

SEIZURES

What are some risk factors that may precipitate a seizure?

Some people have an inheritant low threshold to seizure producing stimuli: (i.e. after trauma, disease, fever)

Fever (Hyperthermia) (babies)

Infection (babies/children)

CVA

ETOH withdrawal

Adrenalin response

Repetitive stimuli (strobes)

Metabolic Disorders (hypocalcemia, hypoglycemia, hyponatremia)

Idiopathic—means that we don't know why

FYI: Stroke and Cerebral Metastasis are the #1 causes for seizures in the elderly

Genetic Anomalies

Vascular Problems

Head Trauma

Brain Tumor

Meningitis/encephalitis

Renal Failure

You know that your patient has a seizure disorder. Upon entering her room, what do you need to **assess before** a seizure occurs?

- *Does the patient have an aura?*
- *Any information provided in H and P or given in report to help you (the nurse) prepare*
- *Make sure seizure precautions are implemented in the room –seizure pads, suction set-up, clothing loosened, able to lie on side, no soft fluffy pillow, side rails up at all times*
- *Review MAR for routine anti seizure meds and PRNs*
- *Review labs for pertinent anti-seizure drug levels*
- *Make sure IV is patent and intact*
 - *Pt. can become very diaphoretic and IV could fall out or pt. hits arm against rail and dislodges catheter?*

You walk in to your patient's room at 0815 to perform a complete assessment. All of a sudden, your patient starts to seize. What do you **assess during** this seizure?

- *Airway*
- *Record that the seizure was witnessed*
- *Start time and duration of seizure*
- *Describe what you see—where did it begin—did it progress? Motor movement? Sensation?*
- *Identify the first thing that the person does in the seizure*
- *Changes in LOC?*
- *Automatism?—lip smacking, chewing, picking at clothes*
- *Type of movement—unilateral or bilateral? Stiff? Twitches?*
- *Changes in pupil size/ eye deviation?*
- *Bite lip or tongue?*
- *Bowel and bladder incontinence?*
- *Presence of apnea, cyanosis, and salivation—need oxygen?*
- *Assess for safety during the seizure—*

Your patient starts to seize while you are walking him to the bathroom. What are your **actions (interventions) during** the seizure?

- SAFETY--Protect from harm—no bruises, fx., lacerations
- Ease pt. to floor (if not in bed)
- Padded rails (if patient is in bed)
- Call for MAR--any meds ordered PRN for seizure activity?
- Provide privacy (aura) may have time to find a safe place
- Protect head w/ pad
- Loosen clothes
- Push away furniture
- If pt. is in bed—remove pillows & elevate siderails
- If an aura precedes seizure, may insert padded tongue blade otherwise--no tongue blade
- Don't attempt to pry open jaws that are clenched
- Don't restrain pt. during seizure (potential injury)
- Place pt. on one side w/ head flexed forward (suction?)
- May use oxygen during or after
- Reorient upon awakening after a seizure (potential confusion)
- Give any PRN anti-seizure med, call the MD (reminder: never leave your pt. therefore, ask another RN to get the PRN anti-seizure med or to get the MD on the phone)

Your patient has stopped seizing and is now in the post-ictal phase. What is your **on-going assessment and interventions?**

- SAFETY
- Hypoxia (circumoral vasoconstriction or true hypoxia), vomiting, aspiration--lie on side, possible need for oxygen
- LOC?
- Any recall of the seizure
- Probable short term memory
- Neuro checks Q2-4
- Allow for rest; keep on patient's side; watch for repeated seizures

The patient was admitted last evening. In report you hear that Sally is a 26 yr old admitted with seizures—no seizure activity noted during the night. She has a saline lock in the right wrist—no known allergies

- What other questions would you ask in order to provide specific nursing care to Sally?
 - You need to know what kind of seizure so that you know what to watch for. Make sure saline lock is intact and patent--just in case you must access it; is there any predisposing factors/aura that cause the seizure and you can watch for?---remember, this is report and needs to be succinct yet factual

Drug Therapy

Patient will be on a single med or multiple meds to control seizure activity—GOAL is to reduce or eliminate seizure activity with the LEAST number of side effects

Phenytoin:

What type of seizure is this medication used for?

- *Not an effective drug for absence seizures—used for tonic-clonic and complex partial--
Reduces voltage, frequency & spread of electrical discharge*

What labs would you specifically monitor while patient is receiving Phenytoin?

- *low WBC/platelets (hold drug and call MD before giving the dose)*
- *Dilantin level-- Therapeutic range 10-20 mcg/ml*

How do you prepare and give this medication when ordered IVPB? Side effects (other than lab changes) when ordered IVPB?

- *Use NS when mixing IV Dilantin—incompatible w/ everything---Look @ IV drug book—how to mix/hang*
- *Side Effects: fine red rash; hypotension may occur with IV forms; very damaging to veins---it burns--IVs don't last long when given*

Patient teaching regarding long term use of Phenytoin P.O.

- *Good oral care when long term use; don't skip doses*
- *(oral) Gingiva Hyperplasia—overgrowth of gum tissue due to long-term use*
- *Don't skip a dose*

Carbamazepine:--tegreol

What type of seizure is this medication used for?

- *Used for tonic-clonic and complex partial*

What patient teaching is required when Carbamazepine is given orally?

- *Give with food*
- *Don't skip a dose*
- *Don't chew*
- *Side effects: dizzy, unsteadiness, skin rash, agranulocytosis, leucopenia*
- *Will decrease the effectiveness of oral contraceptives*

Valium/Ativan:

What situation R/T a seizure are these medications used for?

- *Used as a front line drug to immediately relieve seizure*
- *Drugs of choice for status epilepticus*