

<b>Medications</b>
<ul style="list-style-type: none"> <li>• Levetiracetam (Keppra) 750mg IV push BID q12 hours <ul style="list-style-type: none"> <li>○ Pyrrolidine derivative/anticonvulsant</li> <li>○ Indication: seizures</li> <li>○ Assess for the absence of seizures before and during therapy, assess blood pressure in children, and monitor for adverse effects and signs of anaphylaxis.</li> </ul> </li> </ul> <p>(Jones &amp; Bartlett Learning, 2020)</p>

<b>Demographic Data</b>	
<b>Admitting diagnosis:</b> Nonepileptic seizures	<b>Psychosocial Developmental Stage:</b> Identity vs. role confusion
<b>Age of client:</b> 15 years old	
<b>Sex:</b> Female	
<b>Weight in kgs:</b> 57.6 kg Operational	<b>Cognitive Development Stage:</b> Formal
<b>Allergies:</b> No known allergies	
<b>Date of admission:</b> 10/01/2021	

<b>Admission History</b>
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<b>Relevant Lab Values/Diagnostics</b>
<p>Prior to the patient's arrival at Carle, she had a magnesium level of 1.5mg/dL and was given 2 grams of IV magnesium. The normal lab value for magnesium is 1.6-2.2mg/dL (Van Leeuwen &amp; Bladh, 2021). An electroencephalography (EEG) was completed to rule out epileptic seizures and was determined to be negative as it was normal during awake, drowsy, and sleepy states with no definite epileptic discharges or seizures recorded. Additionally, an electrocardiogram was performed as a repeat diagnostic due to prolonged QTC intervals shown on a prior ECG from Sarah Bush Lincoln. However, the report for this ECG had not resulted prior to the end of clinical.</p>

<b>Pathophysiology</b>
<p><b>Disease process:</b> Nonepileptic seizures are defined as a temporary loss of control typically accompanied by convulsions, unconsciousness, or both due to a loss or change in physical function unrelated to a central nervous system disorder (University of Michigan Health, 2020). Nonepileptic seizures come from a psychological problem and are derived as a result of an underlying psychiatric disorder with no known organic or physical cause (Epilepsy Foundation, 2019).</p> <p><b>S/S of disease:</b> Impaired or jerky movements, disturbances in coordination, temporary blindness, tunnel vision, loss of senses such as smell and taste, and tingling sensation of the skin (University of Michigan Health, 2020).</p> <p><b>Method of Diagnosis:</b> Nonepileptic seizures are diagnosed using a comprehensive health history as well as an electroencephalogram, otherwise known as an EEG (Epilepsy Foundation, 2020).</p> <p><b>Treatment of disease:</b> Nonepileptic seizures are treated by treating the underlying psychological problem with appropriate medications and therapy</p>

On Friday, October 1<sup>st</sup>, the patient woke up at around 0700 feeling dizzy and nauseous. Once the patient started to ambulate in order to get ready for school, her eyes began to roll, her body became rigid, and she dropped to the floor due to shaking, tonic-clonic seizure like activity throughout her whole body that lasted about 30 seconds, her mother's concern for why it was happening as well as if her daughter had hit her head is why care was sought. Prior to her arrival at Carle, she was given 1gm of levetiracetam and 1mg of lorazepam after having two more tonic-clonic episodes lasting 30 seconds apiece.

### Medical History

**Previous Medical History:** The patient has a medical history of anxiety and depression.

**Prior Hospitalizations:** No previous hospitalizations.

**Chronic Medical Issues:** Anxiety and depression

**Social needs:** The patient needs meaningful relationships and interactions with peers in order to develop a sense of identity.

### Active Orders

1. Seizure precautions- to keep the patient safe if another seizure occurs.
2. Neuro checks every 4 hours- to determine if all areas of the brain are functioning as normal and not being affected by the seizures.
3. Vital signs every 4 hours- to monitor the patient's status for any changes.
4. Regular diet- to provide nutrition.
5. Continuous pulse oximetry to keep states >= 92%- monitor any changes to respiratory status as a result of seizures.

**Assessment**

General	Integument	HEENT	Cardiovascular	Respiratory	Genitourinary	Gastrointestinal	Musculoskeletal	Neurological	Most recent VS (highlight if abnormal)	Pain and Pain Scale Used
<p>A&amp;Ox4                      Patient did appear to be a little anxious/nervous.                      Patient was appropriately dressed and well groomed.</p>	<p>Skin was pink, warm, dry, intact, and appropriate for race.                      Patient did score a Braden score of 19, indicating she was at medium risk for impaired skin integrity.</p>	<p>Normocephalic head shape with no contusions or abnormalities. PERRLA. Oral mucosa was pink, moist, and firm. No discharge of bleeding from eyes, nose, mouth, or ears.                      Patient did state her vision was very blurry and that is not a normal occurrence for her.</p>	<p>S1 and S2 heart sounds auscultated, no presence of an S3 gallop or heart murmur. Distal pulses equal and present in all extremities. Capillary refill less than 3 seconds.</p>	<p>Breath sounds were clear, equal, and noted bilaterally posterior and anteriorly upon auscultation. No use of accessory muscles.</p>	<p>Patient denied any pain, frequency, hesitancy, or urgency with urination. Did not inspect the patient's genitalia. Patient had a total of 400mL of urine voided during the clinical period.</p>	<p>Active bowel sounds auscultated in all four quadrants. Abdomen was soft and tender with no distention or masses. Patient did complain of some slight nausea that caused a decreased appetite.</p>	<p>Patient scored an 8 on the Cummings Pediatric Fall Scale, indicating she is a high fall risk. Patient has control over all extremities. Patient ambulates slowly with a stand by assist. Patient also had noticeably weak hand grips bilaterally.</p>	<p>Patient is A&amp;Ox4 and mental status is appropriate for age. Patient has clear speech and is responsive to light and deep stimulation. Patients deep tendon reflex were 2+. Patient did complain of a headache which was sensitive to light.</p>	<p><b>Time:</b> 1100  <b>Temperature:</b> 98.4 degrees F  <b>Route:</b> Oral  <b>RR:</b> 20  <b>HR:</b> 88  <b>BP and MAP:</b> BP: 94/58                      MAP: 82mm Hg  <b>Oxygen saturation:</b> 99% on room air  <b>Oxygen needs:</b> None</p>	<p>Numeric pain scale                       Patient rated pain 2/10 when assessed at 1100.</p>

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<p align="center"><b>Nursing Diagnosis 1</b></p> <p>Stress overload related to patient's parents getting a divorce, a recent break up, and issues with friends as evidenced by patient stating, "so much is happening with my family and friends right now, it is stressing me out".</p>	<p align="center"><b>Nursing Diagnosis 2</b></p> <p>Anxiety related to the patient's past medical history diagnosis and lack of knowledge regarding the cause of seizures as evidenced by patient stating, "I'm scared I'm going to have another seizure. What's causing them?"</p>	<p align="center"><b>Nursing Diagnosis 3</b></p> <p>Risk for falls related to nonepileptic seizures as evidenced by Cummings Pediatric fall score of 9 and dizziness during ambulation.</p>
<p align="center"><b>Rationale</b></p> <p>I chose this diagnosis as both the patient and her mother stated multiple times she had been under a lot of stress and believes that it could have caused her to have the seizures.</p>	<p align="center"><b>Rationale</b></p> <p>I chose this diagnosis because the patient already has a medical diagnosis of anxiety and stated that she is scared and unsure on what the cause of her seizures are, making her even more anxious regarding the thought of having another.</p>	<p align="center"><b>Rationale</b></p> <p>This patient scored a 9 on the Cummings Pediatric Fall Scale, indicating her as a high fall risk. The patient also stated that she gets very dizzy during movement and ambulation and she requires a stand by assist for all activities when out of bed.</p>
<p align="center"><b>Interventions</b></p> <p><b>Intervention 1:</b> Provide opportunities for patient to express her feelings about stressors.</p> <p><b>Intervention 2:</b> Teach coping strategies to relieve stress such as exercising, pet therapy, and using music.</p>	<p align="center"><b>Interventions</b></p> <p><b>Intervention 1:</b> Teach patient relaxation techniques to use when anxious, such as music therapy, guided imagery, and deep breathing exercises.</p> <p><b>Intervention 2:</b> Provide patient with clear, concise explanations of current treatment and include patient in decisions regarding her care and treatment.</p>	<p align="center"><b>Interventions</b></p> <p><b>Intervention 1:</b> Implement fall precautions such as the use of a bed alarm, ambulating only with a stand by assist, and using non-slip shoes and socks when ambulating.</p> <p><b>Intervention 2:</b> Keep the bed in the lowest position and move frequently used items within reach of the patient.</p>
<p align="center"><b>Evaluation of Interventions</b></p> <p>Patient will report reduced amounts and signs of stress overload after utilization of the teaching and patient will healthily express her feelings about experienced stressors and adopt new, healthy coping mechanisms.</p>	<p align="center"><b>Evaluation of Interventions</b></p> <p>Patient will determine and utilize appropriate relaxation techniques, show fewer signs of anxiety, and cope with her current medical situation without severe signs of anxiety.</p>	<p align="center"><b>Evaluation of Interventions</b></p> <p>The patient will not sustain a fall and will implement necessary changes in order to promote fall prevention.</p>

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## References:

Kiriakopoulos, E. (2019). *Psychogenic nonepileptic seizures (PNES): Cause, diagnosis, and treatment*. Epilepsy Foundation.

<https://www.epilepsy.com/learn/diagnosis/imitators-epilepsy/psychogenic-nonepileptic-seizures-pnes-cause-diagnosis-and-treatment>

Jones and Bartlett Learning. (2020). *Nurse's drug handbook* (19<sup>th</sup> ed). Jones and Bartlett Publishers.

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[%20nonepileptic%20seizures%20\(NES,inactivity%20that%20resemble%20epileptic%20seizures](https://www.uofmhealth.org/health-library/tm6344#:~:text=People%20with%20nonepileptic%20seizures%20(NES,inactivity%20that%20resemble%20epileptic%20seizures)

Van Leeuwen, A. M., & Bladh, M. L. (2021). *Davis's comprehensive manual of laboratory and diagnostic tests with nursing implications* (9<sup>th</sup> ed.).

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