

Edmonton Epilepsy Association



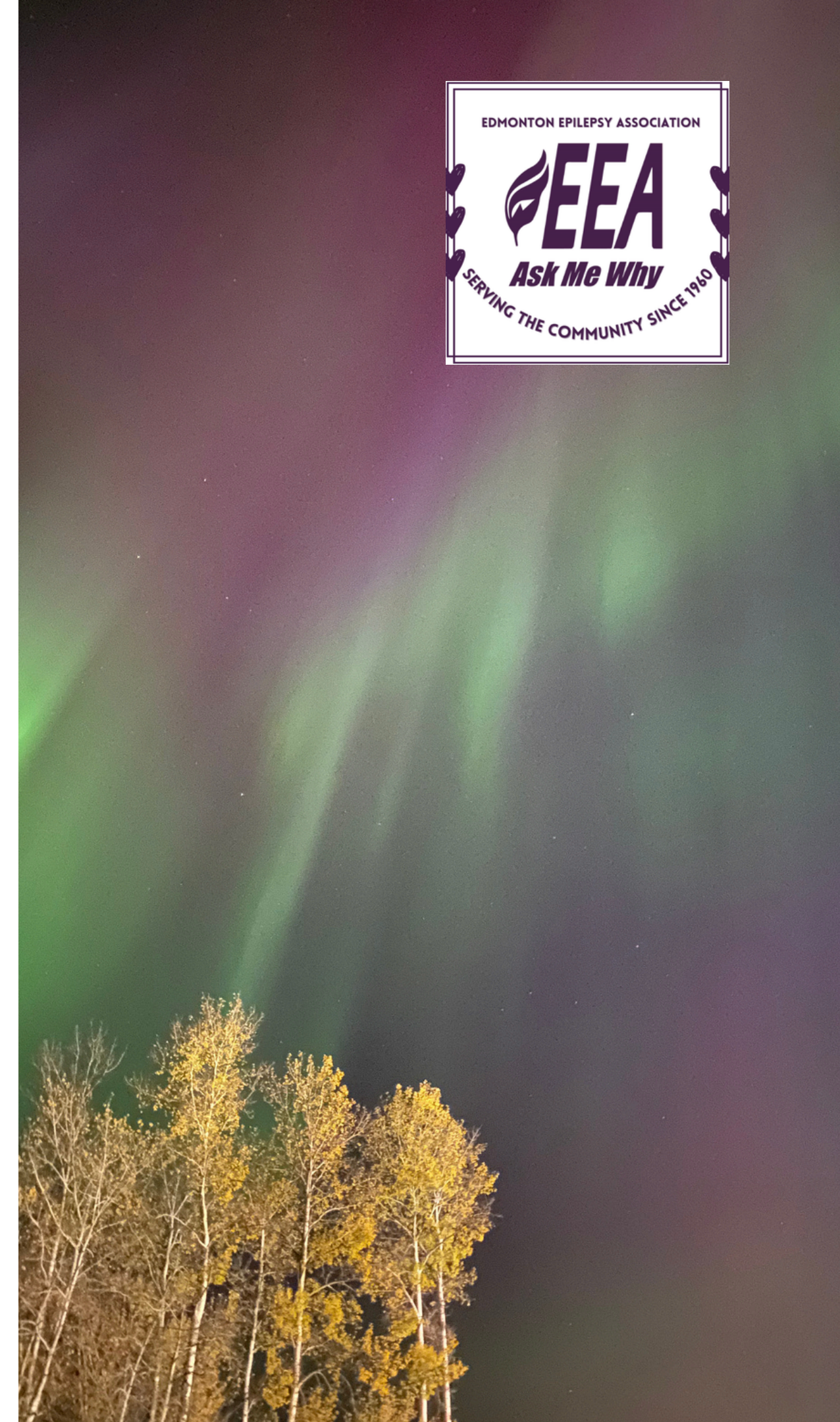
Neurodiversity In and Out of the Classroom: Understanding Epilepsy.

Presented by Valeria Palladino and Susan Wilkie

GETCA 02.27.25

Land Acknowledgement

We respectfully acknowledge that we live, work, and play on the Treaty 6 and Treaty 8 territories, home of the many First Nations, Métis, Cree and Dene people whose histories, languages, cultures and traditions continue to influence our communities. We express gratitude for the land we use and are committed to advancing reconciliation.



This session



description

The session will provide an overview on seizures and epilepsy and showcase a wide range of educational resources for all grades, when supporting students with epilepsy. A wide range of examples of teaching materials and ideas will be illustrated, and free resources provided to all who attend.

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our goals

- **Introduce** epilepsy and the EEA
- **Share** personal stories
- **Build** foundational understanding of epilepsy and impact on students
- **List** resources
- **Encourage** questions

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Build understanding of epilepsy...



...back to
our goals...



the basics



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Build understanding of epilepsy...



...back to
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the basics



What are seizures?

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Build understanding of epilepsy...



...back to
our goals...



the basics



What are seizures?
What is epilepsy?

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Build understanding of epilepsy...



...back to
our goals...



the basics



What are seizures?
What is epilepsy?
How many people are impacted?

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...back to
our goals...



the basics



What are seizures?
What is epilepsy?
How many people are impacted?
Triggers and facts on seizures

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Build understanding of epilepsy...



...back to
our goals...



the basics



What are seizures?
What is epilepsy?
How many people are impacted?
Triggers and facts on seizures
Recognize seizure types

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Build understanding of epilepsy...



...back to
our goals...



the basics



What are seizures?
What is epilepsy?
How many people are impacted?
Triggers and facts on seizures
Recognize seizure types
First aid and support

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Build understanding of epilepsy...



Epilepsy

AND YOU KNOW?

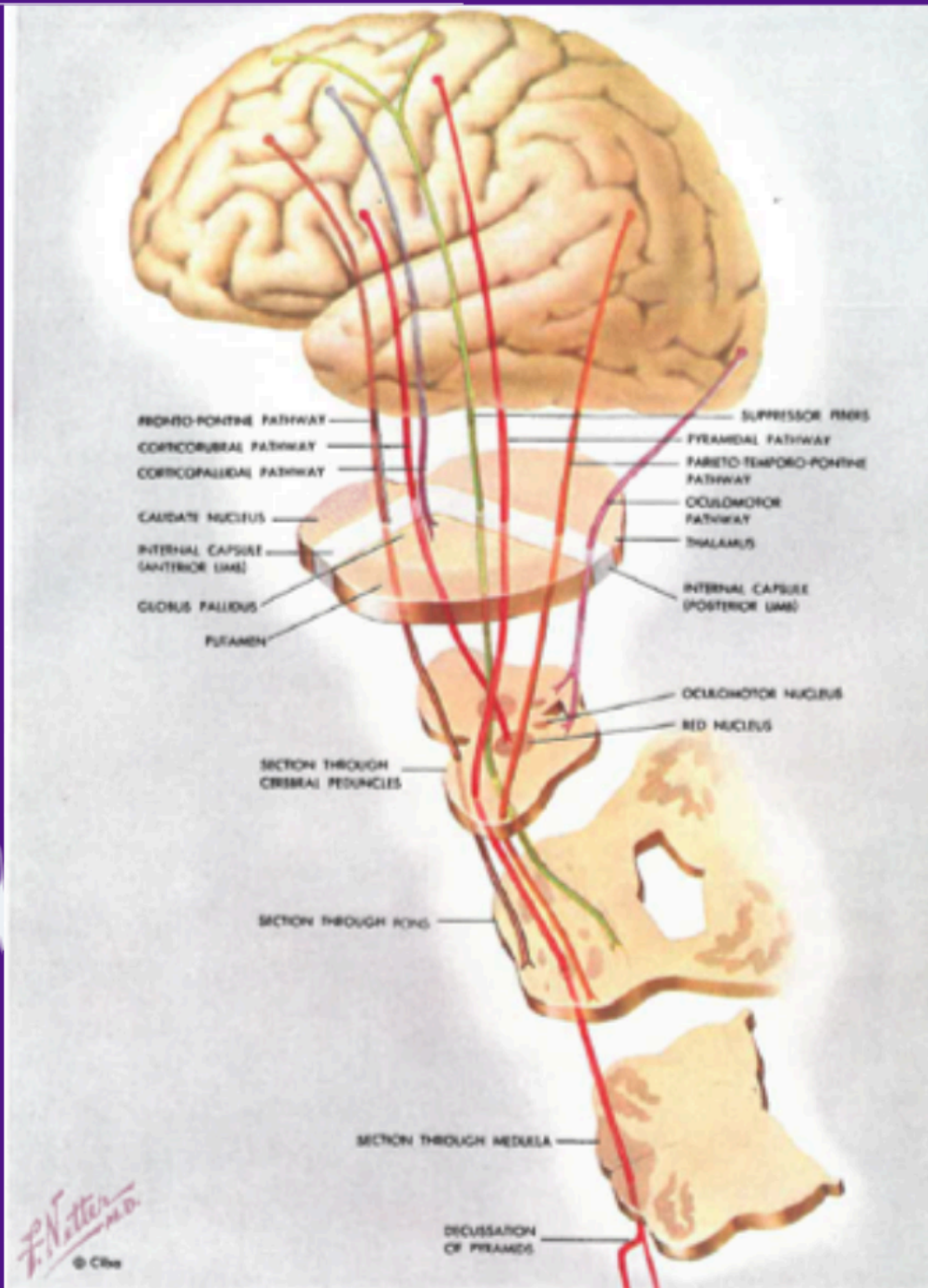
A guide for teachers

www.edmontonepilepsy.org



Understanding Epilepsy - What are seizures?

What are seizures?



BRAIN

- 1500 grams in weight
- 2% of body weight
- 20% use of oxygen
- 80% use of glucose
- made of nerve cells that communicate via electrical and chemical signals
- 86 billion neurons
- only organ in the body that deals with electrical signals



Understanding Epilepsy - What are seizures?

What are seizures?



SEIZURES

- sudden, brief disturbance of electrical activity in the brain
- clinical manifestation of abnormal electrical discharges in the brain



Understanding Epilepsy - What are seizures?

What are
seizures?

unprovoked

- brief disturbance
electrical activity in
brain
- clinical manifestation of
abnormal electrical
discharges in the brain





Understanding Epilepsy - What is epilepsy?



EPILEPSY

What is epilepsy?

- seizure disorder
- at least two seizures for diagnosis
- **non-provoked** seizures
- condition of the brain in which individual has recurrent seizures

Build understanding of epilepsy...



Understanding Epilepsy - Who is affected epilepsy?



Who is affected by epilepsy?

- one in every 100 Canadians
- approx. 40,000 people live with epilepsy in Alberta
- approx. 20,000 people in our service area (north of Red deer)
- onset occurs most often in early childhood or late in life



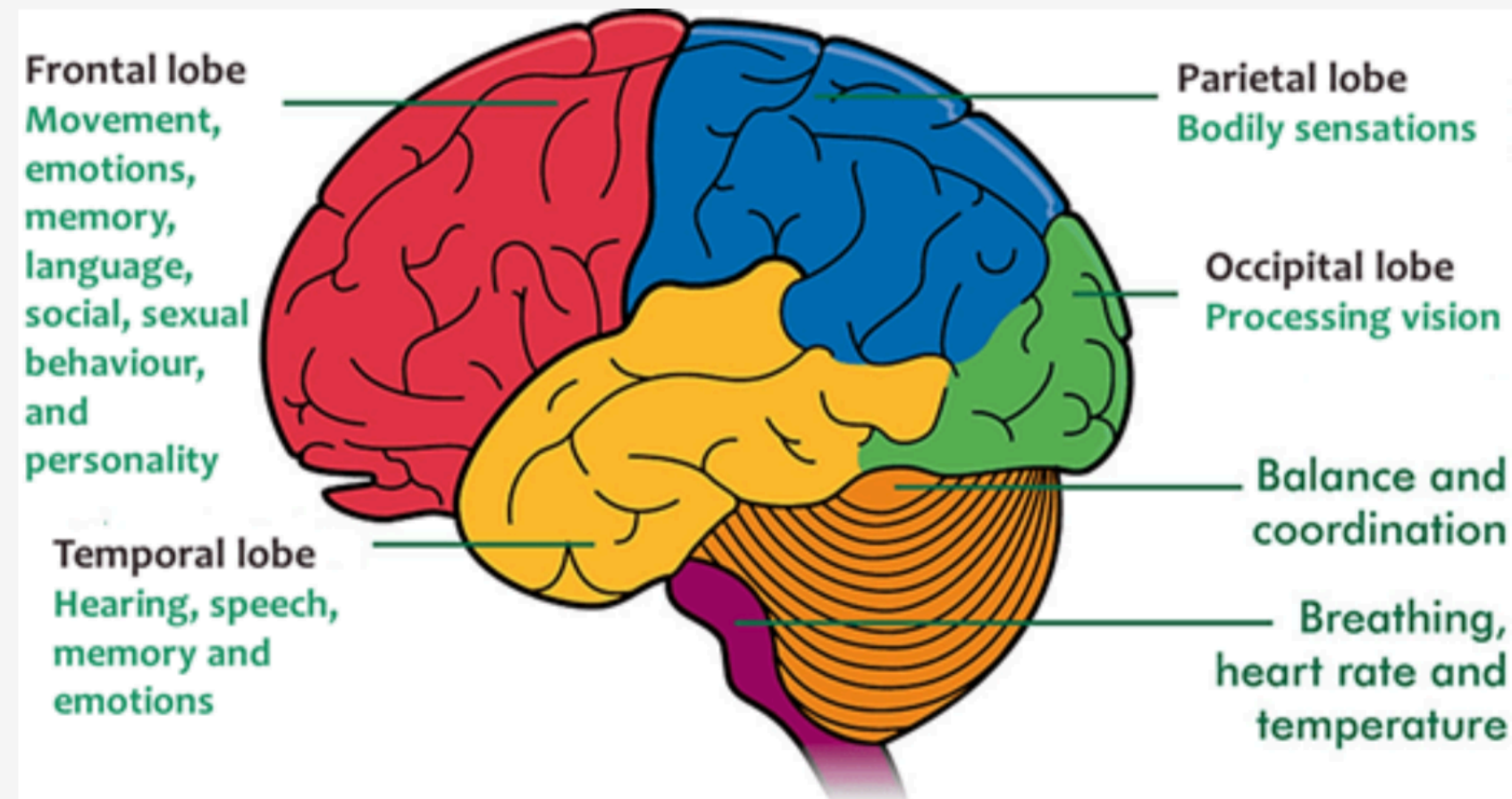
Understanding Epilepsy - Seizure triggers

Seizure triggers

- missed medication
- sleep deprivation
- stress
- missing meals
- illness or fever
- excessive alcohol consumption
- flickering lights
- medication
- street drugs
- hormonal changes



Seizure facts



- the form the seizure takes depends on where in the brain the seizure occurs

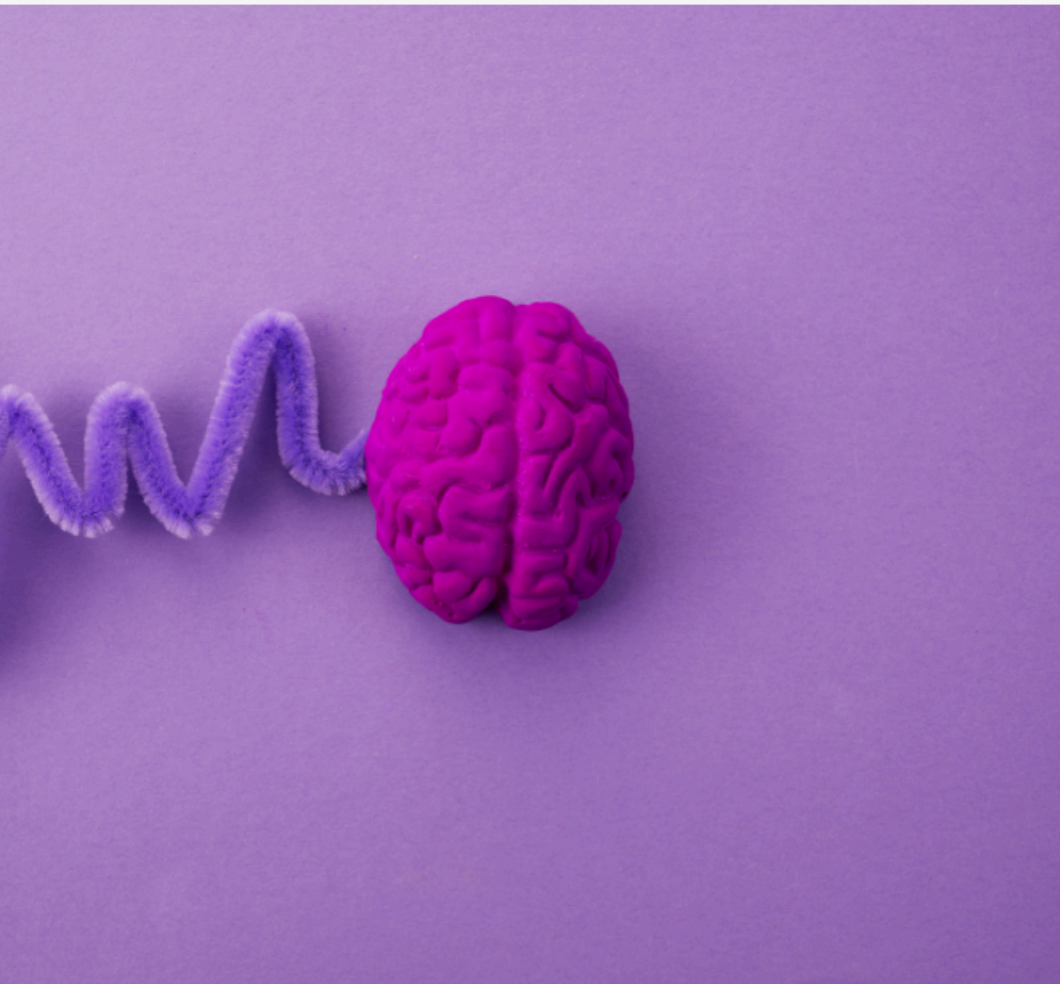
Seizure facts



- the length, intensity or frequency of the seizure can change as a person ages
- generally, seizures are painless and will end naturally

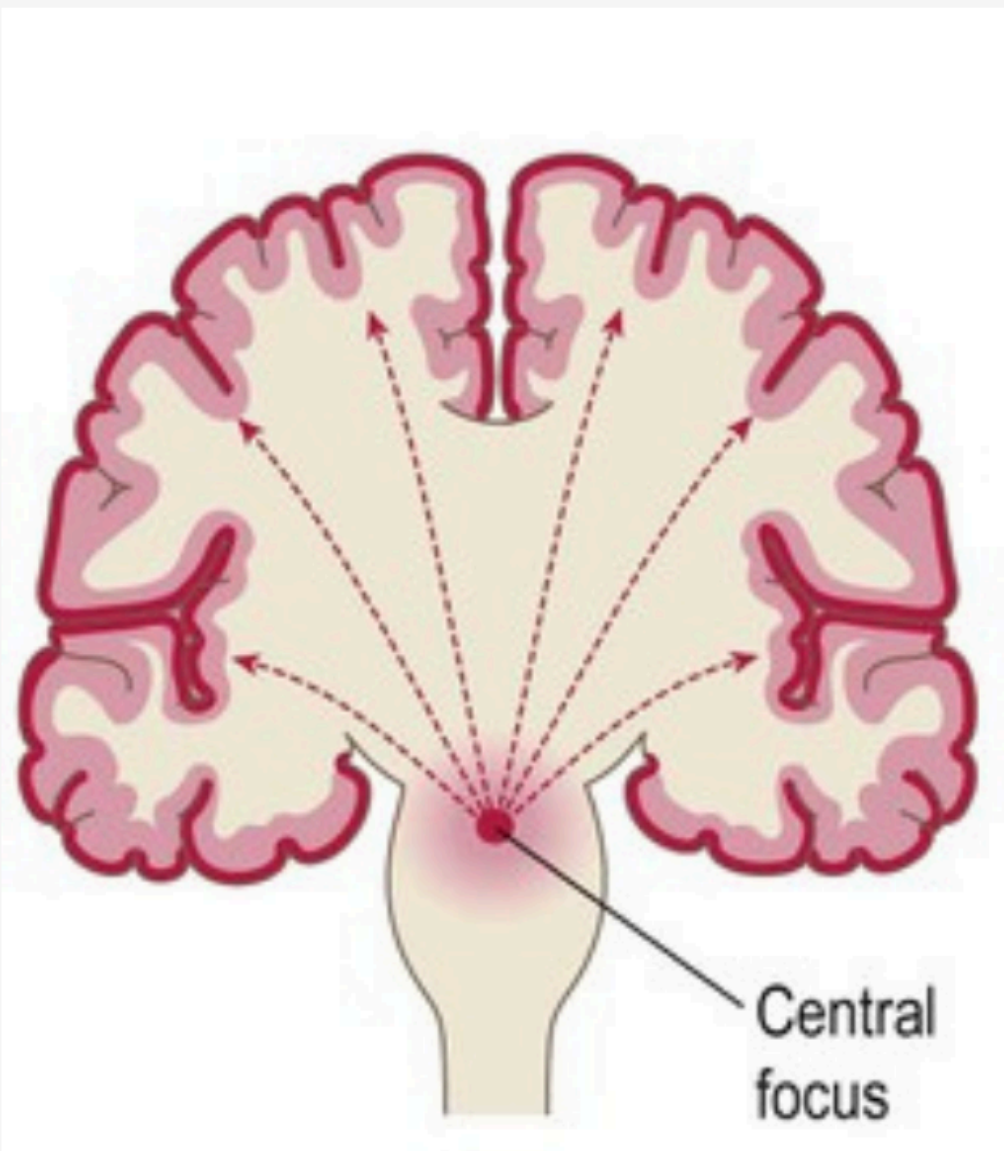


Types of seizures



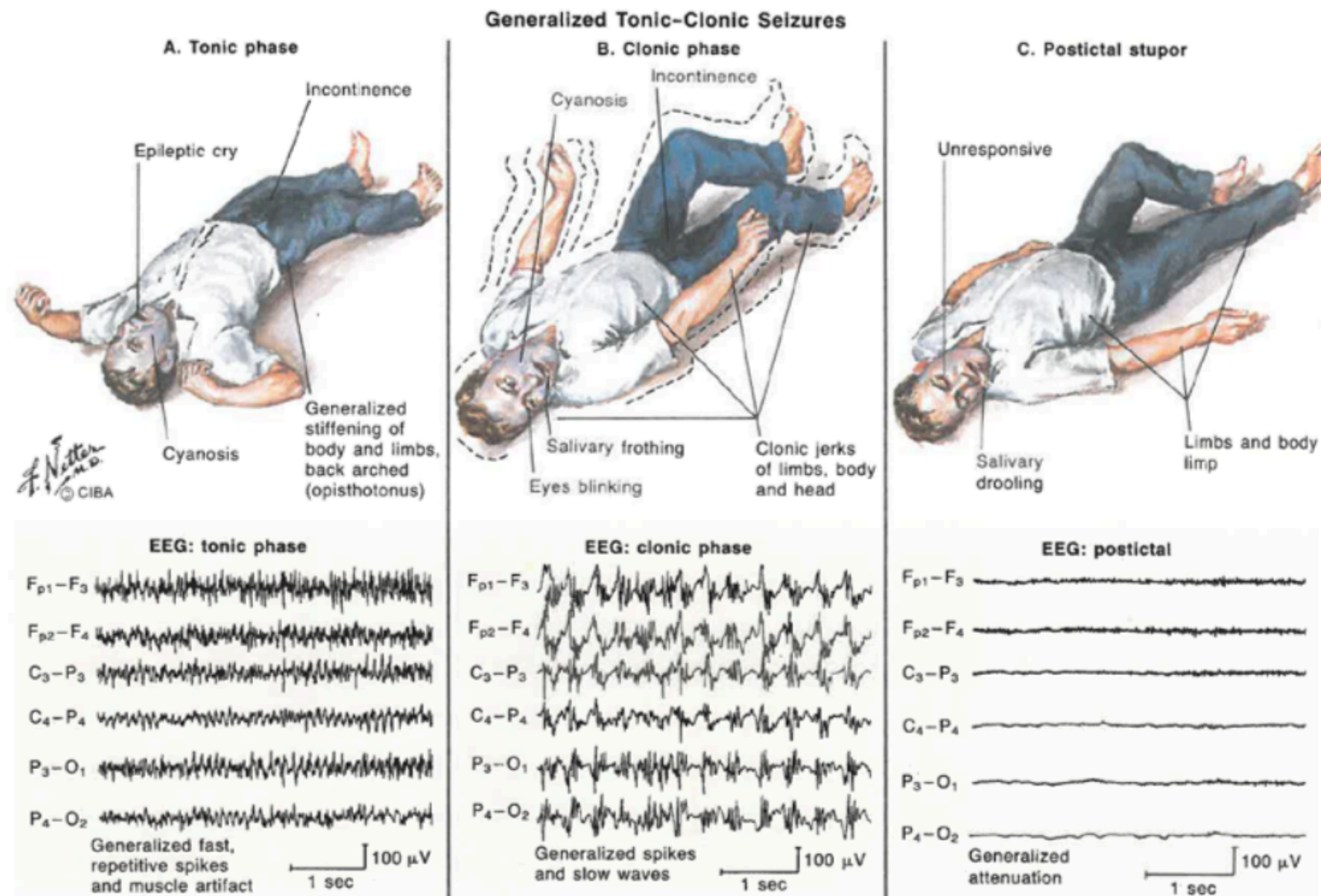
- three main types of epilepsies
 - primary generalized
 - focal
 - combined generalized and focal

Generalized seizures



- widespread seizures on both sides of the brain
- petit mal (absence seizures)
- grand mal (tonic clonic)
- idiopathic (underlining genetic reason)

Generalized seizures



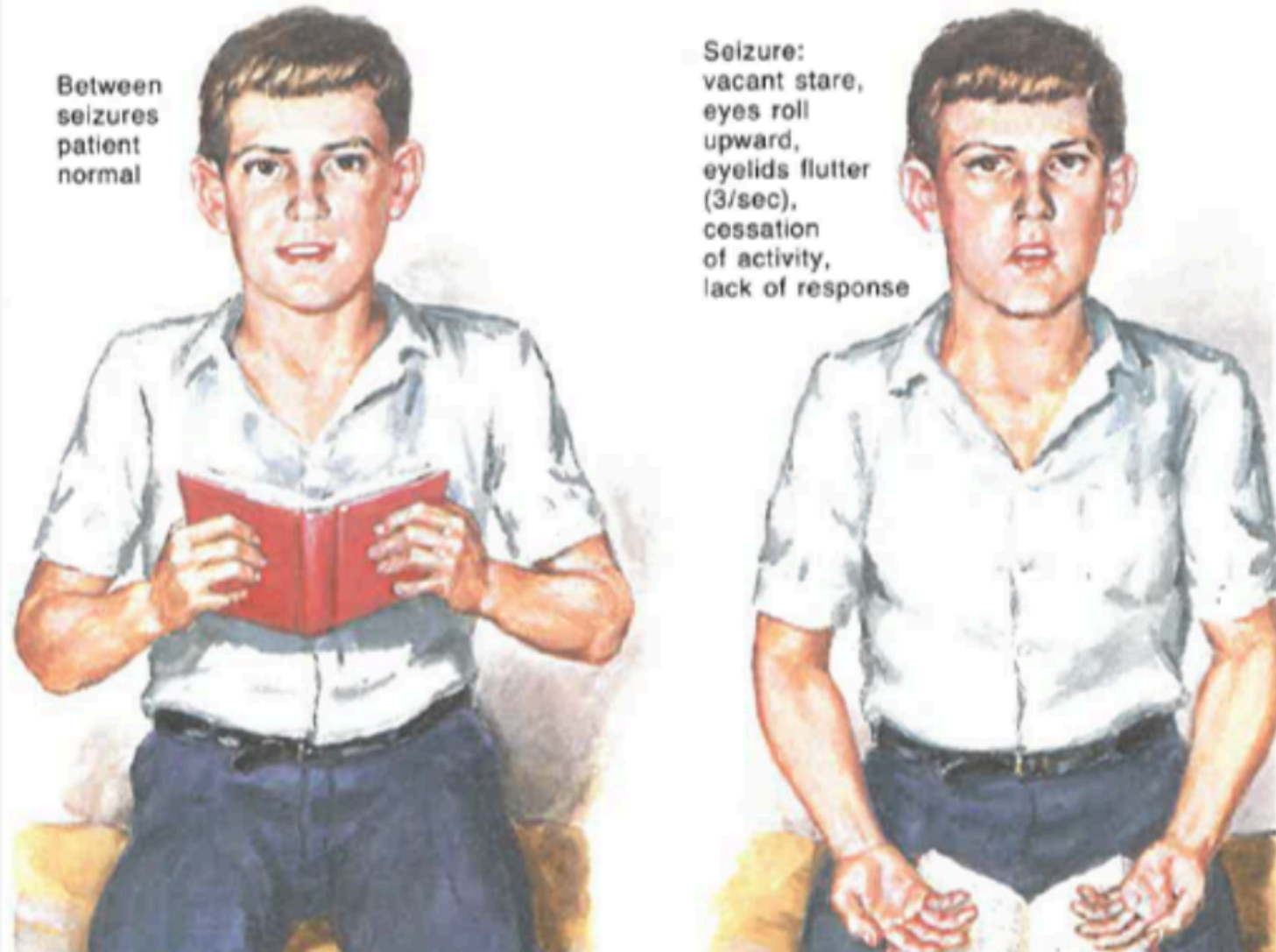
- generalized tonic-clonic (also known as grand mal)

Generalized seizures

Absence (Petit Mal) Seizures

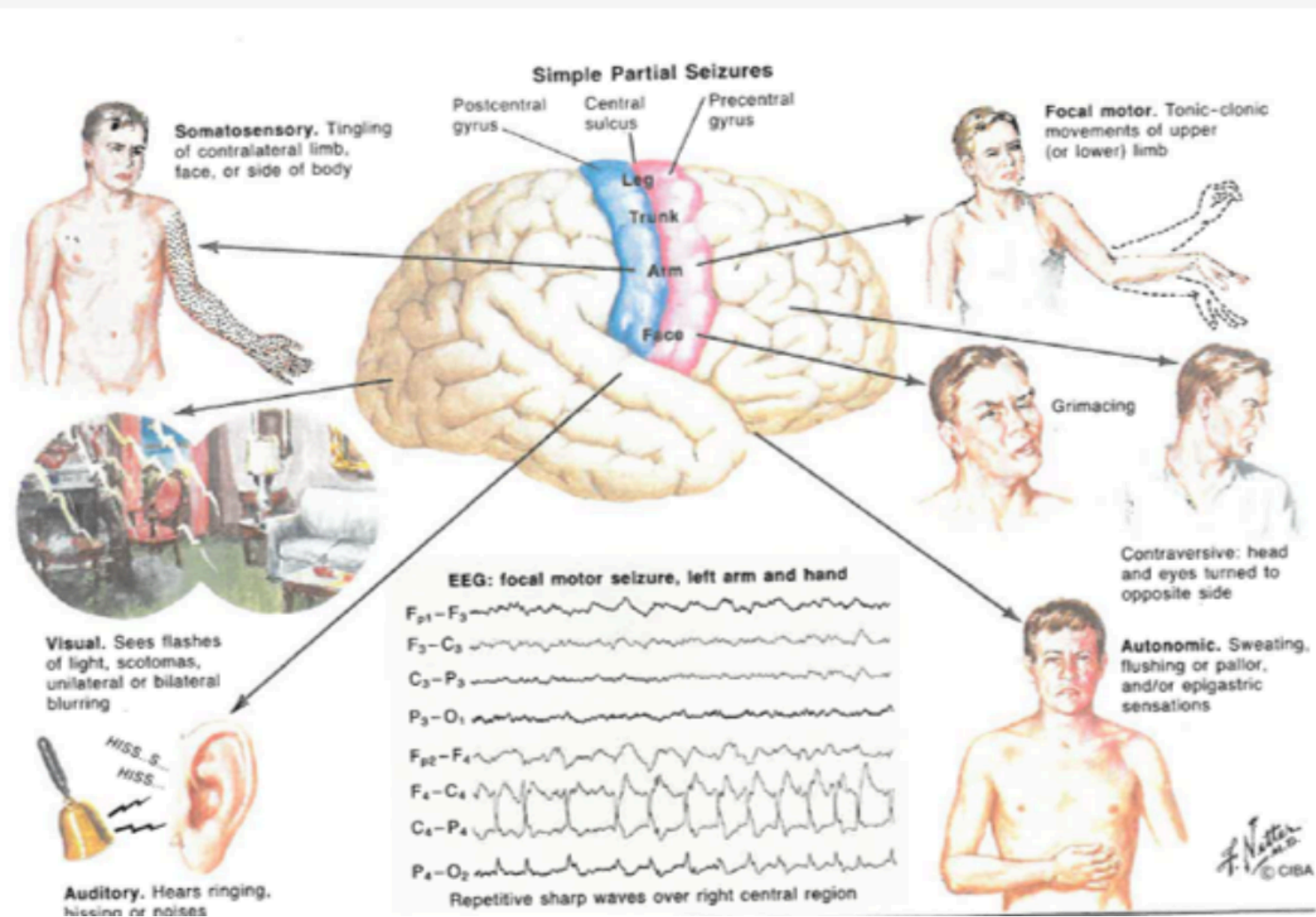
Between
seizures
patient
normal

Seizure:
vacant stare,
eyes roll
upward,
eyelids flutter
(3/sec),
cessation
of activity,
lack of response



- absence seizures (also known as petit mal)

Focal seizures



- focal aware (simple partial)

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The two most common kinds of focal seizures are focal aware and focal impaired awareness seizure.

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questions

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Epilepsy

DID YOU KNOW?

A guide for teachers

www.edmontonepilepsy.org



Treatment

SEIZURE MEDICATION (AED)

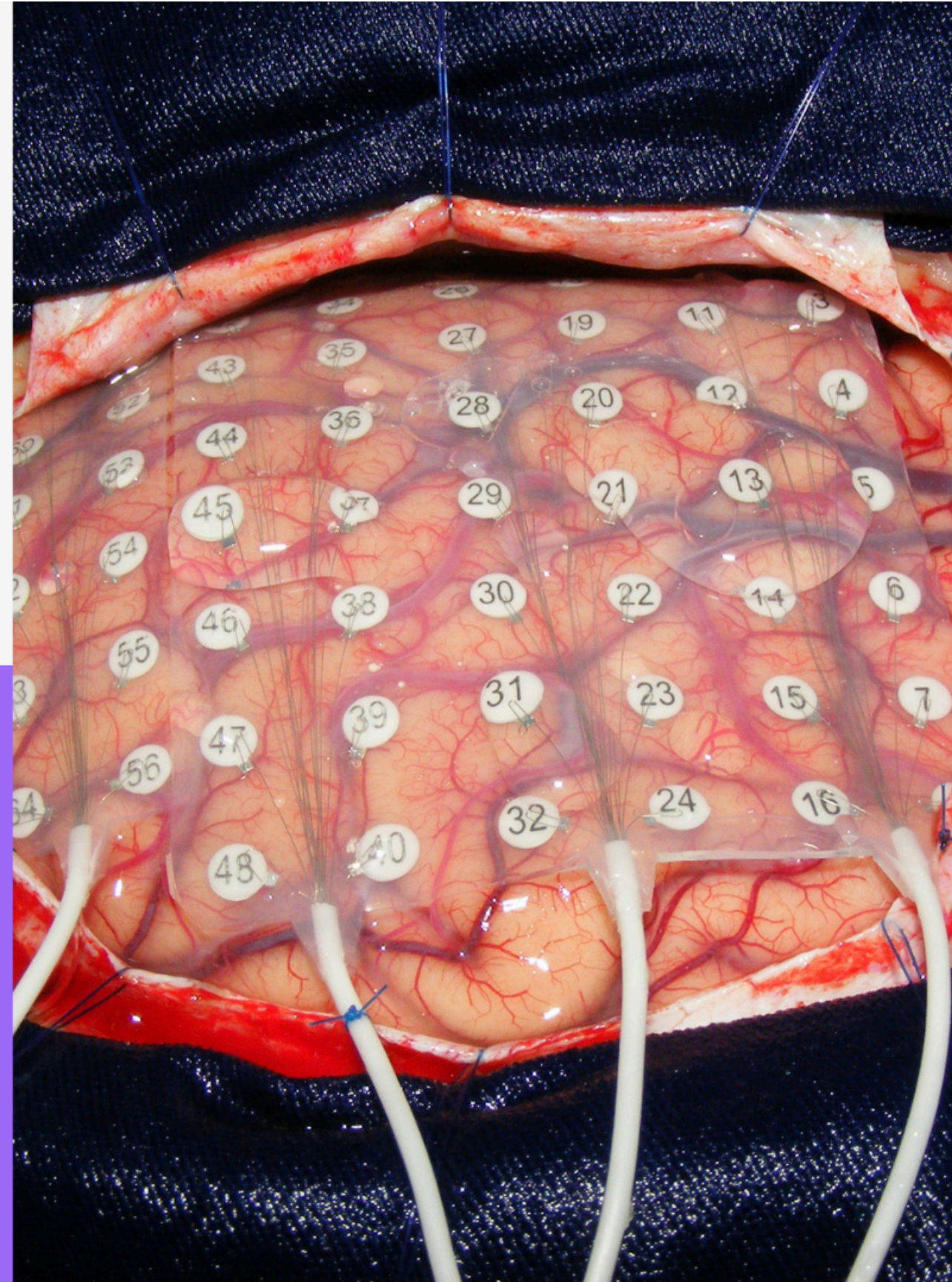
- primary treatment for epilepsy
- drugs do not cure epilepsy but reduce or stop seizures
- 70% of epilepsy patients manage their seizures through drugs



Treatment

SURGERY

- 2% of people with epilepsy undergo surgery to control their seizures
- open brain surgery
- stereotactic surgery with laser wire (LITT)





Treatment

ADDITIONAL TREATMENT OPTIONS

- ketogenic diet
- implants
- CBD





Understanding Epilepsy - First Aid

Seizure First Aid

stay calm

loosen anything tight around the neck

keep the person safe

check for medical ID

protect the person from injury

do not restrain the person





Understanding Epilepsy - First Aid

Seizure First Aid

remove any hard or dangerous items

gently roll the person onto their side

alert bystanders

offer comfort and reassurance

do not put anything in the person's mouth

stay with the person





Understanding Epilepsy - First Aid

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Understanding Epilepsy - First Aid

When to call an ambulance

if there is no known history of seizures



1



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Build understanding of epilepsy...



Epilepsy

DID YOU KNOW?

A guide for teachers

www.edmontonepilepsy.org

Build understanding of epilepsy...



Epilepsy

seizures

what people see

what people don't see

altered senses
bladder issues
confusion
depression
dizziness
double vision
loss of awareness
loss of consciousness
loss of muscle control

nausea
rash
repetitive movements
staring
sudden collapse
tingling
tiredness

myepilepsyteam

Epilepsy

seizures

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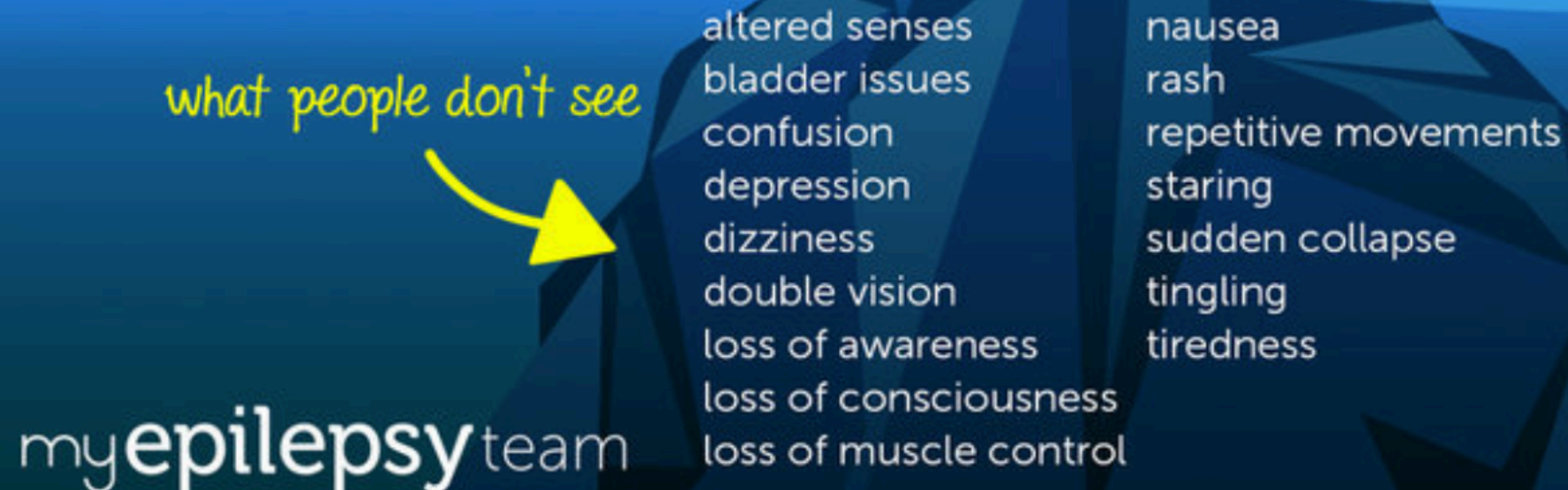
myepilepsyteam

Seizure free



**No support
required**

Epilepsy



The need to advocate for support in school is exhausting for students and families

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Build understanding of epilepsy...



questions

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Access resources



Access resources for epilepsy



Click here to order your printed copies online



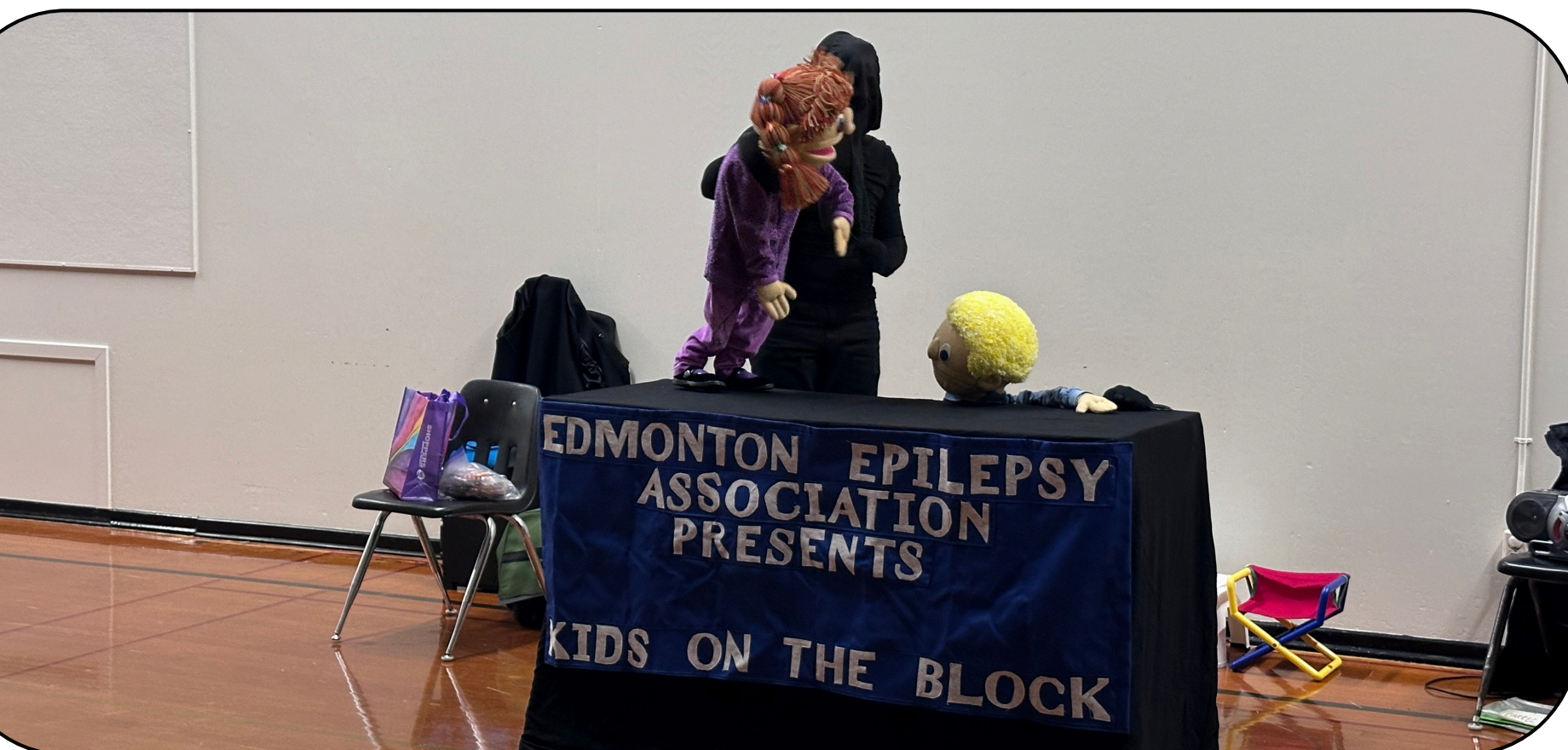
EPILEPSY INFORMATION BOOKS

WWW.EDMONTONEPILEPSY.ORG

EPILEPSY BOOKS

- 11 original titles - free to order online at our page
- 10 English titles also in audiobooks
- Titles have short video clips for educational purposes
- We have a colouring book for younger kids

Access resources for epilepsy



KIDS ON THE BLOCK PUPPET SHOW

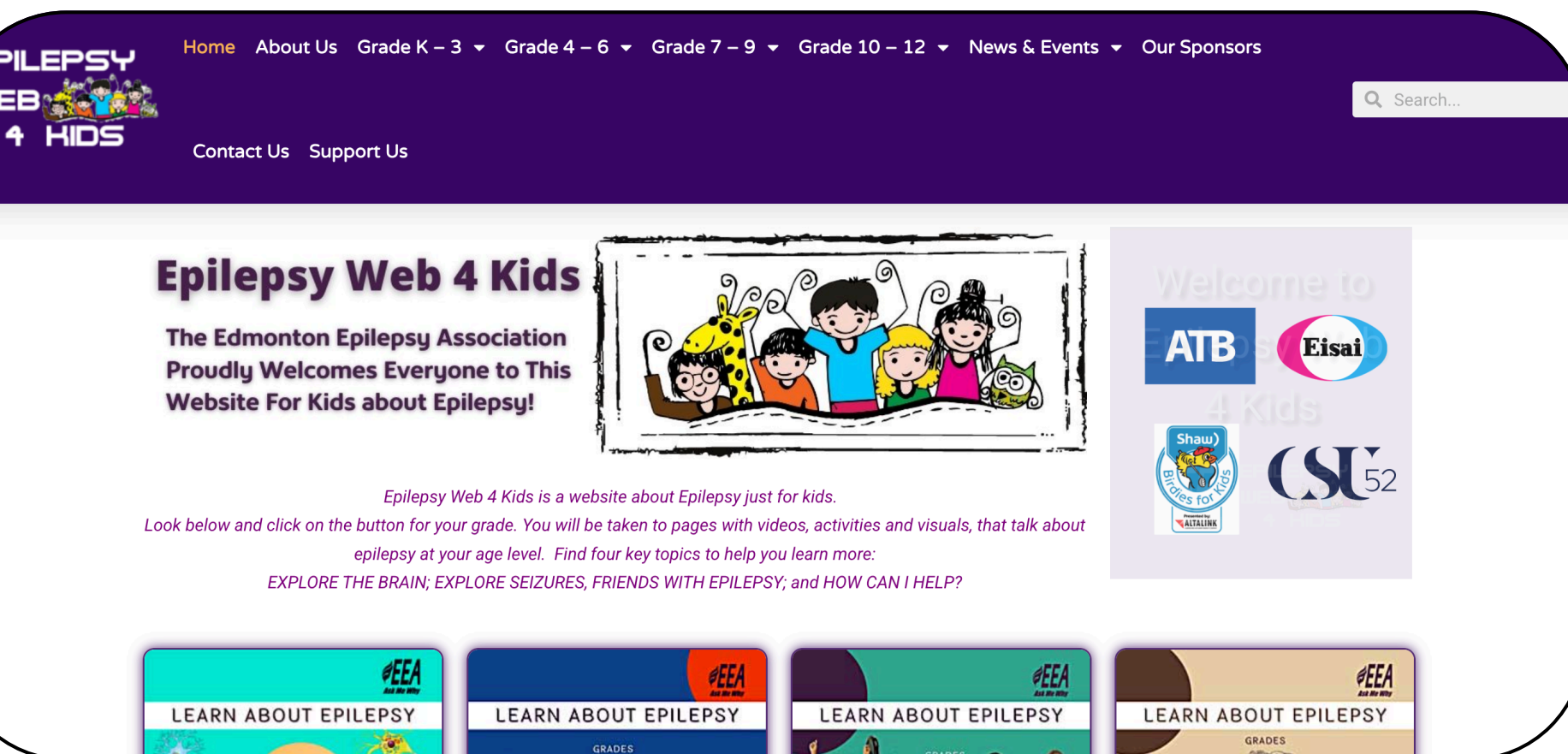
- Free live performance for elementary grades (grade 4-5 and younger)
- Book show online - we come for 20 kids and 400 kids
- Build inclusive environment - learn seizure first aid and how to be a good friend

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Access resources



Access resources for epilepsy



WWW.EPILEPSYWEB4KIDS.CA

- Website dedicated to talking about epilepsy with kids language and K-12 learning goals in mind

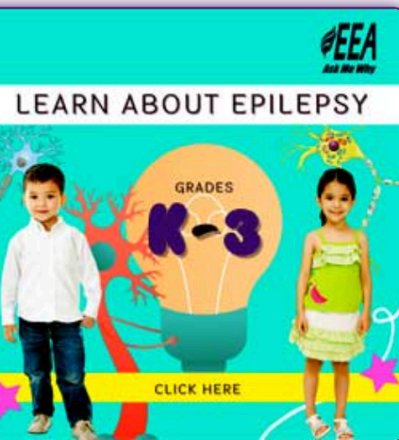
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Access resources

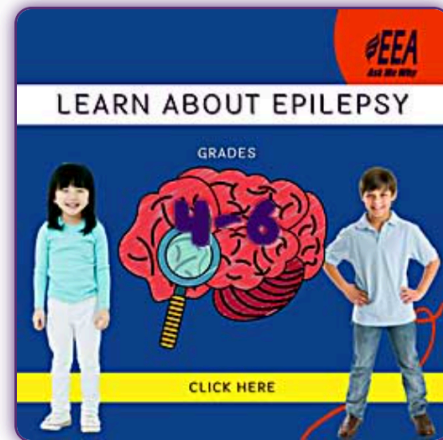


Access resources for epilepsy

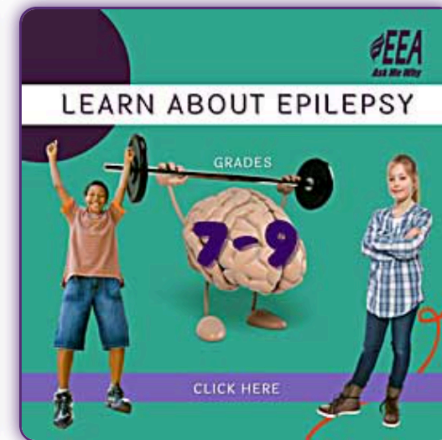
Click below and click on the button for your grade. You will be taken to pages with videos, activities and visuals, that talk about epilepsy at your age level. Find four key topics to help you learn more:
EXPLORE THE BRAIN; EXPLORE SEIZURES; FRIENDS WITH EPILEPSY; and HOW CAN I HELP?



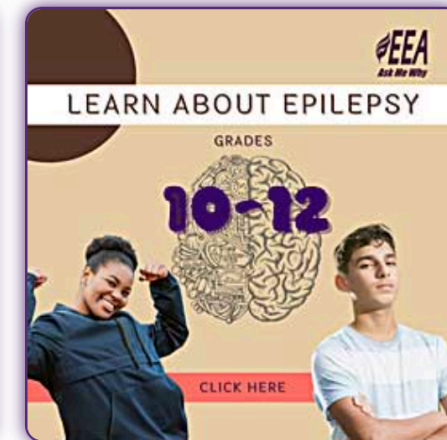
Explore resources and engage with activities to better understand epilepsy here, if you attend Kindergarten to Grade 3. Ask an adult to help you and learn together about epilepsy.



Explore resources and engage with activities to better understand epilepsy here, if you attend Grade 4 to 6. Ask an adult to help you and learn together about epilepsy.



Explore resources and engage with activities to better understand epilepsy here, if you attend Grade 7-9.

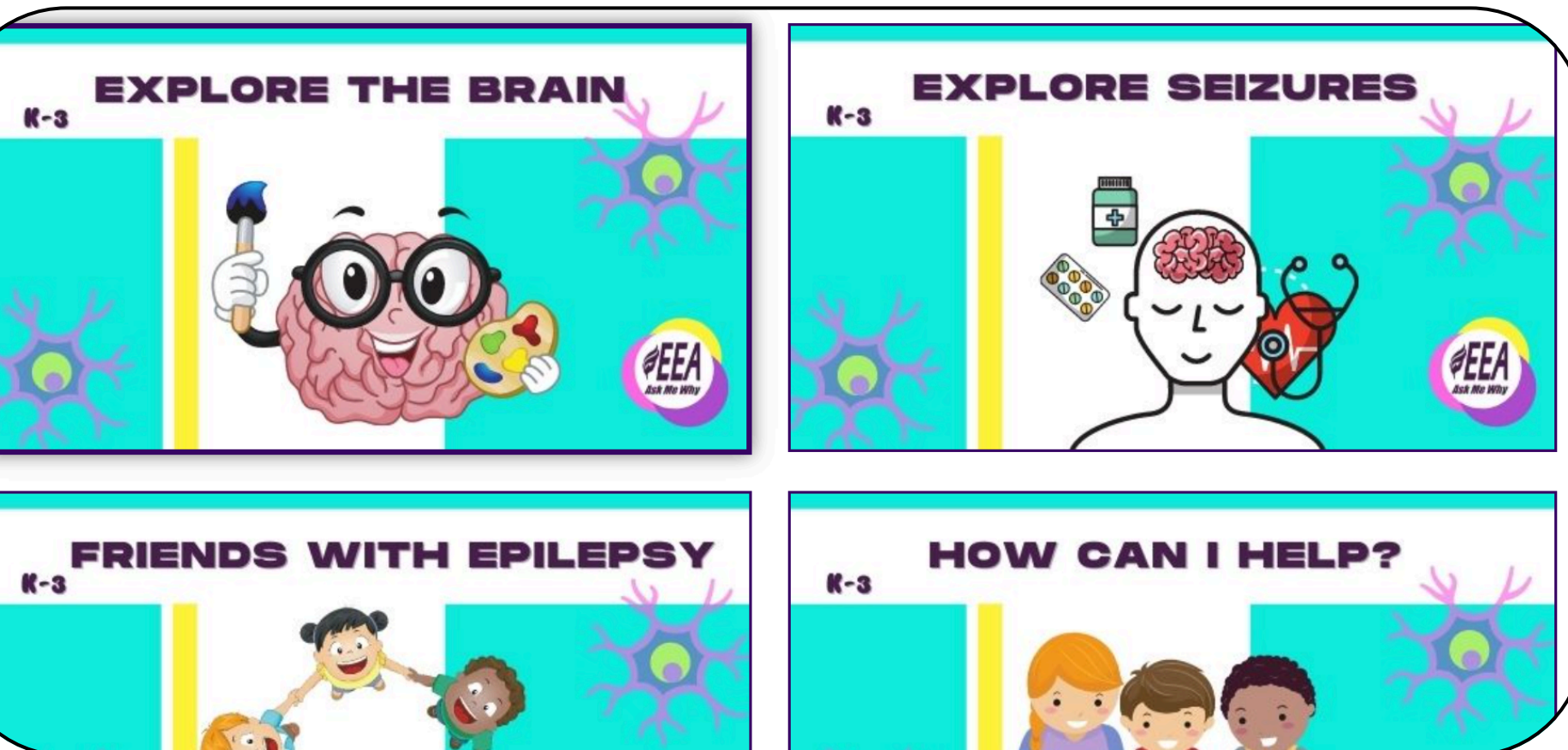


Explore resources and engage with activities to better understand epilepsy here, if you attend Grade 10-12.

WWW.EPILEPSYWEB4KIDS.CA

- Four main sections by division

Access resources for epilepsy



WWW.EPILEPSYWEB4KIDS.CA

- Four key conversations
 - Explore the brain
 - Explore seizures
 - Friends with epilepsy
 - How can I help?

Access resources for epilepsy

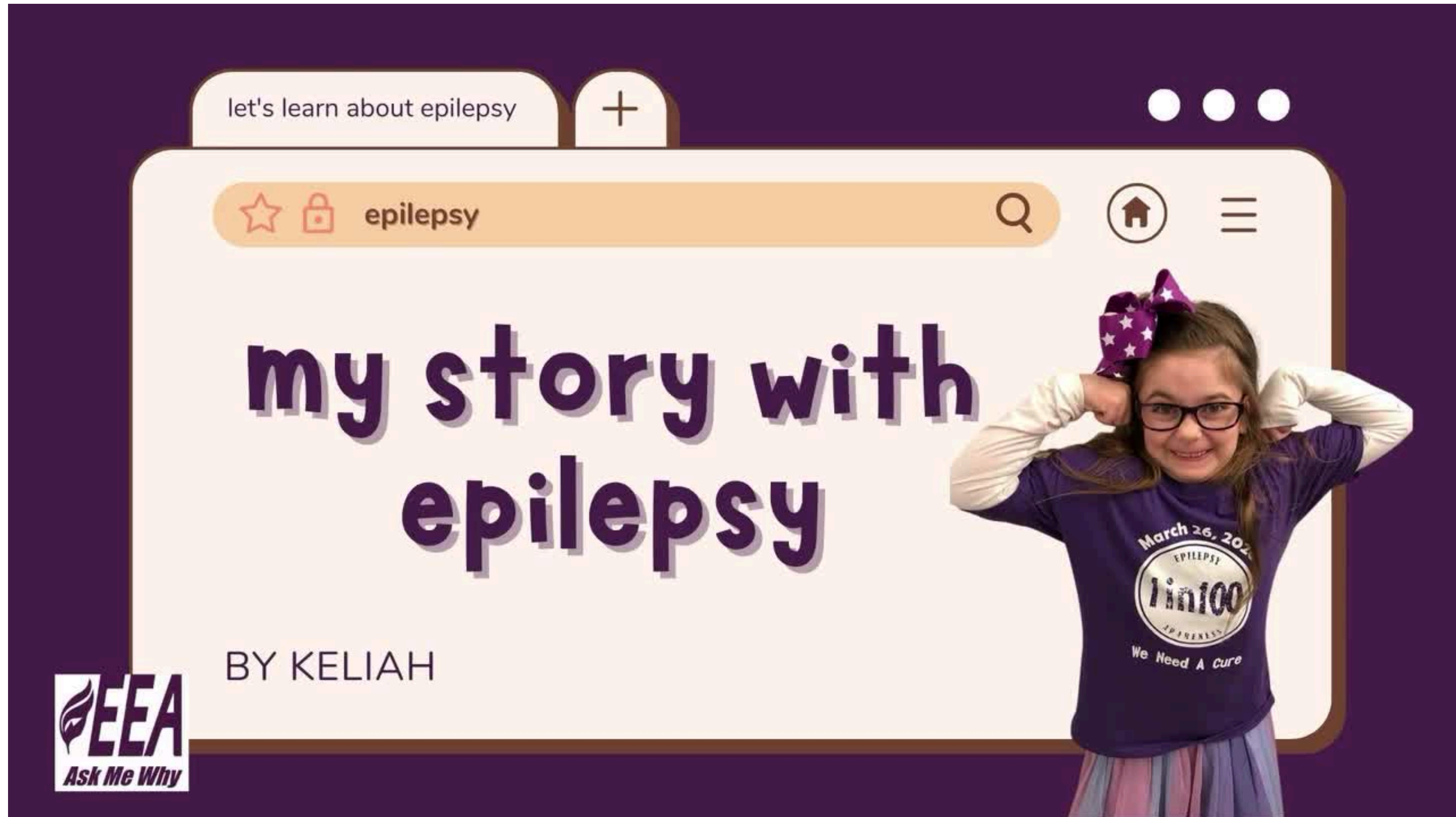


ENGAGE WITH EDMONTON EPILEPSY ASSOCIATION

- March Epilepsy Awareness Month Activities
- Scholarships
- Projects with schools

Students who have epilepsy may be neurodivergent...







He needs medication to manage and control his seizures.



OWEN SHARES WHAT HE KNOWS ABOUT HIS EPILEPSY

In this video, our young friend Owen shares a few facts about his life with seizures. He talks about what he does each day, to manage the seizures, and how they still impact his school life. He also invites viewers to donate to the Edmonton Epilepsy Association, EEA, as they can help other kids like him live better lives with epilepsy. Watch the short video and then access the practice activities below as you learn a bit about epilepsy.

DOWNLOAD THE QUESTION SHEET, ANSWER THE QUESTIONS AND SHARE YOUR ANSWERS WITH A FRIEND.

[ANSWER KEY](#)

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Build understanding of epilepsy...



questions

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ENGAGE...AND THANK YOU!



Thank You

