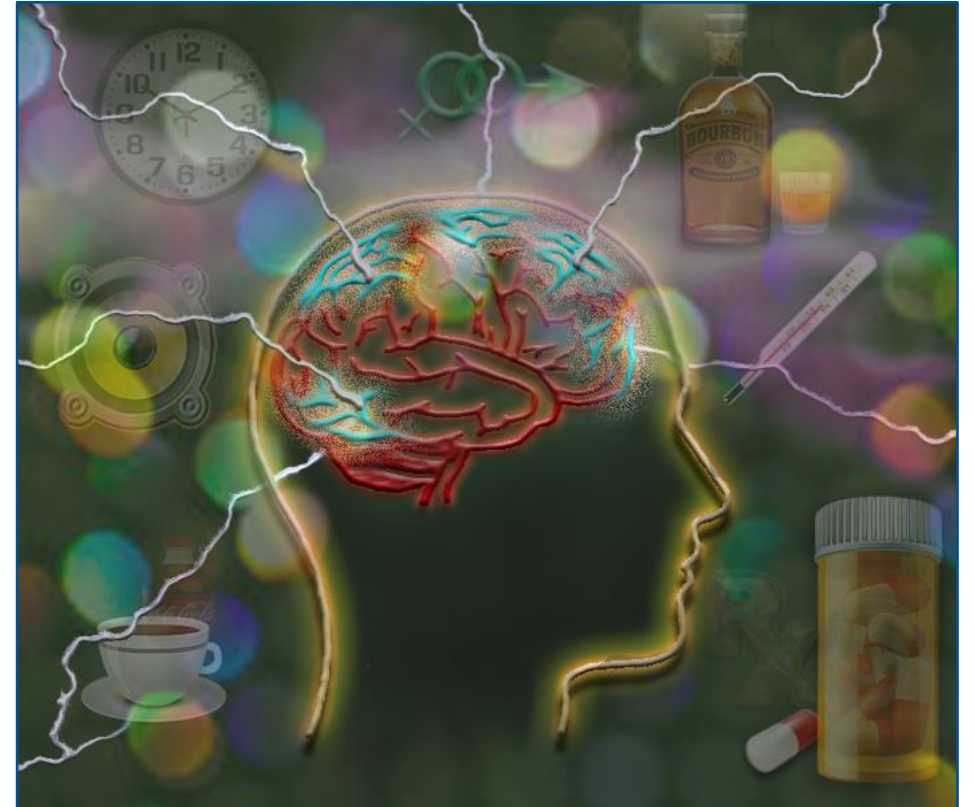


Credit: Martin Allison



Seizure Triggers or Precipitants

- Missed medication or a change in medication
- Lack of sleep or fatigue
- Dehydration
- Stress
- Low blood sugar

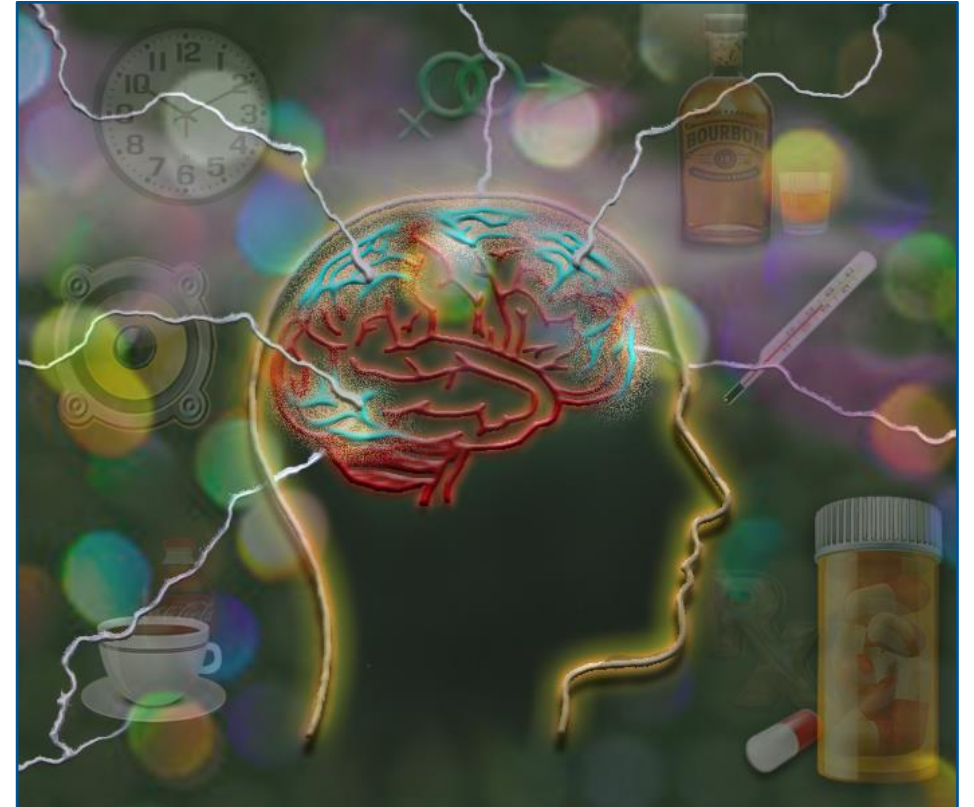


Credit: Martin Allison



Seizure Triggers or Precipitants

- Missed medication or a change in medication
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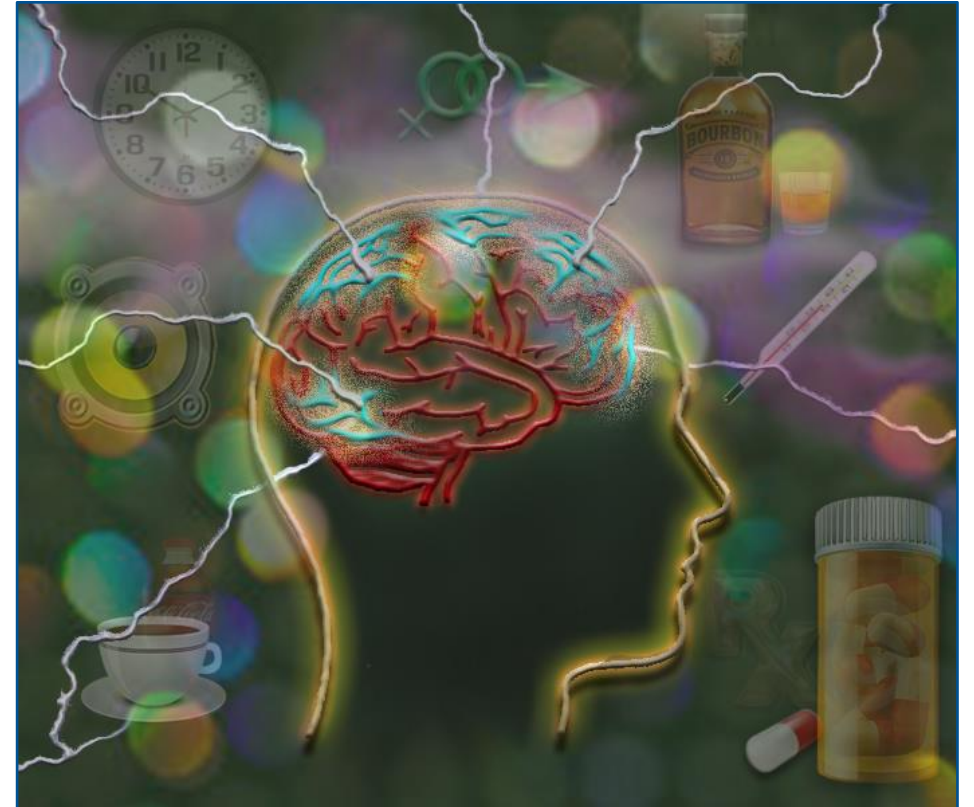


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Seizure Triggers or Precipitants

- Missed medication or a change in medication
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- Flashing lights (photosensitivity)
 - Affects 3% of people with epilepsy

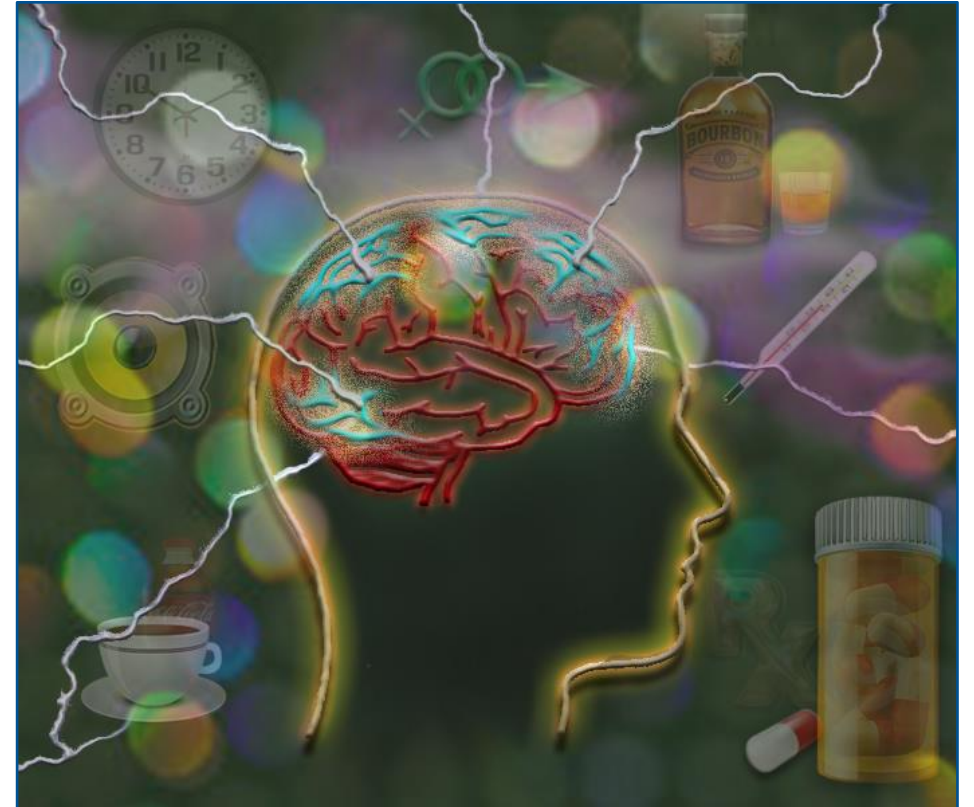


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Seizure Triggers or Precipitants

- Missed medication or a change in medication
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- Low blood sugar
- **Flashing lights (photosensitivity)**
 - Affects 3% of people with epilepsy
 - Photosensitive epilepsy

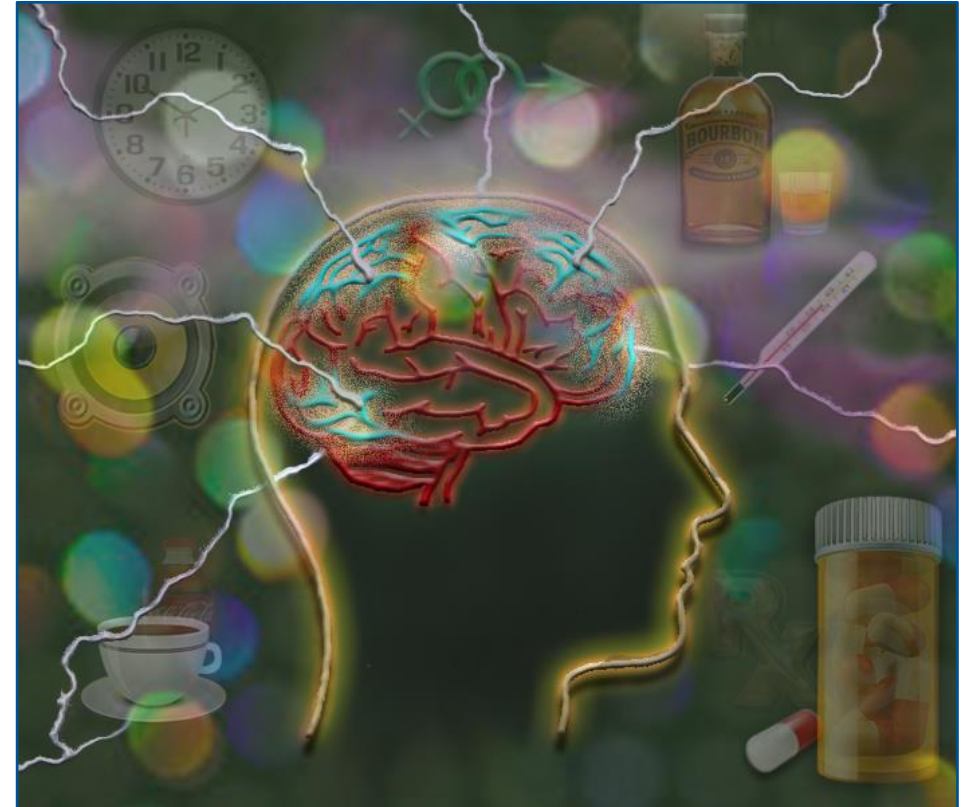


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Seizure Triggers or Precipitants

- Missed medication or a change in medication
- Lack of sleep or fatigue
- Dehydration
- Stress
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- **Flashing lights (photosensitivity)**
 - Affects 3% of people with epilepsy
 - Photosensitive epilepsy
 - More common in children and adolescents

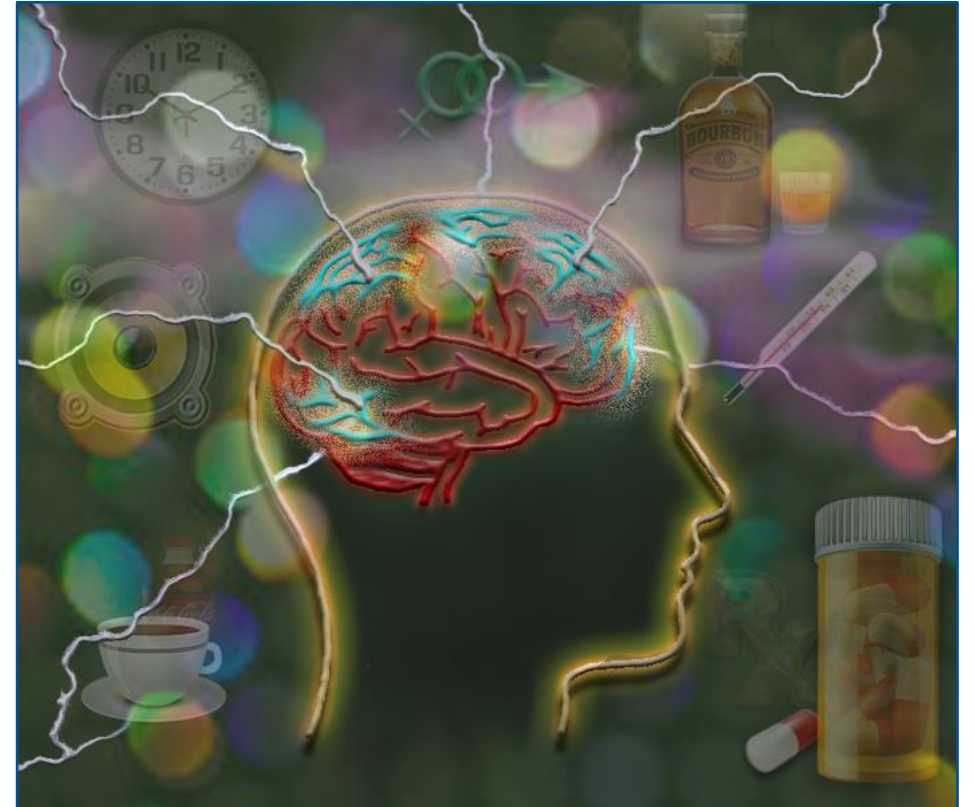


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Seizure Triggers or Precipitants

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- Hormonal changes

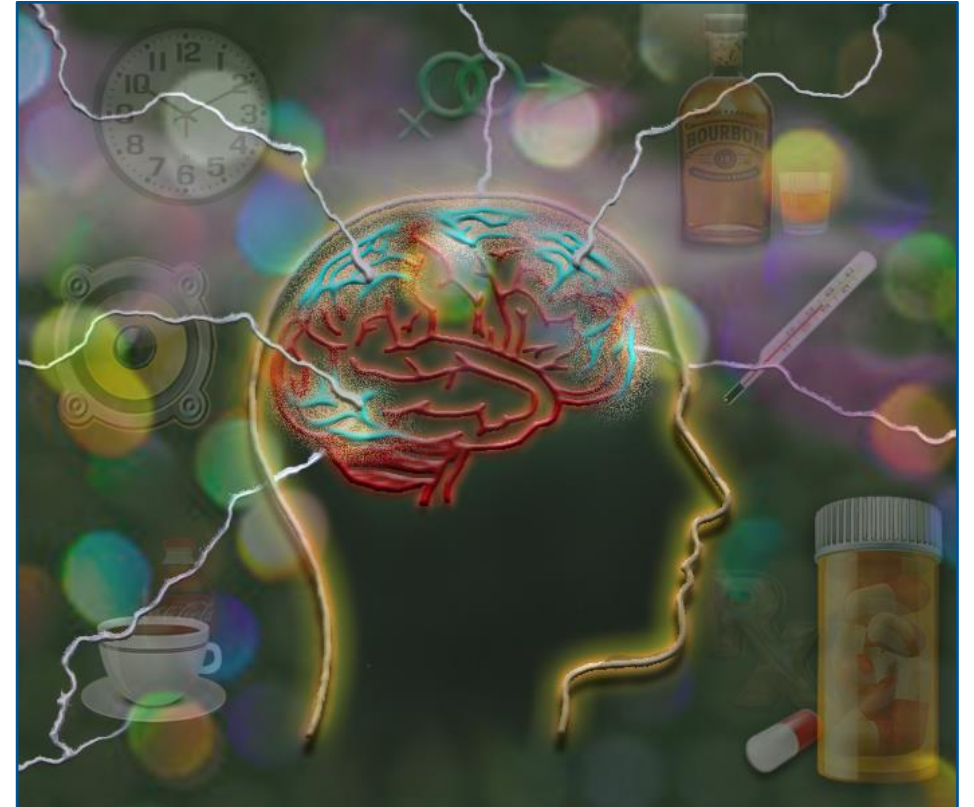


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 - Especially in puberty

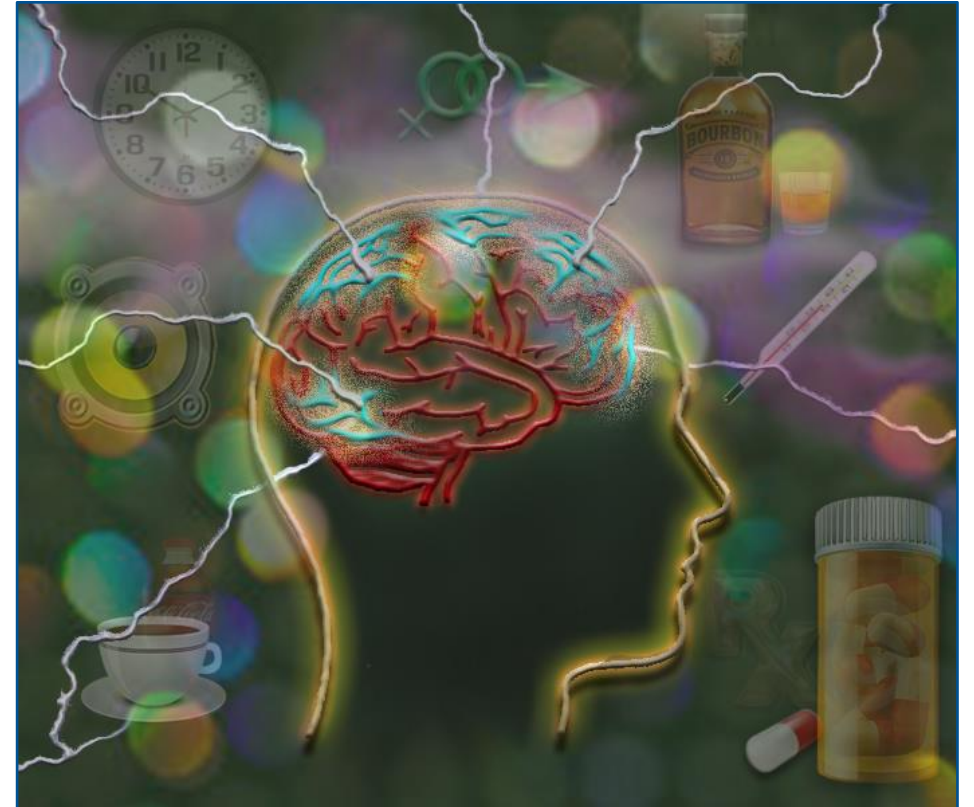


Credit: Martin Allison



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- Hormonal changes
 - Especially in puberty
 - Increase in seizures around monthly menstrual bleeding

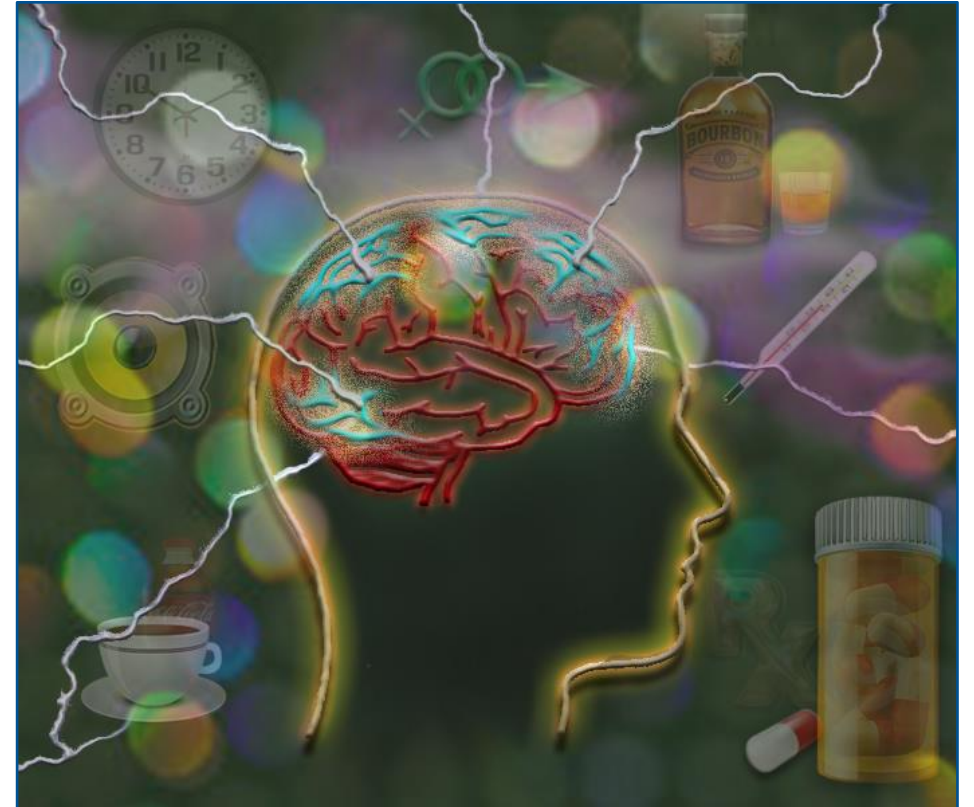


Credit: Martin Allison



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- Alcohol or drug abuse

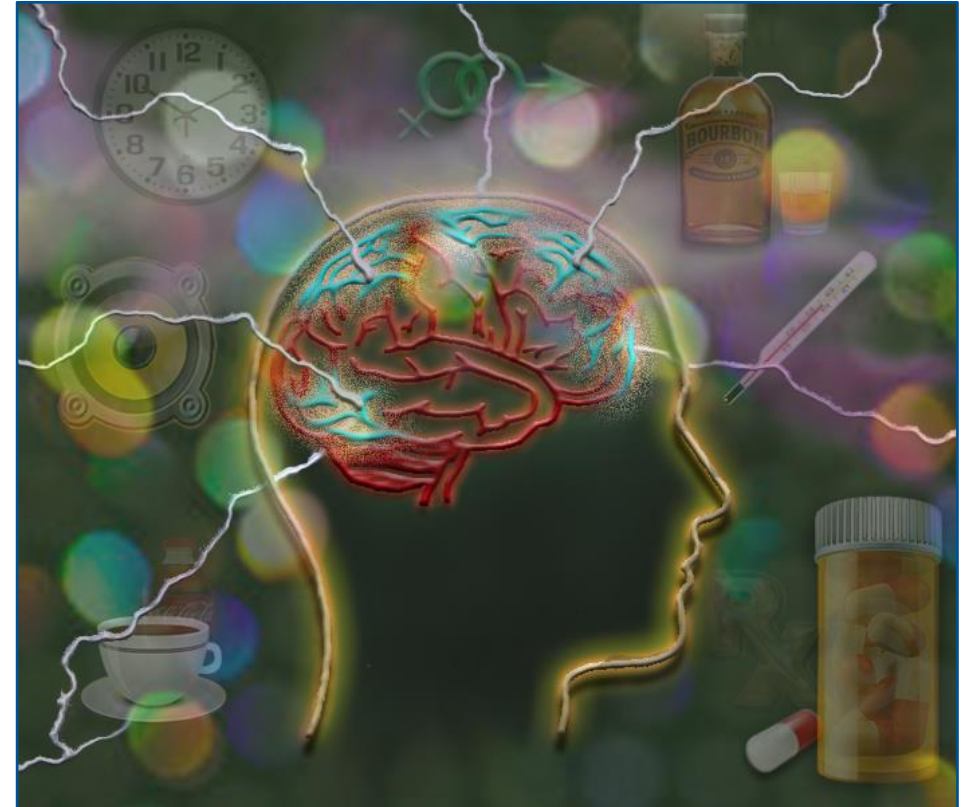


Credit: Martin Allison



Seizure Triggers or Precipitants

- Missed medication or a change in medication
- Lack of sleep or fatigue
- Dehydration
- Stress
- Low blood sugar
- Flashing lights (photosensitivity)
- Hormonal changes
- Alcohol or drug abuse
- Extreme temperature fluctuations

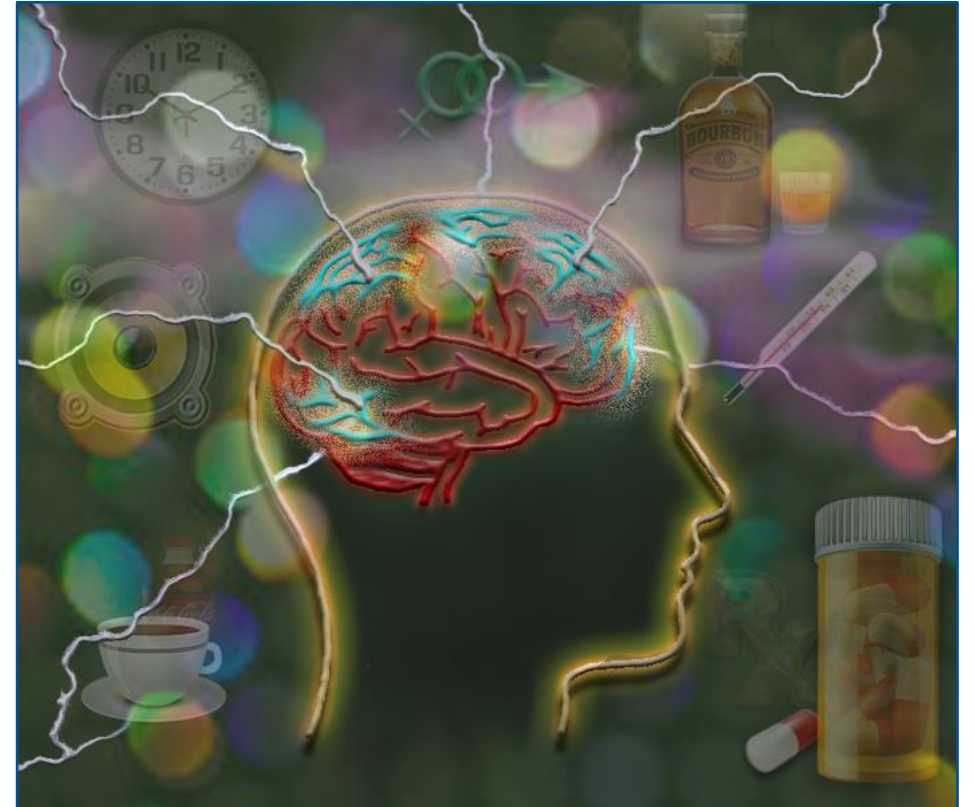


Credit: Martin Allison



Seizure Triggers or Precipitants

- Missed medication or a change in medication
- Lack of sleep or fatigue
- Dehydration
- Stress
- Low blood sugar
- Flashing lights (photosensitivity)
- Hormonal changes
- Alcohol or drug abuse
- Extreme temperature fluctuations
 - Especially becoming overheated

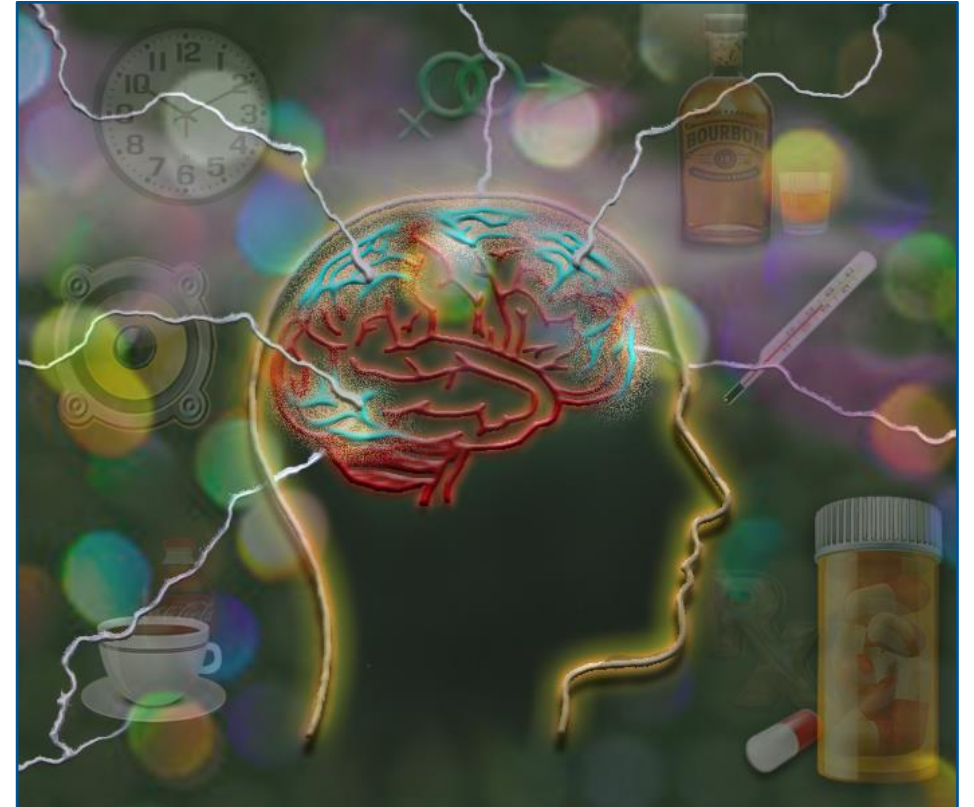


Credit: Martin Allison



Seizure Triggers or Precipitants

- Missed medication or a change in medication
- Lack of sleep or fatigue
- Dehydration
- Stress
- Low blood sugar
- Flashing lights (photosensitivity)
- Hormonal changes
- Alcohol or drug abuse
- Extreme temperature fluctuations
- Fever or systematic illness

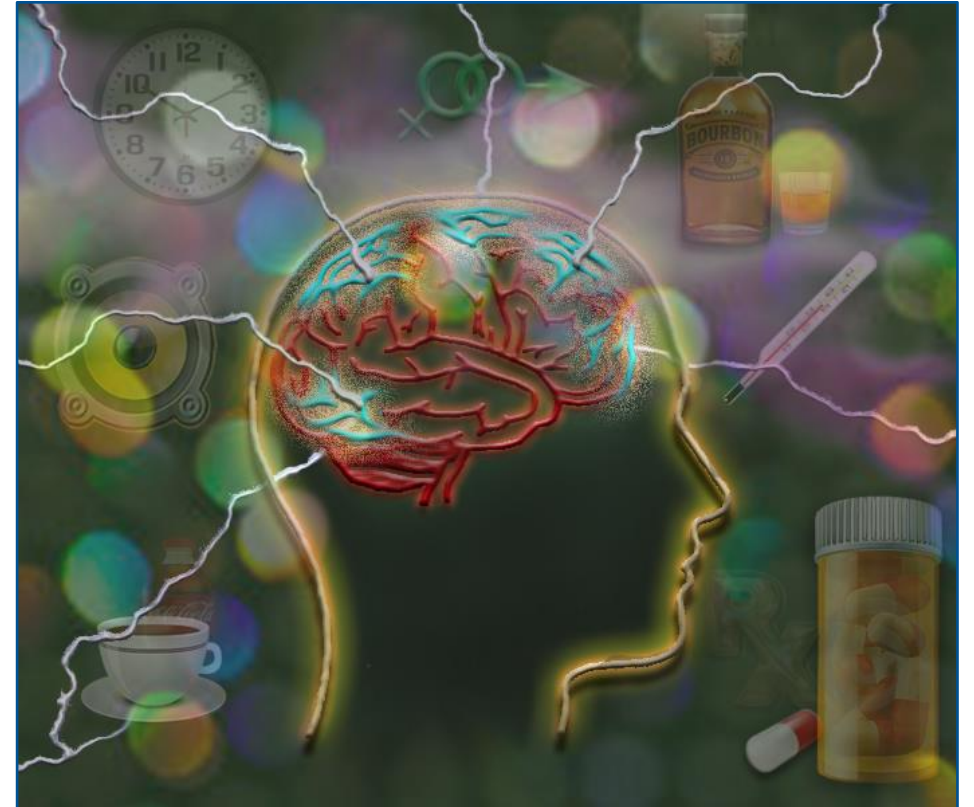


Credit: Martin Allison



Seizure Triggers or Precipitants

- Missed medication or a change in medication
- Lack of sleep or fatigue
- Dehydration
- Stress
- Low blood sugar
- Flashing lights (photosensitivity)
- Hormonal changes
- Alcohol or drug abuse
- Extreme temperature fluctuations
- Fever or systematic illness
 - Head colds, lung infections, sinus infections



Credit: Martin Allison



How Can I Use This Information?

Pause and think about how you can use the information discussed in this section in your daily practice.

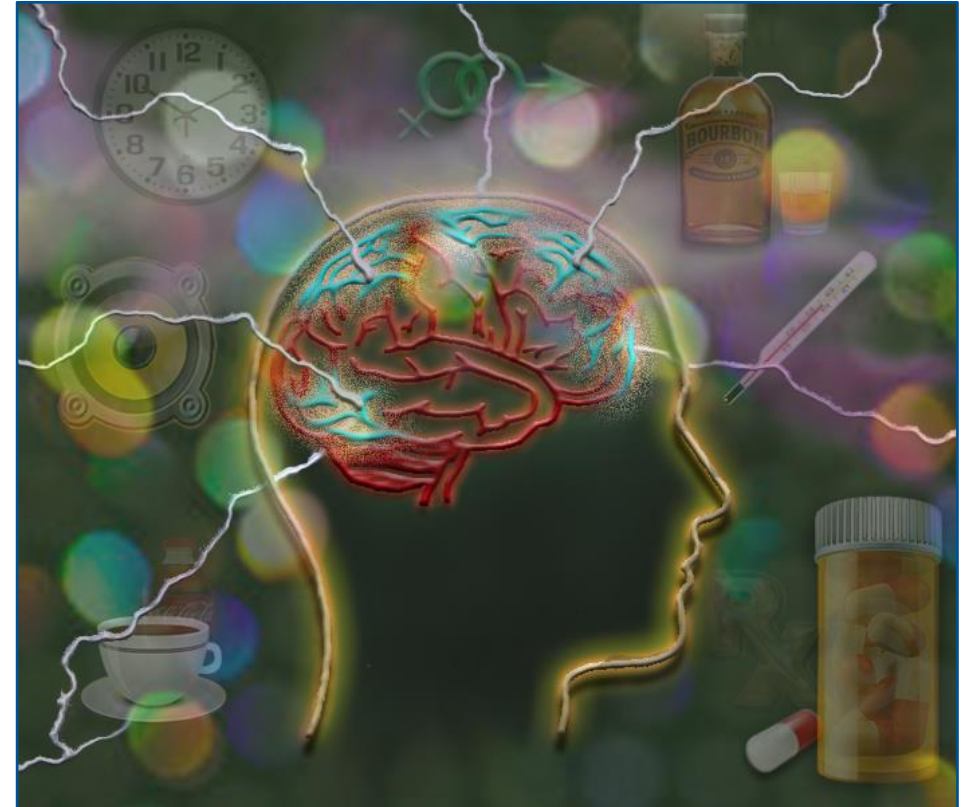


Credit: Deposit Photos



Review

Now that we have:



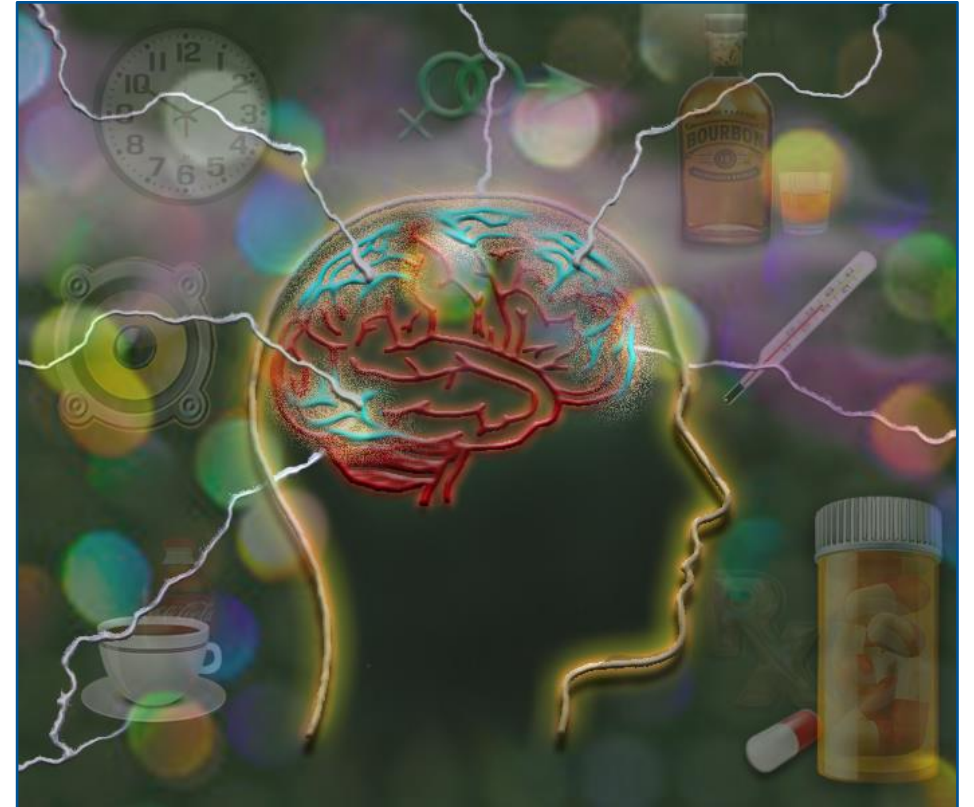
Credit: Martin Allison



Review

Now that we have:

- Defined epilepsy



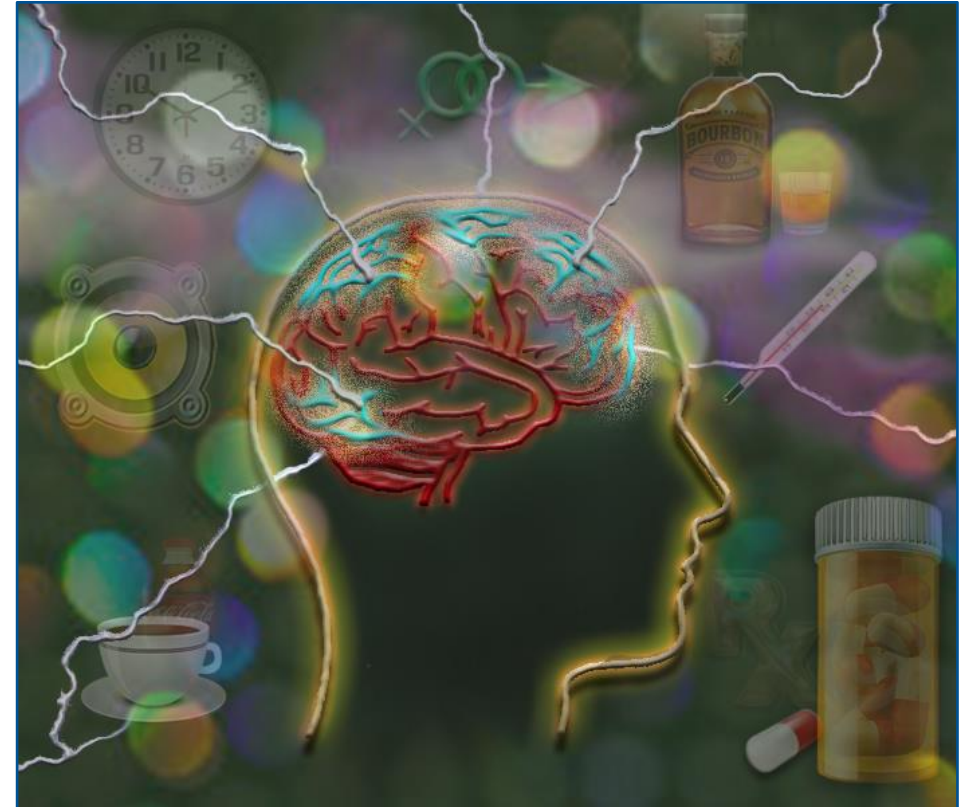
Credit: Martin Allison



Review

Now that we have:

- Defined epilepsy
- Described the difference between epilepsy and seizures



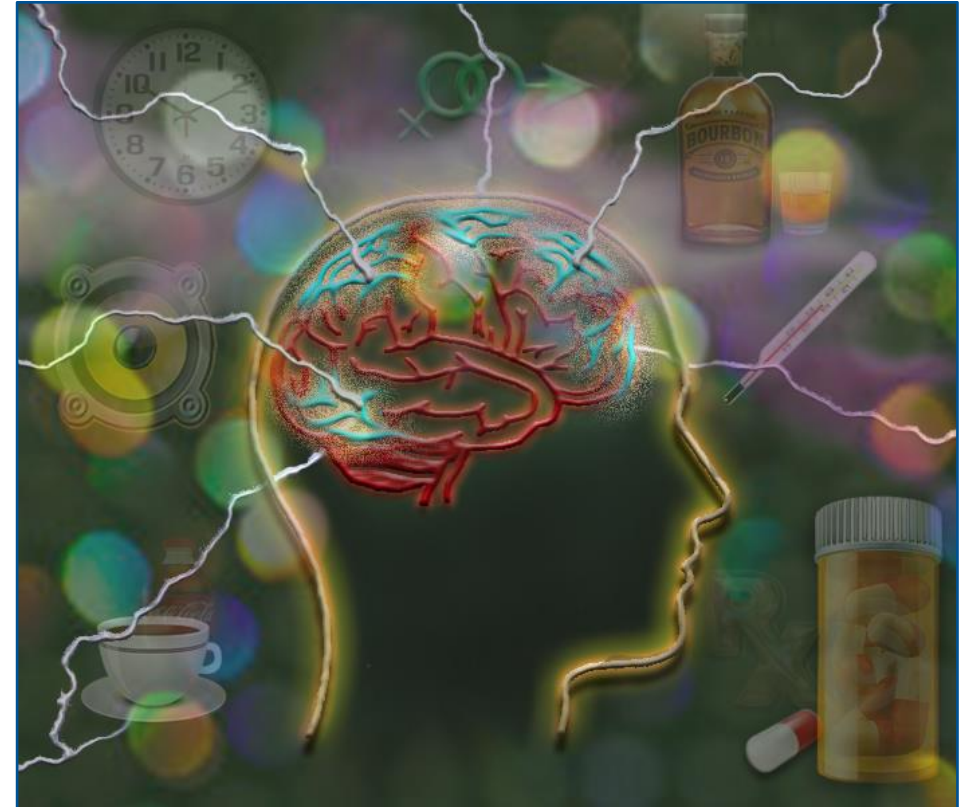
Credit: Martin Allison



Review

Now that we have:

- Defined epilepsy
- Described the difference between epilepsy and seizures
- Explained potential causes, triggers or precipitants for seizures

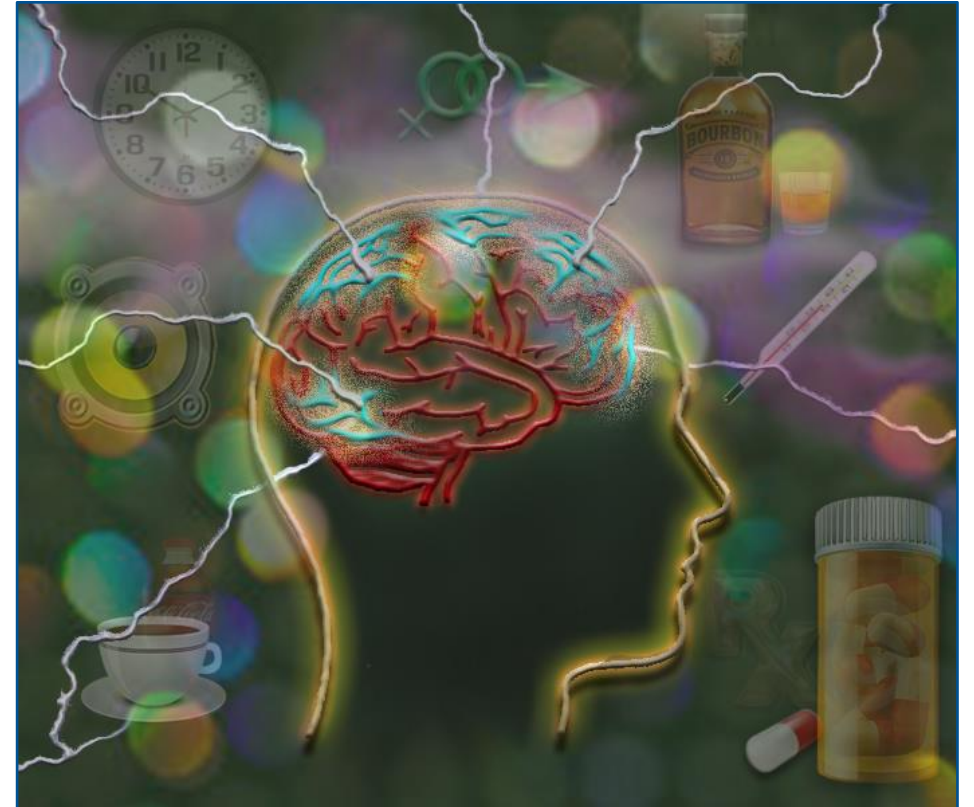


Credit: Martin Allison



Wrap-Up

Let's wrap up this video by looking at the Children's Healthcare of Atlanta Epilepsy program and additional resources for you to use.



Credit: Martin Allison



Resources

Web Address	Resource	1
epilepsy.com	Epilepsy Foundation	
seizuretracker.com	Seizure Self Management App (Free)	
cdc.gov/epilepsy	Center for Disease Control Epilepsy Program	
aesnet.org	American Epilepsy Society	
webease.org	Web Based Self Management Program (Free)	
choa.org/medical-services/neurosciences/epilepsy	Children's Healthcare of Atlanta Comprehensive Epilepsy Center Susan McCallum 404-785-3720 Susan.McCallum@choa.org	

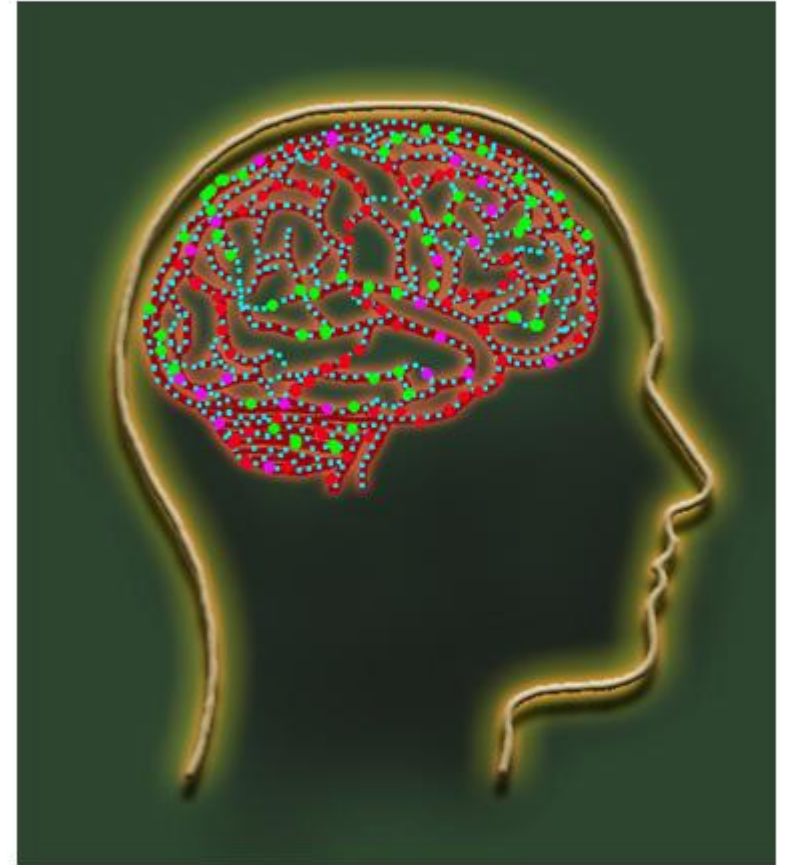


Epilepsy Care in a School Setting



Epilepsy Care in a School Setting

1. Overview of Epilepsy

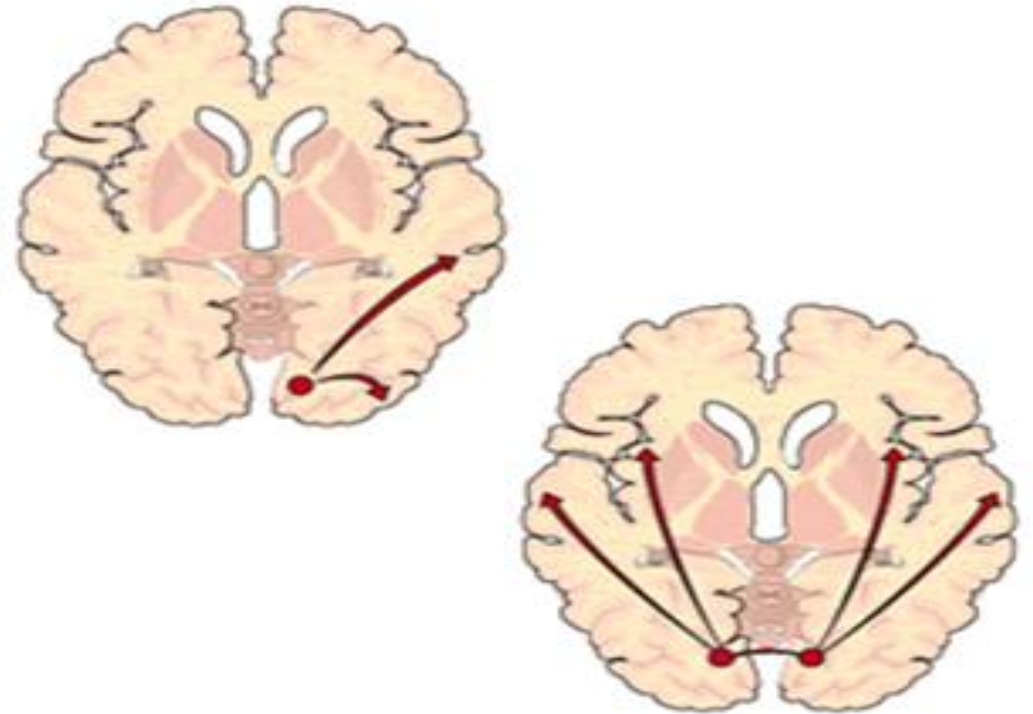


Credit: Martin Allison



Epilepsy Care in a School Setting

1. Overview of Epilepsy
2. Seizure Phases and Classifications



Epilepsy Care in a School Setting

1. Overview of Epilepsy
2. Seizure Phases and Classifications
3. Seizure Diagnostics and Treatments



Credit: Children's Healthcare of Atlanta

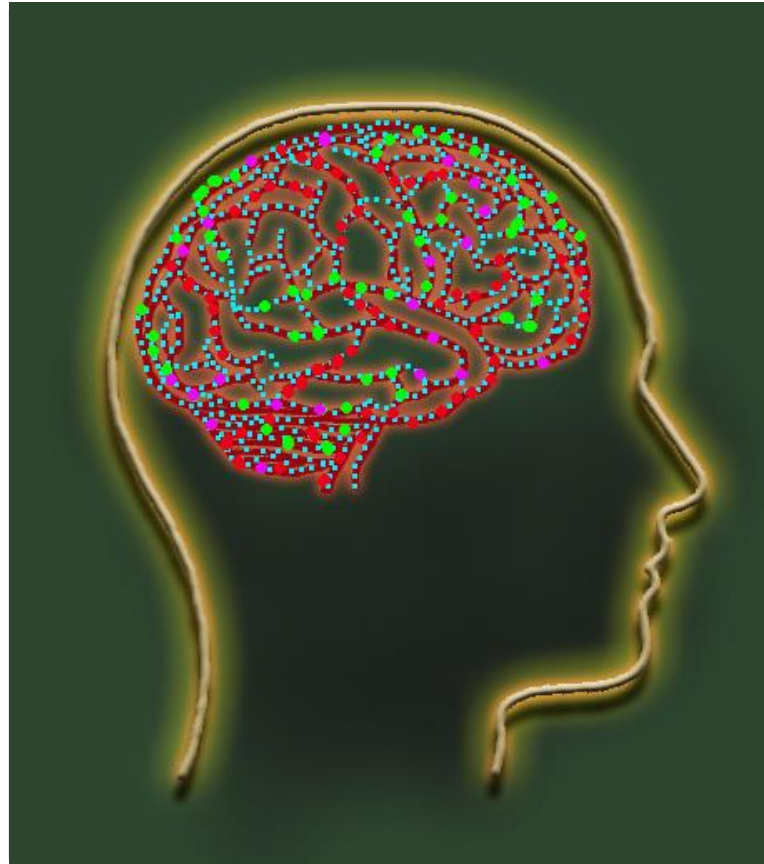
Epilepsy Care in a School Setting

1. Overview of Epilepsy
2. Seizure Phases and Classifications
3. Seizure Diagnostics and Treatments
4. Seizure First Aid



Credit: Deposit Photos





Credit: Martin Allison

Epilepsy Overview

Children's Comprehensive Epilepsy Center

Presented by Susan McCallum, MSN, RN
Children's Comprehensive Epilepsy Center
404-785-3720
www.choa.org

Children's Healthcare of Atlanta





School Health Resources

Children's works closely with the school health community throughout the state to provide them with educational materials, training and support.

<https://www.choa.org/schoolhealth>

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Video Credits



Rectal Diazepam (Diastat)...University of Wisconsin – Joint Project with Wisconsin Department of Public Instruction



How to Give your Child Midazolam...Children's Hospital Colorado

Photo & Graphics Credits

Martin Allison

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