



सत्यमेव जयते



Epilepsy For CHO/SN





GROUP EXERCISE

Participants to read two case scenarios (Scenario 1 & Scenario 2) given in next two slides and answer the following questions-

- Probable diagnosis
- Clinical features
- Role of CHO

Time: 5 minutes for each case



SCENARIO 1

A 72-year-old hypertensive man, was seen at 5:30 am in the morning by his wife, having abnormal posturing of all four limbs with head turning to the left and frothing from the mouth. The movements lasted for around 2 minutes following which the patient lost consciousness. There was no history similar episode in the past. On examination, patient was unconscious and non-responsive even 10 mins after the seizure stopped.

Questions

- Probable diagnosis ?
- Clinical features for diagnosis ?
- Role of CHO



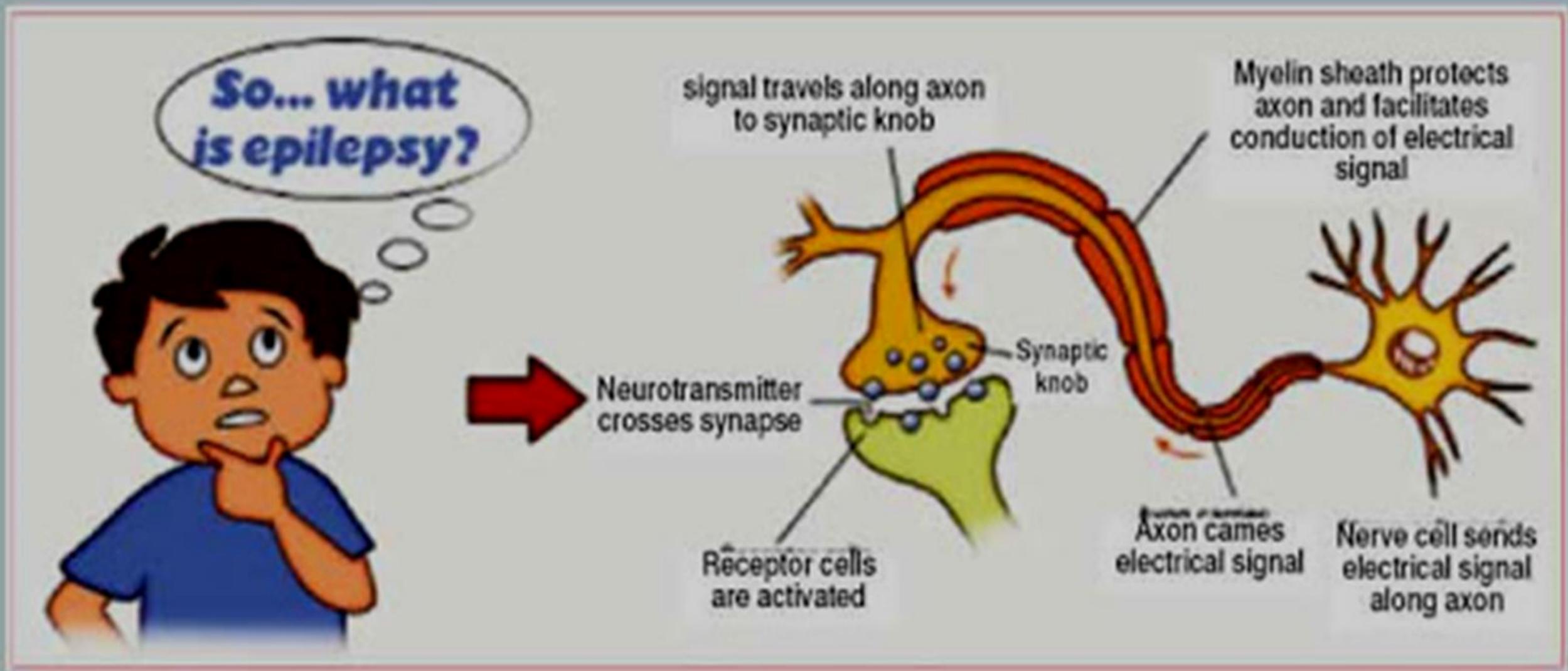
SCENARIO 2

A four-year-old child is brought by the parents with recurrent episodes for episodes of sudden onset blank staring that occur abruptly and lasts for 10-15 seconds and occurs 10-15 times a day since last 2-3 months. Patient is unresponsive and stops all activities during the episodes. Patient occasionally have rapid eye blinking during these episodes. He resumes the activity immediately after that and stays unaware of the episode. There are no convulsions. There is no similar history in family member.

Questions

- Probable diagnosis?
- Clinical features for diagnosis?
- Role of CHO?







FEW DEFINITIONS

- **Seizure:** A transient occurrence of signs and symptoms due to abnormal excessive or synchronous neuronal activity in the brain.
- **Unprovoked seizure:** Occurring in the absence of precipitating factors and may be caused by a static or progressive injury.
- **Acute symptomatic seizure:** Caused by acute illness (stroke, CNS infection, TBI); seizure within 7 days of an insult.
- **Remote symptomatic seizure:** Pre-existing brain injury; seizure greater than 7 days after insult
- **Provoked seizure:** Caused by transient reversible alterations without structural change (toxin, metabolic factors, medication); occurs at time of insult or within 7 days.



EPILEPSY - DEFINITION

Epilepsy: Disorder of the brain characterized by an enduring predisposition to generate epileptic seizures.

- Has been defined as 2 or more unprovoked seizures occurring more than 24 hours apart

OR

- 1 unprovoked seizure and a high risk (at least 60%) of recurrent unprovoked seizures over the next 10 years.



WHAT IS EPILEPSY?

Epilepsy: Repeated seizures

Diagnosis: Person must have at least 2 unprovoked seizures 24 hours apart

Features:

- Mostly starts before the age of 20.
- Anyone can get this condition.
- Affects both men and women.
- Around 1 out of 100-200 people will have epilepsy.





CAUSES AND PRECIPITATING FACTORS



Causes:

- Difficult birth
- Head injuries
- Brain tumors
- Brain infections
- Genetic conditions
- Stroke (most common cause in elderly)

Precipitating factors:

- Missing medication dose
- Lack of sleep
- Fever
- Intake of other drugs
- Heavy alcohol intake





CLINICAL FEATURES



Generalized seizures

- Occur without warning, associated with injuries
- Sudden onset jerking/shaking with stiffness/tightening of whole body
- Patient may or may not remember seizure afterward

Focal seizures

- Muscle twitching, or abnormal jerking of one limb
- Abnormal sensation/ strange taste or smell

Other seizures

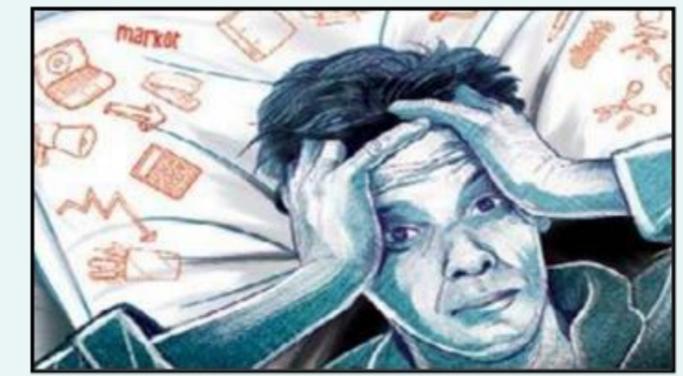
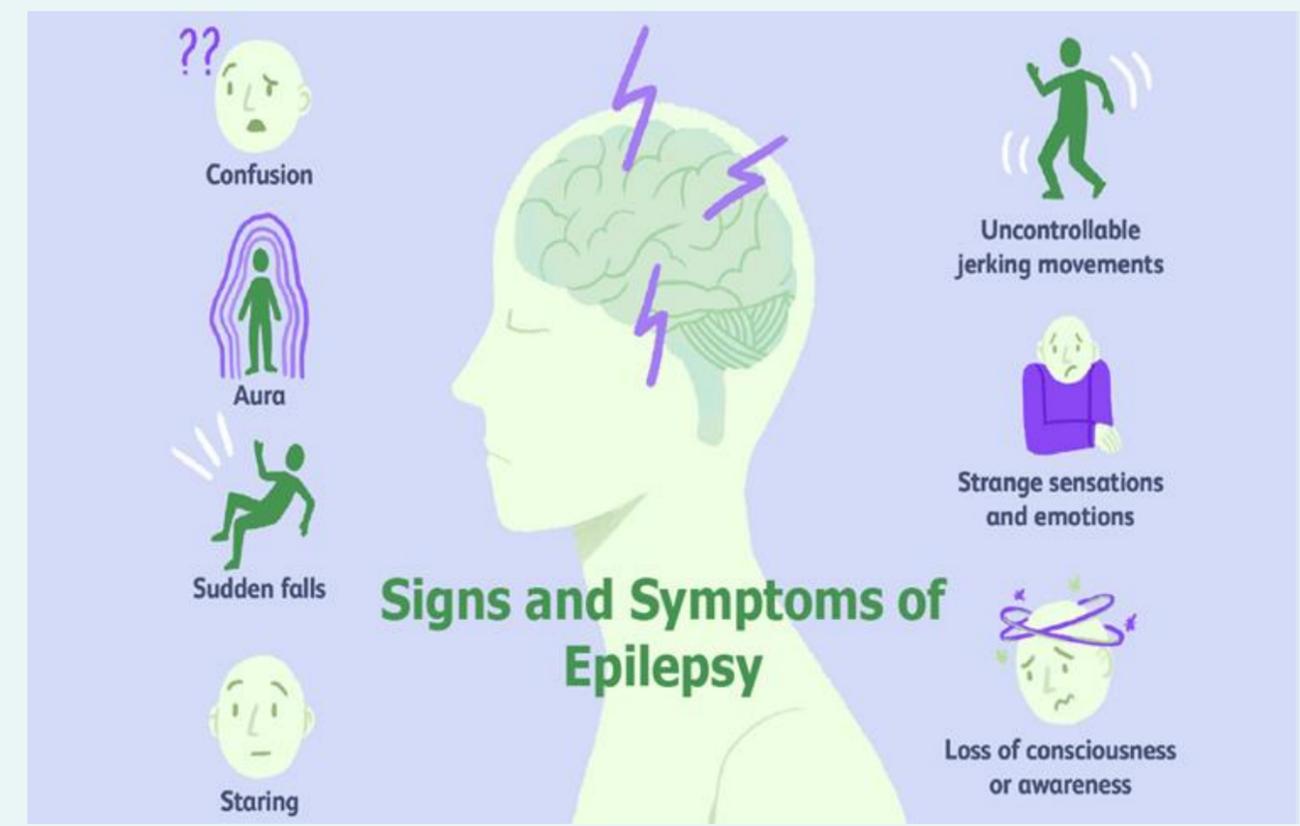
- Due to changes in body electrolytes
- Alcohol withdrawal
- Pseudoseizures





WHAT IS A SEIZURE?

- Loss of consciousness
- Involuntary shaking
- Sudden change in behaviour
- Bite tongue
- Pass urine
- Sleepy





MANAGEMENT OF EPILEPSY/SEIZURE AT SHC-HWC



- Not usually a medical emergency
- Often seizures are self limiting and stop within 1-2 min
- In case seizures last for more than 5 minutes, it is an emergency – must be immediately referred
- Rescue therapy - can be given at home to abort seizure
- Give Midazolam nasal spray – 5 mg(1 spray) into one nostril.
- An additional 5 mg(1 spray) into the opposite nostril may be administered after 5 minutes if the patient has not responded to the initial dose
- Do not give the second dose if the patient has breathing trouble or excessive sedation occurs





IF A PERSON IS HAVING SEIZURE, TAKE FOLLOWING STEPS

- Most fits are self-limited and will stop after a few minutes.
- If person is unconscious, turn the person on his/her side.
- Ensure that the person does not hurt himself.
- Don't hold or restrain the person, don't put anything in the person's mouth.
- **If the fit is not over in 5 minutes call the ambulance, This is a medical emergency (“*status epilepticus*”)**
- Comfort the person when he/she awakes.





IF A PERSON IS HAVING SEIZURE, TAKE FOLLOWING STEPS:



Seizure First Aid

What to do in the event of a seizure

- 1** **STAY** with the person and start timing the seizure. Remain *calm* and check for medical ID.
- 2** Keep the person **SAFE**. Move or guide away from *harmful objects*.
- 3** Turn the person onto their **SIDE** if they are not awake and aware. *Don't block airway*, put something small and soft under the head, loosen tight clothes around neck.
- 4** Do **NOT** put *anything* in their mouth. Don't give water, pills or food until the person is awake.
- 5** Do **NOT** *restrain*.
- 6** **STAY** with them until they are awake and alert after the seizure. *Most seizures end in a few minutes.*

Cushion head

Look for I.D

Loosen tight clothing

Monitor duration of attack

Turn on side

Do not grab or hold down

Nothing in mouth

Offer help as seizure ends



WHEN SHOULD A PERSON WITH SEIZURES TAKEN TO THE HOSPITAL



- First seizure
- Has been injured severely
- Trouble breathing after seizure
- Seizure immediately following another
- Seizure lasts more than 5 minutes
- Unconscious even after 20-30 minutes of seizure
- Seizures associated with weakness of limb, slurred speech that persists even after the seizure stops
- Patients > 65 years of age with new onset
- Seizures associated with altered sensorium. fever, intense headache, recurrent vomiting



PRECAUTIONS TO BE TAKEN IN EPILEPSY PATIENTS

General precautions

- Do not skip medication
- Adequate sleep
- Early treatment of fever

Precautions to prevent injuries

- Do not drive
- Avoid swimming or should be supervised
- Avoid going to height alone
- Use helmet in case of frequent fall attacks





PHARMACOTHERAPY

Pharmacotherapy

- Medicines for treatment can only be prescribed by a MO
- You can dispense the medicines
- You should also be aware of common side- effects and identify them while following up.

Non- Pharmacological Intervention

- Diet therapy: Special high-fat. low- carbohydrate diet
- Alternative therapies: Yoga, exercise, music therapy



FOLLOW UP CARE, FREQUENCY AND ASSESSMENT



In well controlled epilepsy patients: 3-6 monthly

In others: more frequent follow-up

During each follow-up visit ask –

For last seizure episode	For the compliance
For sleep duration	For any reaction/ side-effect
For preferably maintaining the seizure diary	For any alternate medications
For seizure episodes from patients relative/witness	For proper counselling in case of females before conceiving





WHEN TO REFER

6

- Not controlled with medication within 2 years
- Unsuccessful management after two drugs
- Unacceptable immediate or long term side-effects
- Psychological and/or psychiatric co-morbidity
- Other associated symptoms like declining school performance, behavioural disturbances, difficulty in walking, frequent falls, visual disturbances
- Strong family history of seizures



QUESTIONS

True or False:

1. Epileptic persons can drive vehicle under supervision- T/F
2. Seizures can occur due to changes in body electrolytes- T/F
3. Stroke is one of most important causes of epilepsy in elderly- T/F

Fill in the blank:

1. To diagnose epilepsy the person must have at least _____ 24 hours apart .
2. Unconscious person with epilepsy attack may bite his _____ or involuntarily pass _____
3. If the seizures last for more than _____ min, it is an emergency called _____



ANSWERS

True or False:

1. Epileptic persons can drive vehicles under supervision- **T/F**
2. Seizures can occur due to changes in body electrolytes- **T/F**
3. Stroke is one of the most important causes of epilepsy in the elderly- **T/F**

Fill in the blank:

1. To diagnose epilepsy the person must have at least **2 seizures** 24 hours apart.
2. Unconscious person with epilepsy attack may bite his tongue or involuntarily pass **urine/ stool**
3. If the seizures last for more than 5 min, it is an emergency called **status epilepticus**



सत्यमेव जयते



Thank You

